

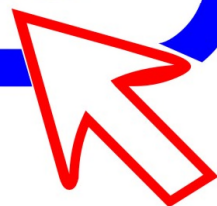
PRICE LIST



Splits Mounting Accessories



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CAREFUL

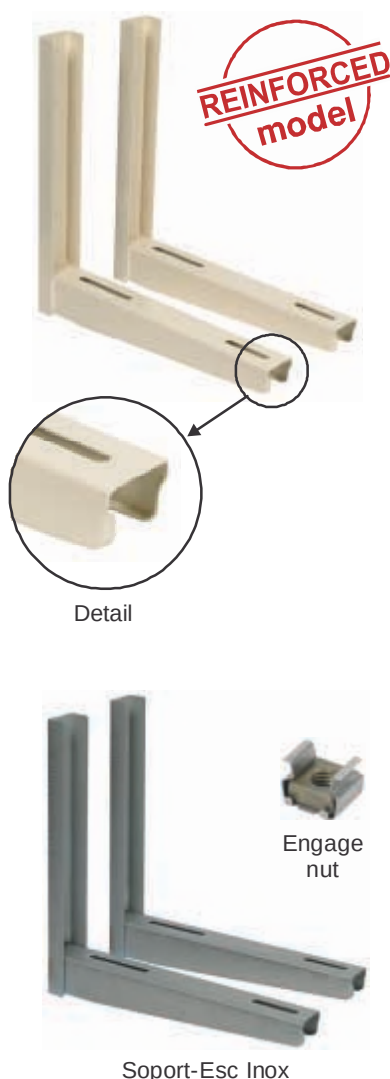
The present Price List suffers continuous changes, due to price updatings of our suppliers, the change in value of the euro over the dollar, etc.

BEFORE PLACING YOUR ORDERS, WE ADVICE YOU TO CONSULT ALWAYS THE UPDATING PRICES AT OUR COMMERCIAL DEPARTMENT

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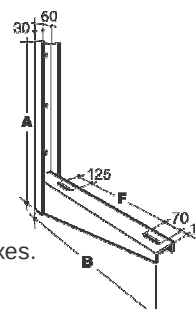
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01 BRACKETS FOR OUTDOOR UNITS



• Welded bracket

- Painted in ivory epoxy-polyester
- Metal sheet 2 mm.
- 3 drillings Ø11 wall fixing.
- Corner reinforcement.
- Supplied in individual cardboard boxes.



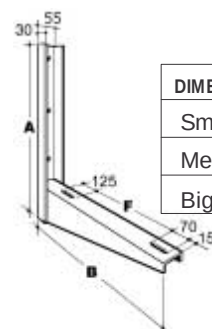
DIMENSIONS			
Small	400	400	120
Medium	480	450	160
Big	500	500	215
Super	500	560	215

Part No.	Item	€
«SOPORT-ESC»		
AS 01 001	SMALL model «P» Pack 10+ uts.	27.08 23.20
AS 01 002	MEDIUM model «M» Pack 10+ uts.	29.00 23.90
AS 01 003	BIG model «G» Pack 10+ uts.	31.00 25.60
AS 01 018	SUPER model «S» Pack 10+ uts.	33.00 27.60
CARTON BOX «NEUTRAL»		
AS 01 004	SMALL model «PN» Pack 10+ uts.	27.08 23.20
AS 01 005	MEDIUM model «MN» Pack 10+ uts.	29.00 23.90
AS 01 006	BIG model «GN» Pack 10+ uts.	31.00 25.60
AS 01 019	SUPER model «SN» Pack 10+ uts.	33.00 27.60
STAINLESS «SOPORT-ESC»		
• Stainless sheet AISI-304 (1.5 mm)		
AS 01 007	SMALL model «Pl»	87.08
AS 01 008	MEDIUM model «Ml»	96.76
AS 01 009	BIG model «Gl»	106.96
ENGAGE NUT «M8» FOR SUPPORT		
AS 01 010	Square nut M8 with split for support of groove	0.70

ONLY FOR DEALERS

• Support for outdoor unit assembly

- Painted in ivory epoxy-polyester
- Metal sheet 1.5 mm.
- 3 drillings Ø11 wall fixing.
- Supplied in individual cardboard box



DIMENSIONS	A	B	F
Small	400	400	120
Medium	400	450	160
Big	500	500	215



Part No.	Item	€
«SOPORT-ESC» ECO		
AS 01 057	SMALL model 400 Pack 10+ uts	19.56 18.10
AS 01 058	MEDIUM model 450 Pack 10+ uts	20.30 19.90
AS 01 059	BIG model 500 Pack 10+ uts	10.65 19.70
• Supply in 5 set boxes		
AS 01 055	SMALL model	18.00
AS 01 056	MEDIUM model	19.00

01 BRACKETS FOR OUTDOOR UNITS

MINIMUM QUANTITY
10 UNITS.

• Support sets

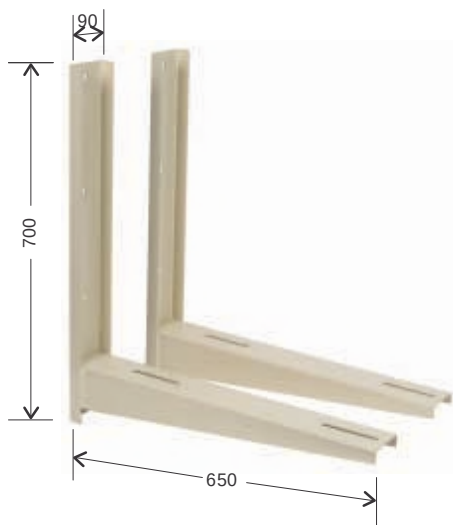
- Metal sheet 2 mm.
- Plastified packaging



DIMENSIONS	A	B	F
Small	500	400	120
Medium	500	450	160
Big	500	500	215



Part No.	Item	€
AS 01 501	SMALL model 400 Pack 10 to 24 uts. Pack 25 to 49 uts. Pack 50 to 99 uts. Pack 100+ uts.	17.00 16.16 14.40 13.84
AS 01 502	MEDIUM model 450 Pack 10 to 24 uts. Pack 25 to 49 uts. Pack 50 to 99 uts. Pack 100+ uts.	18.48 17.24 16.60 15.40
AS 01 503	BIG model 500 Pack 10 to 24 uts. Pack 25 to 49 uts. Pack 50 to 99 uts. Pack 100+ uts.	20.00 18.48 16.92 16.00



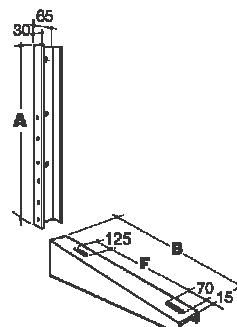
• TANK brackets

- Metal sheet 3 mm.
- 4 drillings Ø11 wall fixing

Part No.	Item	€
AS 01 016	• Painted in ivory epoxy-polyester • Supply in single boxes SHEET 3 mm TANK model «TA»	117.90

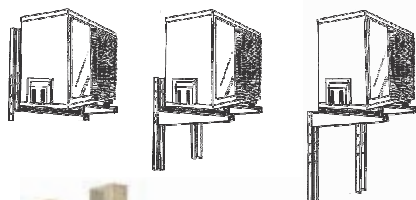
• Three position brackets

- Metal sheet 2 mm.
- 3 drillings Ø11 wall fixing.
- 3 positions assembly with 2 screw and nut.



DIMENSIONS	A	B	F
Small	400	400	120
Medium	450	450	160
Big	500	500	215

Part No.	Item	€
AS 01 011	• Painted in ivory epoxy-polyester • Supply in single boxes SMALL model «3PP» Pack +10 uts.	24.20 20.00
AS 01 012	MEDIUM model «3PM» Pack +10 uts.	25.70 21.70
AS 01 013	BIG model «3PG» Pack +10 uts.	26.60 22.60



01 BRACKETS FOR OUTDOOR UNITS

• Reinforced polyamide plastic bracket

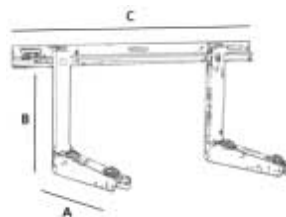
- Perfect for coastal areas and humid places
- Working temperature: -30 to 60°C
- Sunlight resistant (UV rays protection)
- Doesn't need shock absorbers



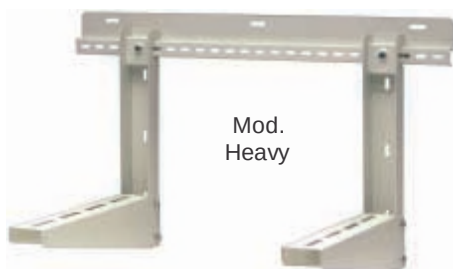
Part No.	Item	€
AS 01 111	SMALL model 400 x 400 Pack 10+ uts.	26.52 24.60
AS 01 113	BIG model 500 x 500 Pack 10+ uts.	31.82 29.54
BAG POLYAMIDE FIX		
AS 02 210	Bag includes: • 4 M8 bolts • 8 Ø9 x Ø20 washers • 4 M8 x 30 mm screws	3.44

• Outdoor unit brackets with pattern

- Cream colour polyester epoxy painted.
- Zinc-coated steel made.



DIMENSIONS	A	B	C
Small	400	365	700
Medium	480	400	850
Big	560	560	1000



Part No.	Item	€
STANDARD SERIES		
AS 01 087 AS 01 088	• Includes 4 anti-vibrators with zinc-coated screws to fix the equipment SMALL model (400 mm) with pattern 700 mm MEDIUM model (480 mm) with pattern 850 mm	28.20 53.40
	HEAVY SERIES - MAXIMUM 200 Kg	
AS 01 089	• Identical to the previous one but without the anti-vibrator bag HEAVY model (560 mm) with pattern 1000 mm	151.36

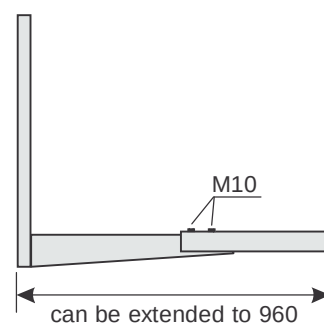
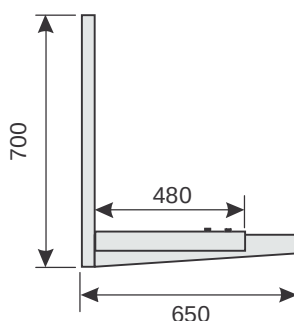
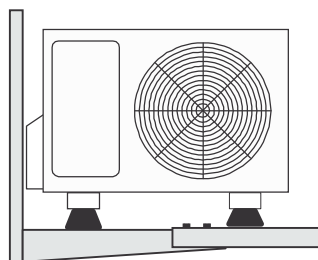
• Bracket with lever and pattern



Part No.	Item	€
AS 01 121 AS 01 122 AS 01 123 AS 01 124	• Metal sheet 2 mm • Painted in epoxy-polyester • Wall metal sheet 500 mm SMALL model 400 mm MEDIUM model 450 mm BIG model 500 mm SUPER model 550 mm	23.16 24.00 25.00 25.70
	FIXING PATTERN	
	• Level include • Wall level nogs included Pattern 840 mm	12.40

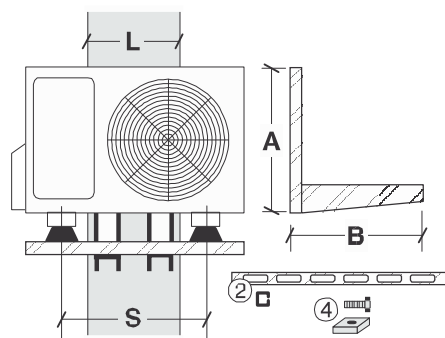
01 OUTDOOR UNIT BRACKET FLAG TYPE

- Metal sheet 3 mm
- Extensible
- Width 95 mm



Part No.	Item	€
AS 01 017	Flag type bracket	119.20

- Brackets with adjustable installation width for column

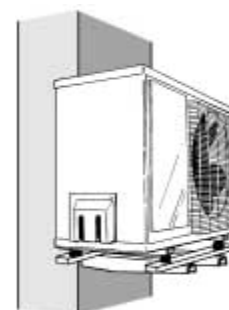


DIMENSIONS	A	B	C
Small	400	400	700
Medium	480	460	800
Big	580	520	1.000

L = width column
S = distance between fixing legs

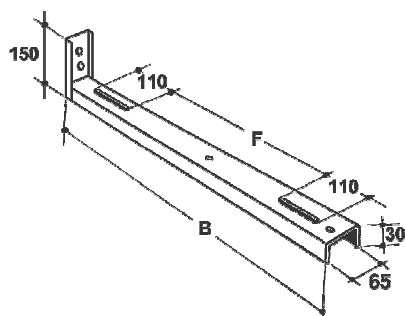
L < S
less than

- Rail and support painted in ivory EPOXY-polyester.
- 2 galvanized and painted rail 32x20x2.5 mm.
- Normal welded wall support.
- 4 screws and galvanized nut.



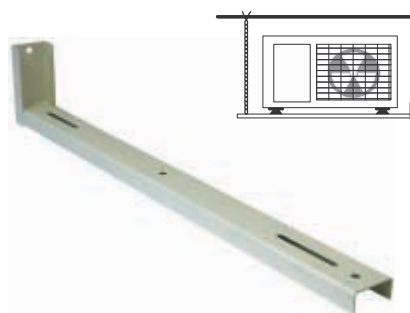
Part No.	Item	€
	• Painted in ivory epoxy-polyester • Supply in single cardboard boxes • Includes adjustable rail with screws and 8 nuts	
AS 01 061	SMALL model 400 rail 660	63.40
AS 01 062	MEDIUM model 480 rail 750	75,50
AS 01 063	BIG model 580 rail 850	83.60

01 OUTDOOR UNIT BRACKETS



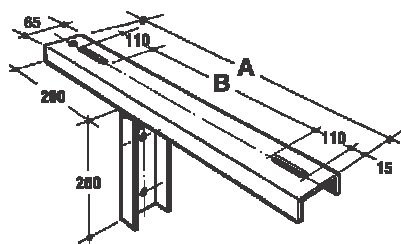
• Bracket for wall corners

- Metal sheet 2 mm.
- 2 drillings Ø10x110 machine fixing.
- 2 drillings Ø11 wall fixing.
- 1 central drilling Ø11 to avoid opening.
- 1 drilling Ø11 for threaded bar pass of M10.



DIMENSIONS	B	F
Small	880	550
Medium	980	650
Big	1.080	750

Part No.	Item	€
	• Painted in ivory epoxy-polyester • Single cardboard box • Angle with 2 drillings Ø11 mm.	
AS 01 031	SMALL model (880 mm.)	51.68
AS 01 032	MEDIUM model (980 mm.)	55.92
AS 01 033	BIG model (1,080 mm.)	63.40



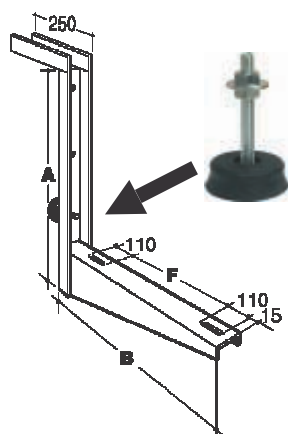
• T Bracket for windows

- Metal sheet 2 mm.
- 2 drillings Ø10x110 fixing
- 3 drillings Ø11 wall fixing.



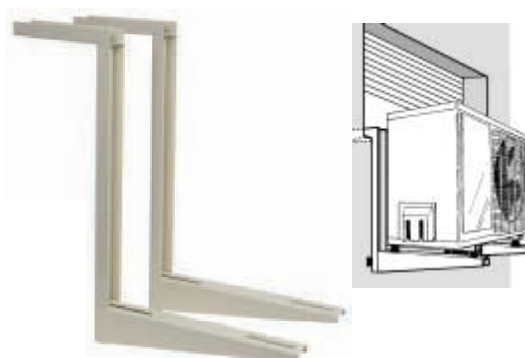
DIMENSIONS	A	B
Small	400	155
Medium	460	220
Big	530	285

Part No.	Item	€
	• Painted in ivory epoxy-polyester • Machine fixing drillings	
AS 01 041	SMALL model	47.92
AS 01 042	MEDIUM model	53.76
AS 01 043	BIG model	60.72



• Window hook type

- Metal sheet 2 mm.
- 2 drillings Ø10x110 fixing.
- Adjustable stoppers made of anti-vibratory rubber.
- 3 drillings Ø11 wall fixing.



DIMENSIONS	A	B	F
Small	575	400	155
Medium	675	460	220
Big	775	520	285

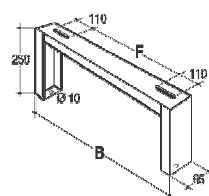
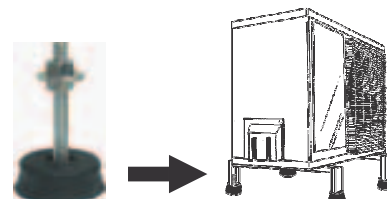
Part No.	Item	€
	• Painted in ivory epoxy-polyester • Single cardboard box • Includes 2 regulation stoppers and a stay S-40	
AS 01 051	SMALL model 400 x 575	54.20
AS 01 052	MEDIUM model 480 x 675	56.84
AS 01 053	BIG model 580 x 775	63.00

01 OUTDOOR UNIT BRACKETS



• Ground brackets

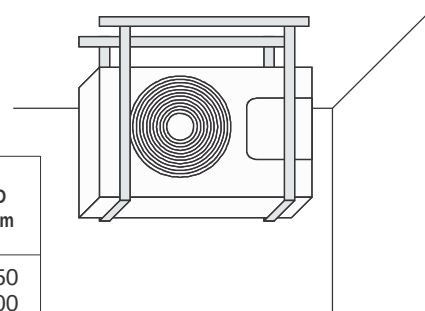
Note: This support together with anti-vibrators S-40 (AV 01 020) allows to save any surface unevenness.



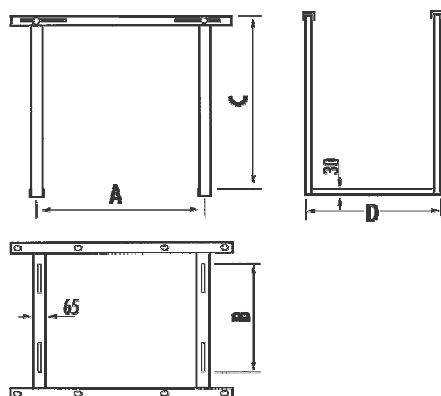
DIMENSIONS	B	F
Small	400	155
Medium	460	220
Big	520	285

Part No.	Item	€
AS 01 081	• Painted in ivory epoxy-polyester	
AS 01 082	• Sheet 2 mm.	
AS 01 083	• Cardboard box packing with set	
	SMALL model	43.68
	MEDIUM model	45.76
	BIG model	47.84

• Bracket for ceiling equipment suspension

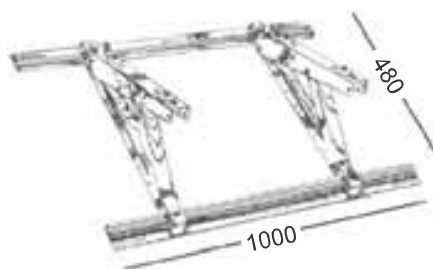


Model	A (adjustable) mm	B (adjustable) mm	C mm	D mm
TRM	500 to 800	150 to 350	625	450
TRG	600 to 1000	200 to 400	725	500



Part No.	Item	€
AS 01 025	• Painted in ivory epoxy-polyester	
AS 01 026	• Adjustable width	
	Medium model «TRM»	93.40
	Big model «TRG»	102.30

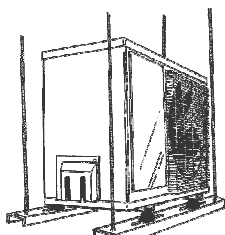
ROOF (OR SLOPING SURFACE) BRACKET



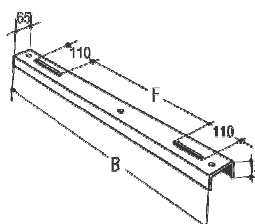
Part No.	Item	€
AS 01 085	• To install on roofs or sloping surfaces	
	• Adjustable angle for surface incline 10 to 28°	
	• Adjustable length width: 400 to 1000 mm	
	• Zinc-coated steel and polyester epoxy painted	
	• Bag with bolt and shock-absorbers	
	• 100 to 380 mm depth	
	Roof or sloping surface universal support	134.00

01 BRACKETS FOR OUTDOOR UNIT

• Ceiling brackets



- Metal sheet 2 mm.
- 2 drillings Ø11 ceilings fixing threaded bar.
- 1 central drilling Ø11 to avoid opening.



DIMENSIONS	B	F
Small	880	550
Medium	980	650
Big	1,080	750

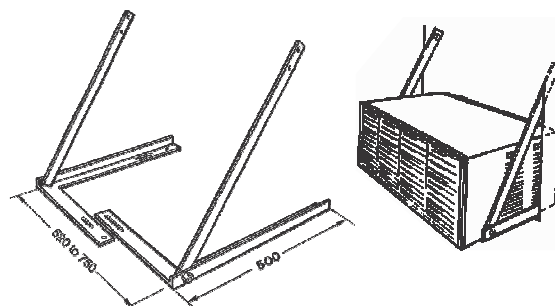


Part No.	Item	€
	• Painted in ivory epoxy-polyester • Supply in single boxes	
AS 01 021	SMALL model «TP»	47.20
AS 01 022	MEDIUM model «TM»	49.72
AS 01 023	BIG model «TG»	51.64

• Window support

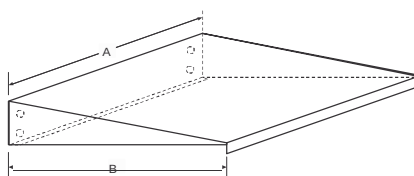


- Metal sheet 2 mm.
- Telescopic adjustment.
- Mobile brace

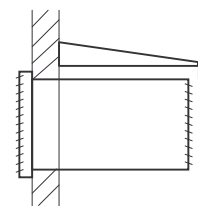


Part No.	Item	€
	• Painted in ivory epoxy-polyester • For appliances of 520 - 750 mm.	
AS 01 075	SOPORT-VENT	61.24

• Anti-rain protector for window machine



DIMENSIONS	A	B
Small	500	400
Medium	600	500
Big	700	550



Part No.	Item	€
	• Painted in ivory epoxy-polyester	
AS 01 077	Anti-rain protector SMALL	63.08
AS 01 078	Anti-rain protector MEDIUM	69.36
AS 01 079	Anti-rain protector BIG	78.48



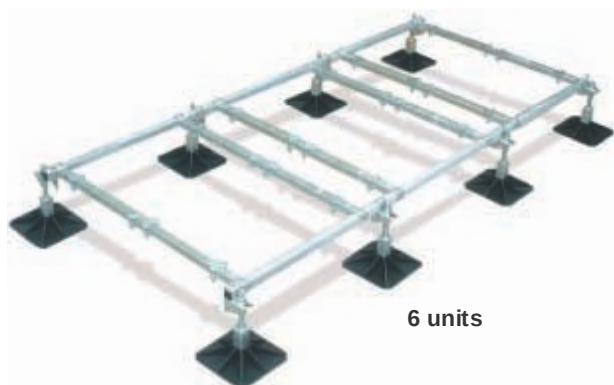
PAINTING TO TOUCH OF BRACKETS

Part No.	Item	€
AS 01 801	Aerosol 400 ml of nitro-synthetic painting. colour RAL 1015 (light ivory)	27.44

01 UNIVERSAL ADJUSTABLE FRAMEWORK FOR LIGHT FLAT ROOFS



Part No.	Item	€
	• Big Foot support surface: 305 mm x 305 mm • Feet total height: 375 mm (optional 575 mm for graded roofs) • Adjustable height: 245 mm - 350 mm: floor to framework (optional 245-550 mm for graded roofs) • Maximal charge: 120 Kg per Big Foot	
AS 01 101	Framework 1 x 1.3 m (1 to 2 units) 480 Kg	1056.00
AS 01 102	Framework 2 x 1.3 m (1 to 4 units) 720 Kg	1450.00
AS 01 103	Framework 3 x 1.3 m (1 to 6 units) 960 Kg	1972.00



EASY ASSEMBLY

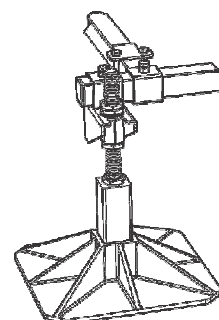


ADJUSTABLE HEIGHT

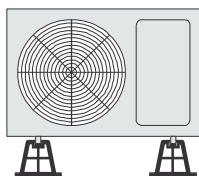
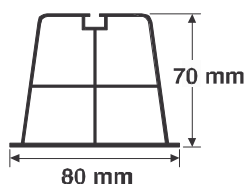


Detachable feet

The feet can be removed individually if the roof needs to be repaired, the equipments can remain assembled.



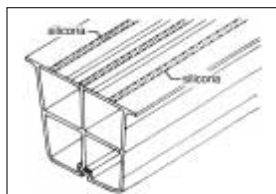
01 FLOOR SUPPORTS FOR OUTDOOR UNIT



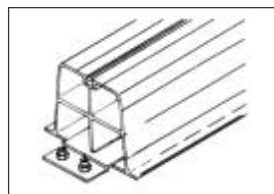
• Floor supports "TerraSoport"

Part No.	Item	Box content	€/unit
SUPPORTS "TerraSoport"			
	• Hard PVC colour black or ivory • Allowable load up to 140 Kg per foot • Includes: 2 screws M10 x 32 2 nuts M10 2 washers M10		
AS 01 790	PRN 350 length 350 BLACK Box 12 units	12	9.70 8.80
AS 01 791	PRN 450 length 450 BLACK Box 12 units	12	12.00 11.00
AS 01 792	PRN 1000 length 1000 BLACK	2	28.00
AS 01 793	PRB 350 length 350 IVORY Box 12 units	12	8.70 8.80
AS 01 794	PRB 450 length 450 IVORY Box 12 units	12	12.00 11.00
ACCESSORIES			
AS 01 797	Galvanized fixing plate with screws	4	6.60
AS 01 798	Coloured black end cover	4	3.24
AS 01 799	Coloured ivory end cover	4	3.24

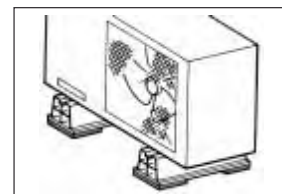
FIXING AND SHOCK-ABSORPTION POSSIBILITIES:



With silicone
AI 19 002



With the accessory
AS 01 797



With rugs
(100x100 mm)
AV 01 206

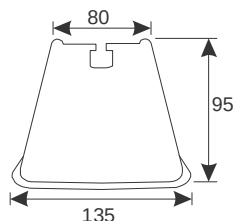
• Support for condensing unit

Part No.	Item	Box content	€/unit
"Economic"			
	• Allowable load up to 140 Kg. • Light weight, easy storage, and good vibration- and shock-absorption • UVA resistant		
AS 01 781	BP 350N length 350 mm BLACK	20	6.60
AS 01 782	BP 450N length 450 mm BLACK	20	7.50
AS 01 783	BP 350C length 350 mm IVORY	20	6.60
AS 01 784	BP 450C length 450 mm IVORY	20	7.50



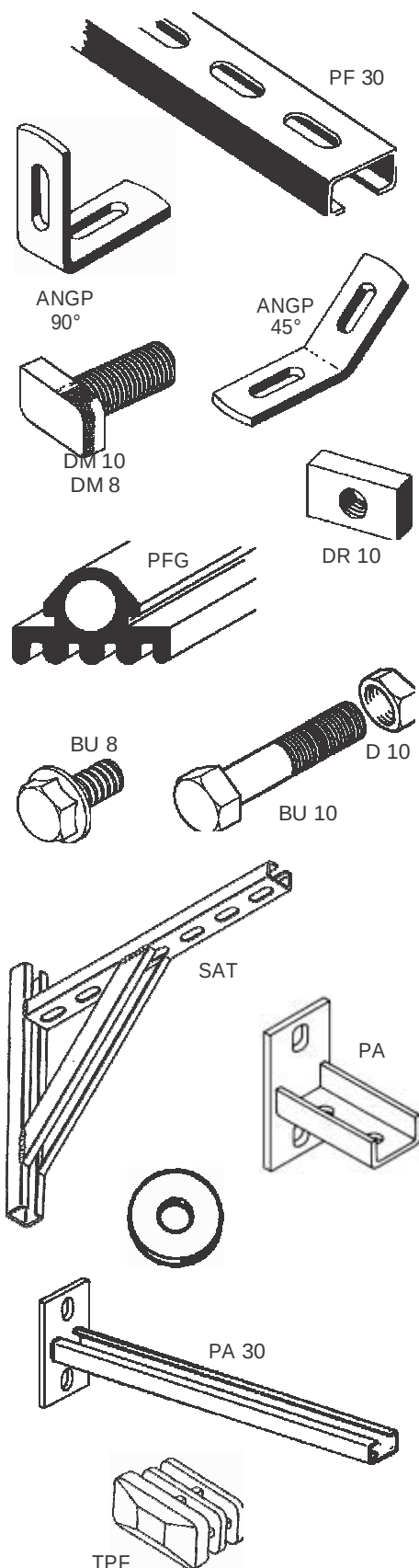
EASY STORAGE

• Set of polyamide plastic supports



Part No.	Item	€
AS 01 789	• Sets of plastic supports Set SoportEsc of 4 pcs + than 25 units	10.74 11.00

CA TAYLOR-MADE BRACKETS FOR AIR-CONDITIONERS



Part No.	Item	Supply bag	€ / unit
MACHINE ASSEMBLY			
CA 12 001	COMPOSED CHANNEL RAIL • Sendzimir galvanized • Channel rail 32 x 20 x 2.5 PF 30.1	2 m	17.00/m
CA 12 003 CA 12 005	GALVANIZED STEEL CONNECTION ANGLE ANGP 90 (90°) ANGP 45 (45°)	10 units 10 units	57.20/bag 57.20/bag
CA 12 010	GALVANIZED STEEL RHOMBUS NUT M10 DR 10	10 units	9.40/bag
CA 12 015	GALVANIZED STEEL TEE BOLT M10 x 16 BU 10	10 units	7.20/bag
CA 12 016	GALVANIZED STEEL HAMMER HEAD BOLT 29 mm DM 10	10 units	32.74/bag
CA 12 091	ANTIVIBRATING RUBBER CHANNEL RAIL PFG	10 m	10.88/m
AI 21 108	GALVANIZED STEEL NUT M10 D 10	—	0.10
AI 21 035	GALVANIZED STEEL PLAIN WASHER M10 M10	—	0.06
DUCT ASSEMBLY			
CA 12 051	COMPONIBLE OUTLINE • Made out of zinc • Outline 30 x 15 x 1.5 PF 30		13.50/m
CA 12 053 CA 12 055	MOUNTING ANGLE ANG 90 (90°) ANG 45 (45°)		39.60/bag 39.60/bag
CA 12 060	SQUARE HAMMER HEAD BOLT M8 DR 8		8.24/bag
CA 12 065	SCREW AND NUT M8 BU 8		3.70/bag
CA 12 066	SCREW HAMMER HEAD BOLT DM 8		32.52/bag
CA 12 092	ANTIVIBRATING RUBBER CHANNEL RAIL PFG		10.88/m
AI 21 106	ZINC NUT M8		3.84/bag
AI 21 034	ZINC WASHER M8		3.60/bag
WALL CHANNEL ASSEMBLY			
CA 12 081	SUPPORTING SHELF FOR PF AND PF1 PA length 80 mm	1 unit	11.40
CA 12 082	SUPPORTING SHELF FOR PF1 PA 30 length 280 mm	1 unit	12.10
CA 12 085 CA 12 086	WELDED CHANNEL SHELF • Welded and galvanized • PF1 channel shelf SAT length 350 mm SAT1 length 530 mm	1 unit 1 unit	26.80 31.08
CA 12 087 CA 12 088	BLACK PLASTIC END COVER (PROTEC-HUBCAP) • Black plastic TPF for PF 30 channel TPF1 for PF 30.1 channel	1 unit 1 unit	0.64 0.74

02 BOLT FOR SPLIT ASSEMBLY



Part No.	Item	Ø Bit	Thread	Box cont.	€/unit
WALL FIXING					
AI 07 341	T 9C T	9	M6 x 45	200	0.50
AI 07 346	9CL T	9	M6 x 60	200	0.56
AI 07 342	11C T	11	M8 x 60	100	0.72
AI 07 347	11CL T	11	M8 x 80	100	0.88
AI 07 343	14C T	14	M10 x 70	100	1.04
AI 07 344	16C	16	M12 x 80	50	1.74
AI 07 338	Blister BT10C 4 uds. M8 x 60 (broca Ø10 mm)				5.20
AI 07 339	Blister BT10CL 4 uds. M8 x 80 (broca Ø10 mm)				5.70
Threaded brass plug					
AI 07 353	M6	8	M6	100	0.38
AI 07 354	M8	10	M8	100	0.64
AI 07 355	M10	12	M10	50	1.16
NYLON PLUGS LP4					
4 directions expansive plugs to fix on solid or empty materials. With two side wings to avoid spinning during mounting and ensure a correct installation on empty materials. Working temperature -40 / +80°C					
AI 07 271	Plug 6 x 30	(100 uts box)			6.60
AI 07 272	Plug 8 x 40	(100 uts box)			10.40
AI 07 273	Plug 10 x 50	(50 uts box)			10.20
GALVANIZED FIXING THREADED RODS					
AI 21 310	Thread M4 x 1000 mm			250	0.86
	Thread M4 (bale 250 m)				0.78/unit
AI 21 311	Thread M6 x 1000 mm			100	1.04
	Thread M6 (bale 100 m)				0.94/unit
AI 21 312	Thread M8 x 1000 mm			50	1.74
	Thread M8 (bale 50 m)				1.56/unit
AI 21 316	Thread M10 x 1000 mm			25	3.12
WRENCH FOR ASSEMB. THREADED BARS					
• Allows to mount without any damage all types of threaded bars M6, M8, M10, M12					
AI 21 321	Type CBF				49.40
GALVANIZED STEEL HEXAGON NUT					
AI 21 107	M 4			100	1.20/bag
AI 21 105	M 6			100	2.40/bag
AI 21 106	M 8			100	3.84/bag
AI 21 108	M 10			10	0.10
AI 21 111	M 12			10	0.14
STAINLESS STEEL NUT					
AI 21 038	Stainless steel M 8			100	14.50/bag
CHANNEL SLIDENUT					
CA 12 060	Rectangular nut M8			10	8.24/bag
CA 12 010	Rectangular nut M10			10	9.40/bag
GALVANIZED STEEL WASHER					
AI 21 031	M 4			100	1.20/bag
AI 21 033	M 6			100	2.40/bag
AI 21 034	M 8			100	3.60/bag
AI 21 035	M 10				0.06/ud
STAINLESS STEEL WASHER					
AI 21 037	Stainless Steel M 8				5.00 / bag
GALVANIZED NOTCHED WASHER					
AV 01 057	M 8 notched				0.06
AV 01 058	M 10 notched				0.10
GALVANIZED BOLT					
AS 02 991	Galvanized bolt M8 x 30 mm				0.14
HEXAGONAL HEAD BOLT					
AS 02 235	Galvanized bolt 8 x 70				0.34

BICOMPONENT CHEMICAL ANCHORAGE POLYESTER RESIN BASED



Part No.	Item	€
	Application by professional 380 ml gun. Its great mechanical resistance and its adherence makes it ideal for screwed rods anchorage in walls and empty walls, with nylon sieves.	
AI 07 251	Polyester resin cartridge 380 ml + 1 mixer	36.24
AI 07 252	Professional gun 380 ml	73.00
AI 07 253	Resin Mixer	1.60
AI 07 254	Nylon sieve diam. 12 x 50 mm (10 uts box.)	0.62/ud
AI 07 255	Nylon sieve diam. 15 x 85 mm (10 uts box.)	0.68/ud
AI 07 256	Nylon sieve diam. 20 x 85 mm (10 uts box.)	0.90/ud

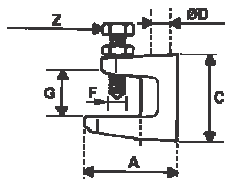
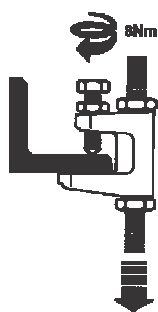
BEAM CLAM CASTED



MOR 10
MOR 12

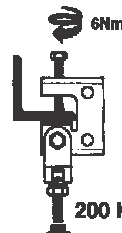
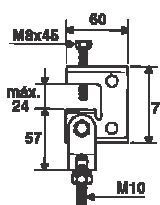


MOR 2



Tipo	A	C	D	F	G	Peso	Carga
MOR8	21	35	M8 Ø9	M8	18	81	1200
MOR10	23	42	M10 Ø11	M10	20	143	2500
MOR12	35	54	M12 Ø13	M10	26	216	3500
MOR16	30	58	M16 Ø17	M12	28	318	5500

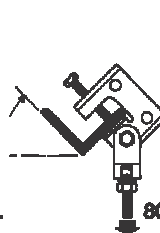
Part No.	Item	Thread	Max. load Kg	Max. thickness channel rail	€
VERTICAL SUSPENSION					
AS 02 301	MOR 8	M8	120	18	4.00
AS 02 302	MOR 10	M10	250	21	5.00
AS 02 303	MOR 12	M12	350	23.5	6.00
AS 02 304	MOR 16	M16	550	29.5	9.00
STEEL OSCILLATING CLAMP					
AS 02 305	MOR 2	M10	See picture	24	52.20



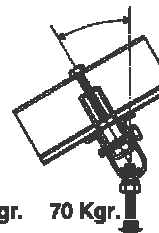
200 Kgr.



95 Kgr.



80 Kgr.



70 Kgr.

ENLARGER / SPREADABLE HOSE



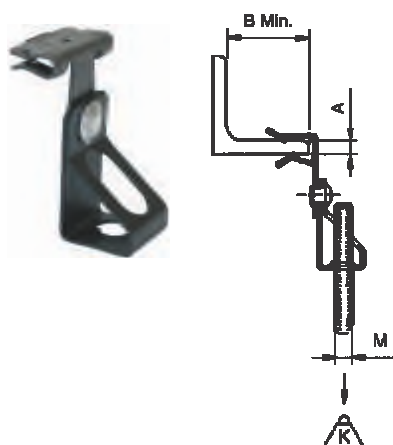
Part No.	Item	€
CYLINDRICAL SPREADABLE HOSE		
	• To enlarge rods or mount rods with male joint.	
AI 21 112	M4 x 20	100
AI 21 113	M6 x 20	200
AI 21 114	M8 x 25	200
ROD ENLARGER HOSE		
AI 21 323	PU M6	2.60
AI 21 324	PU M8	2.60

ADJUSTABLE EQUIPMENT FOR INSTALLATION OF UNITS



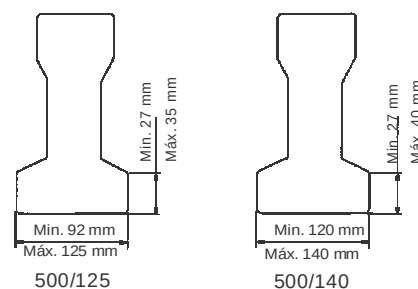
Part No.	Item	€
AS 01 099	It allows a rapid fixing of the units, due to an adjustment lengthwise and breadthwise of the four fixing points, without the help of the machine DIMA model	123.30

02 FIXING SYSTEMS ABOVE METAL BEAM



Part No.	Item	Kg	Thickness beam (mm)	Supply bag	€/unit
SUPPORT FOR HANGING WITH NUTS AND SCREWS					
CA 12 111	100-210 Thread M6	70	1.5-4	100	1.50
CA 12 112	100-211 Thread M8	70	1.5-4	100	1.50
CA 12 114	101-210 Thread M6	70	4-10	100	1.86
CA 12 115	101-211 Thread M8	70	4-10	100	1.86

Ref.	A (mm)	B (mm)	M (mm)
100-210	1.5-4	18	6
100-211	1.5-4	18	8
101-210	4-10	25	6
101-211	4-10	25	8



Type of beams

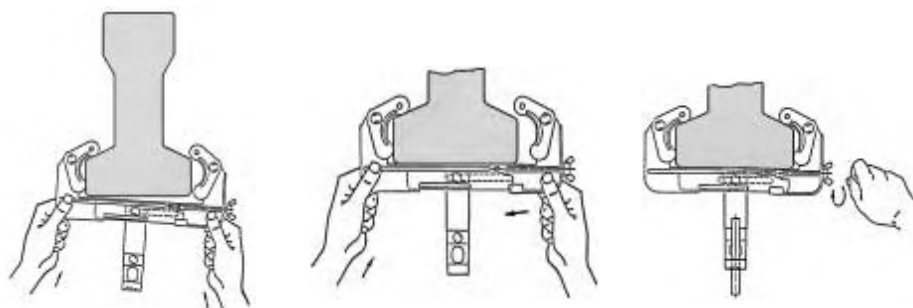
QUICK FIXING SYSTEMS ABOVE CONCRETE BEAMS

- For hanging with nuts and screws



Part No.	Ref.	M	Kg	Units/box	€/unit
CA 12 153	500-211/125	M8	70	50	11.62
CA 12 154	500-211/140	M8	70	50	11.62

Mounting example:

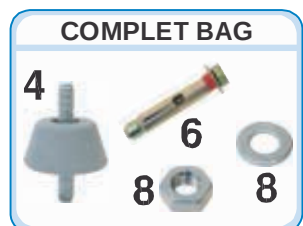


FIXING SYSTEMS ABOVE HOLLOW WALL



Part No.	Item	ØDrill	Wall thickness	Units/box	€
WITH SCREW					
AI 07 361	M5 x 45	11	6 - 13	100	0.84
AI 07 363	M6 x 45	13	6 - 13	100	1.00
AI 07 365	M8 x 61	13	3 - 16	100	1.66
WITHOUT SCREW					
• Ideal for ducted assembly to vaults by means of screws					
AI 07 372	M4 x 45	9	8 - 16	100	0.484
AI 07 374	M5 x 45	11	6 - 13	100	0.86
AI 07 376	M6 x 45	13	6 - 13	100	0.90
AI 07 378	M6 x 71	13	16 - 32	100	1.10
AI 07 381	M8 x 61	13	3 - 16	100	1.26
AI 07 383	M8 x 73	13	16 - 32	100	1.34
PINCER FOR BRICK					
AI 07 391	Mod. 360000 to be used with nuts M4, M5, M6 and M8				53.90

02 ANTIVIBRATION DAMPERS AND FIXING SCREWS



Part No.	Item	€
AS 02 201	BASIC FIXING BAG	
	Type B1 contains: 6 electrogalvanized metal plug T11C 4 galvanized screws M8 x 30 4 galvanized nuts M8 4 galvanized washers M8 4 notched washers M8	6.20
AS 02 202	ECONOMIC FIXING BAG	
	Type B2 contains: 6 plugs Ø10 x 60 6 hexagonal head screws Ø8x70 6 washers Ø8x17 Box 100 bags	3.60 3.00
AS 02 203	SIMPLE FIXING BAG	
	Type B0 contains: 6 plugs Ø10 x 50 6 hexagonal head screws Ø8x50 Box 100 bags	2.20 1.90
AS 02 211	BASIC SHOCK-ABSORPTION BAG	
	Type B3 contains: 4 antivibrators A-35b (8 to 30 Kg) 8 galvanized nuts M8 8 galvanized washers M8 Box 100 bags	5.80 5.50
AS 02 212	Type B4 contains: The same as B-3 but also with antivibrators A-35 (12 to 50 Kg)	4.80
AS 02 112	Type B4/N (neutral bag)	4.80
	Box 100 bags	4.00
AS 02 213	Box 250 bags	3.40
	Box 500 bags	3.00
AS 02 213	Type B5 contains: The same as B-3 but also with antivibrators A-45 (12 - 85 Kg)	9.50
	Type B5/N	9.50
AS 02 113	Box 100 bags	7.00
	Box 250 bags	5.00
	Box 500 bags	4.30
AS 02 221	COMPLETE BAGS SHOCK-ABSORPTION AND FIXING	
	Type B7 contains: 6 electrogalvanized metal plugs T11C 4 antivibrators A-35b (8 - 30 Kg) 8 galvanized nuts M8 8 galvanized washers M8	10.00
AS 02 222	Type B8 contains: The same as B-7 but also with antivibrators A-35 (12 - 50 Kg)	9.00
AS 02 223	Type B9 contains: The same as B-7 but also with antivibrators A-45 (12 - 85 Kg)	15.10
AS 02 225	BAG FOR GROUND ACCESSORIES	
	Type B10 contains: 4 complete shock-absorbers S40 with nuts and washers	6.50
AS 02 125	Type B10 (neutral bag)	6.50
	Box 100 bags	5.00
AS 02 226	Box 250 bags	4.00
	Box 500 bags	3.50
AS 02 226	Type B12 contains: 4 complete shock-absorbers S60 with nuts and washers	12.00
	Type B12 (neutral bag)	12.00
AS 02 126	Box 50 bags	7.00
	Box 100 bags	6.00
	Box 250 bags	5.00
AS 02 288	BAG FOR GROUND WITH SEPARATION	
	Type B15 contains: 4 shock-absorbers ST03 of 75 mm with nuts and washers	16.00
AS 02 289	Type B16 contains: 4 shock-absorbers ST04 of 100 mm with nuts and washers	

*Neutral bags only for warehouses

03 COVERING DUCTS FOR AIR-CONDITIONER PIPES



white duct



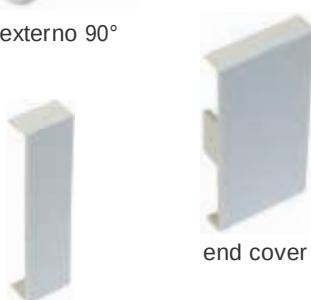
out-corner 90°



in-corner 90°



ângulo externo 90°

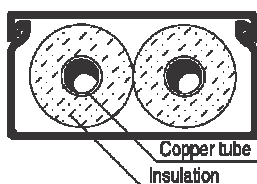


end cover

cover joint

Part No.	Item	Box content	€
WHITE DUCT			
AS 03 251	Duct CB 60 x 40	40/m	9.56/m
AS 03 252	Duct CB 80 x 40	32/m	14.34/m
AS 03 241	Duct CB 100 x 40	24/m	17.28/m
AS 03 255	Duct CB 60 x 60	32/m	11.50/m
AS 03 253	Duct CB 80 x 60	24/m	14.00/m
AS 03 254	Duct CB 100 x 60	18/m	18.28/m
FLAT CORNER 90°			
AS 03 256	Corner AP 60 x 40	10	5.90
AS 03 257	Corner AP 80 x 40	10	6.62
AS 03 242	Corner AP 100 x 40	10	7.56
AS 03 260	Corner AP 60 x 60	10	6.74
AS 03 258	Corner AP 80 x 60	10	7.26
AS 03 259	Corner AP 100 x 60	10	8.00
IN-CORNER 90°			
AS 03 261	Corner AI 60 x 40	10	5.90
AS 03 262	Corner AI 80 x 40	10	6.24
AS 03 243	Corner AI 100 x 40	10	7.96
AS 03 265	Corner AI 60 x 60	10	6.48
AS 03 263	Corner AI 80 x 60	10	6.88
AS 03 264	Corner AI 100 x 60	10	7.12
OUT-CORNER 90°			
AS 03 266	Corner AE 60 x 40	10	5.90
AS 03 267	Corner AE 80 x 40	10	6.24
AS 03 244	Corner AE 100 x 40	8	7.96
AS 03 270	Corner AE 60 x 60	10	6.48
AS 03 268	Corner AE 80 x 60	10	6.88
AS 03 269	Corner AE 100 x 60	8	7.12
END COVER			
AS 03 271	Cover TF 60 x 40	20	3.46
AS 03 272	Cover TF 80 x 40	20	3.98
AS 03 245	Cover TF 100 x 40	20	4.74
AS 03 275	Cover TF 60 x 60	20	4.20
AS 03 273	Cover TF 80 x 60	20	4.58
AS 03 274	Cover TF 100 x 60	20	5.16
COVER JOINT			
AS 03 276	Cover joint EJ 60	20	1.64
AS 03 277	Cover joint EJ 80	20	1.82
AS 03 278	Cover joint EJ 100	20	1.98

DUCTS WITH COVER



Copper tube
Insulation

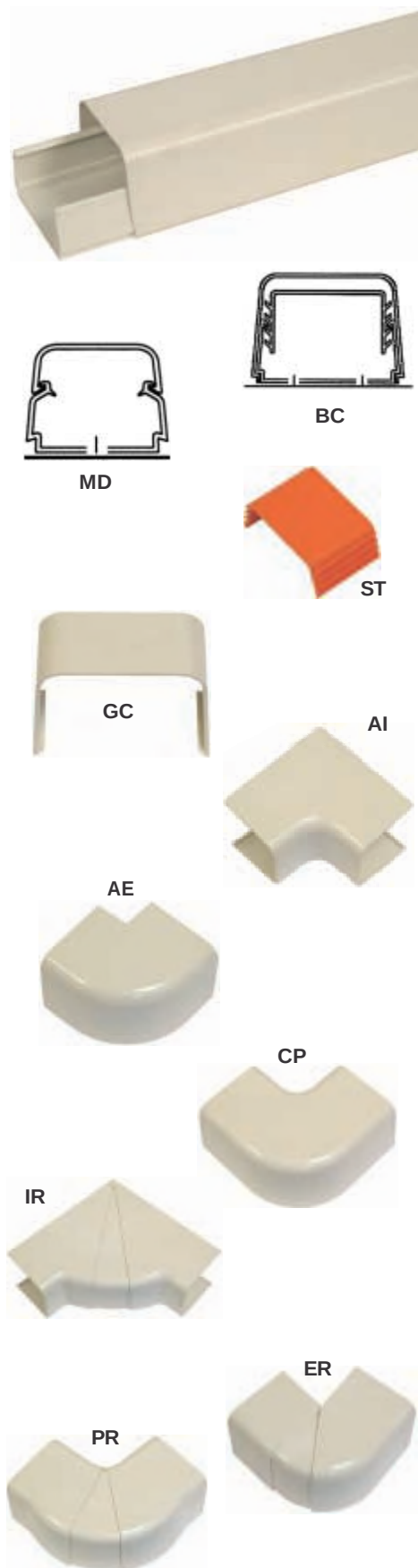


Tube for
condensed fluids

Part No.	Item	Box content	€/m
WHITE DUCT			
AS 03 201	Duct 40-60 B	48 mt	10.04
AS 03 202	Duct 60-60 B	32 mt	12.04
AS 03 203	Duct 60-80 B	32 mt	14.72
AS 03 205	Duct 60-100 B	24 mt	19.84
AS 03 206	Duct 60-120 B	16 mt	20.88
AS 03 207	Duct 80-120 B	12 mt	23.46
AS 03 501	Duct 25-25	64 mt.	4.56
AS 03 811	Duct 30-25 B	80 mt.	5.93
AS 03 511	Duct 35-30	64 mt.	5.70

03 COVERING DUCTS FOR AIR-CONDITIONER PIPES

- Round corners
- Colour RAL 9001
- Working temp. range: from -20°C to +60°C

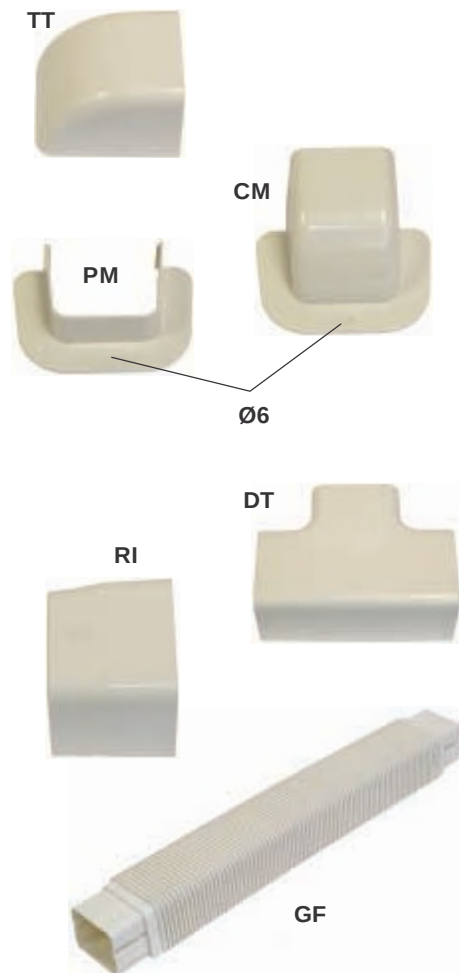


Part No.	Item	Box content	€
DUCT			
AS 03 601	BC 60 x 45	24/m.	6.30
AS 03 602	BC 70 x 55	24/m.	7.84
AS 03 603	BC 80 x 60	16/m.	9.44
AS 03 604	BC 90 x 65	16/m.	11.10
AS 03 605	BC 110 x 75	8/m.	13.60
ECONOMICAL DUC "MIDI"			
AS 03 608	MD 60 x 45	24/m.	5.00
AS 03 609	MD 80 x 60	16/m.	7.50
ADJUSTABLE BRACKETS TO FIX PIPES			
AS 03 611	ST 60	30	0.52
AS 03 612	ST 70	30	0.58
AS 03 613	ST 80	30	0.58
AS 03 614	ST 90	30	0.66
AS 03 615	ST 110	20	0.70
COVER-JOINT DUCT UNION			
AS 03 621	GC 60	30	2.32
AS 03 622	GC 70	30	2.60
AS 03 623	GC 80	30	3.10
AS 03 624	GC 90	30	3.30
AS 03 625	GC 110	20	3.50
IN-CORNER			
AS 03 631	AI 60 x 45	8	4.52
AS 03 632	AI 70 x 55	8	4.84
AS 03 633	AI 80 x 60	6	5.16
AS 03 634	AI 90 x 65	6	5.50
AS 03 635	AI 110 x 75	4	5.52
OUT-CORNER			
AS 03 641	AE 60 x 45	12	4.52
AS 03 642	AE 70 x 55	12	4.84
AS 03 643	AE 80 x 60	9	5.16
AS 03 644	AE 90 x 65	9	5.50
AS 03 645	AE 110 x 75	6	5.52
PLANE CURVE			
AS 03 651	CP 60 x 45	10	5.16
AS 03 652	CP 70 x 55	10	5.72
AS 03 653	CP 80 x 60	8	7.16
AS 03 654	CP 90 x 65	8	7.64
AS 03 655	CP 110 x 75	6	9.28
ADJUSTABLE IN-CORNER 80° TO 105°			
AS 03 715	IR 60 x 45	6/m.	5.16
AS 03 716	IR 80 x 60	4/m.	6.00
ADJUSTABLE OUT-CORNER 70° TO 120°			
AS 03 720	ER 60 x 45	8/m.	5.16
AS 03 721	ER 80 x 60	6/m.	6.00
ADJUSTABLE PLANE-CORNER 65° TO 130°			
AS 03 724	PR 60 x 45	8/m.	5.96
AS 03 725	PR 80 x 60	6/m.	8.28

(*) Coming soon

03 COVERING DUCTS FOR AIR-CONDITIONER PIPES

• Round corners



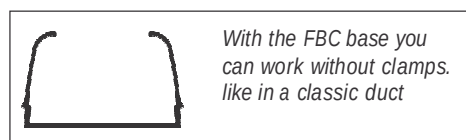
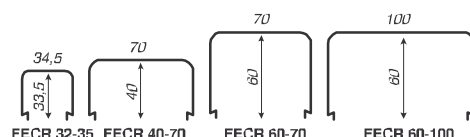
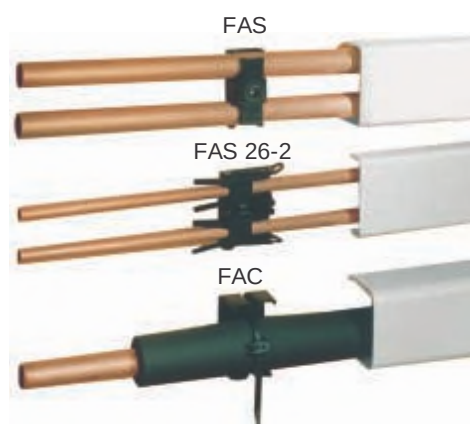
Part No.	Item	Box content	€
END CAP			
AS 03 661	TT 60 x 45	12	4.28
AS 03 662	TT 70 x 55	12	4.52
AS 03 663	TT 80 x 60	9	5.04
AS 03 664	TT 90 x 65	9	5.16
CORNER WALL ELBOW			
AS 03 671	CM 60 x 45	9	6.32
AS 03 672	CM 70 x 55	9	7.04
AS 03 673	CM 80 x 60	6	8.20
AS 03 674	CM 90 x 65	6	8.64
AS 03 675	CM 110 x 75	4	10.08
WALL PASSAGE			
AS 03 681	PM 60 x 45	10	4.90
AS 03 682	PM 70 x 55	10	5.16
AS 03 683	PM 80 x 60	8	6.28
AS 03 684	PM 90 x 65	8	6.64
AS 03 685	PM 110 x 75	8	8.36
"T" SHUNT			
AS 03 691	DT 80 x 60	4	12.36
AS 03 692	DT 90 x 65	4	13.40
AS 03 695	DT 110 x 75	2	15.44
REDUCTION			
AS 03 701	RI 80-60	12	3.50
AS 03 702	RI 80-70	12	3.50
AS 03 703	RI 90-60	12	3.76
AS 03 704	RI 90-70	12	3.80
AS 03 705	RI 110-80	8	4.00
AS 03 706	RI 110-90	8	5.04
FLEXIBLE DUCT			
• Length 590 mm			
AS 03 711	GF 60 x 45	6	9.20
AS 03 713	GF 80 x 60	4	10.56

FIXING SYSTEMS FOR DRAINAGE CHANNELS



Part No.	Item	€
ADHESIVE PUTTY		
• It allows to fix the channel to wall without stoppers • Proper for PVC and plastic material • Water and temperat. from -20°C to 110°C resistant • Quick drying • Permanent elasticity		
AS 03 800	MONTA-KIT 125 gr tube	11.00
AS 03 801	MONTA-KIT 310 ml cartridge	17.98
SPRAY GUN		
AI 19 011	• To apply the cartridges of adhesive putty Spray gun H175 zipper application	12.00
NAIL WALL PLUG		
• Nylon wall plug (polyamide) • Bicromatic steel screw		
AS 03 814	Wall plug 5x25 mm 100 units boxes	18.00/box
AS 03 813	Wall plug 6x35 mm 100 units boxes	24.00/box
AS 03 815	Wall plug 6x45 mm 100 units boxes	24.50/box
THREADED NAIL		
AS 03 816	Quick fixing 6x35 mm thread M6 100 units boxes	33.00/box
AS 03 817	Quick fixing 8x60 mm thread M8 50 units boxes	38.50/box

03 ROUND CORNERS DUCTS



Part No.	Item	Unit Packing	€
• WHITE COLOUR RAL 9016 • WITH ROUND CORNERS			
DUCTS			
AS 03 301	FECECR 32-35	48/m.	5.96
AS 03 302	FECECR 40-70	40/m.	8.42
AS 03 104	FEC 60-70	32/m.	10.34
AS 03 303	FECECR 60-100	32/m.	12.68
BASE FOR DUCTS FBC			
AS 03 113	FBC 32-35	48/m.	3.30
AS 03 111	FBC 40-70	40/m.	5.44
AS 03 114	FBC 60-70	32/m.	8.52
AS 03 112	FBC 60-100	32/m.	10.34
PIPE CLAMP			
• Includes plugs and screws			
AS 03 115	FAC (Composed) from Ø 15 to 45	50	1.94
AS 03 116	FAS (Sanitary) from Ø 10 to 22	50	1.78
AS 03 117	FAS 26-2 (Sanitary) from Ø 12 to 18	50	1.64
JOINTS			
AS 03 321	FUR / 33	12	2.28
AS 03 322	FUR / 47	12	2.70
AS 03 124	FU / 67	12	2.84
AS 03 323	FUR / 610	12	3.14
IN-CORNER			
AS 03 325	FAIR / 33	10	4.30
AS 03 326	FAIR / 47	8	5.50
AS 03 128	FAI / 67	8	7.14
AS 03 327	FAIR / 610	8	7.36
OUT-CORNER			
AS 03 331	FAER / 33	10	4.30
AS 03 332	FAER / 47	8	5.50
AS 03 134	FAE / 67	8	7.14
AS 03 333	FAER / 610	8	7.36
FLAT CORNER			
AS 03 335	FAPR / 33	10	4.52
AS 03 336	FAPR / 47	8	6.36
AS 03 138	FAP / 67	8	7.16
AS 03 337	FAPR / 610	8	8.56
T-SHAPE JOINT			
AS 03 341	FDTR / 33	10	4.36
AS 03 342	FDTR / 47	8	5.46
AS 03 139	FDT / 67	6	5.94
AS 03 340	FDTR / 610	10	6.14
REDUCER JOINT			
AS 03 343	FBRR / 47 / 33 (with reduction FDT / 47 - 33)	8	4.42
AS 03 344	FBRR / 610 / 47 (with reduction of 610 / 47)	5	5.24
END CAP			
AS 03 345	FTFR / 33	10	4.26
AS 03 346	FTFR / 47	10	5.01
AS 03 148	FTF / 67	10	5.24
AS 03 347	FTFR / 610	10	5.62
SANITARY COVER JOINT			
AS 03 351	FBMR / 33 single	10	5.44
AS 03 352	FBSR / 47 double	10	7.16
AS 03 353	FBRR / 47 bathroom	6	10.20
ELBOWED HOSE WITH SUPPORT			
AS 03 161	FR - 741/15 (1/2" x Ø 15) brass	20	5.44

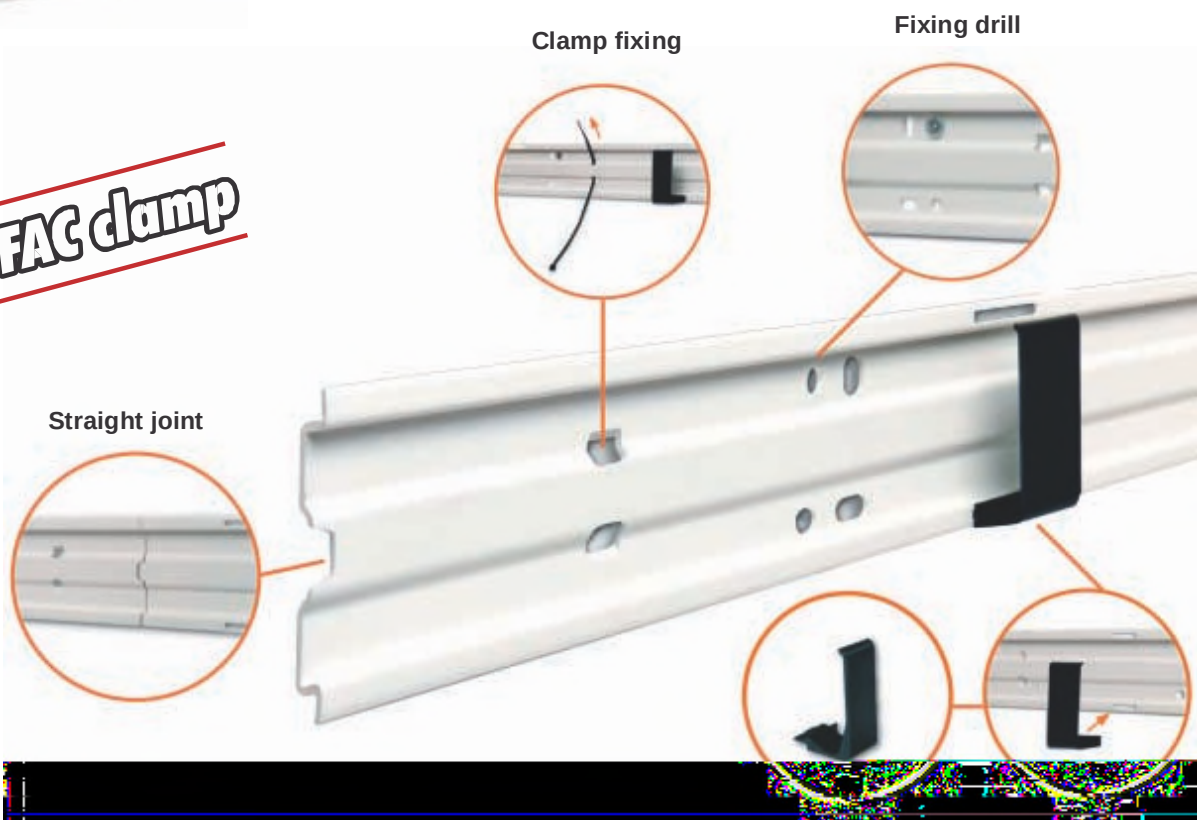
03 COVERING DUCTS

"FLUIDQUINT"

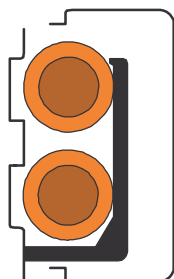
Makes the installation quicker and easier, because of the fact that the installation starts from the first sector. Its stamp makes easier the wall fixing and the pipes clamping, having then an extremely good fixation. The assembling set square is a very convenient item during the installation of the pipes.



without FAC clamp



"Keeps the pipe in horizontal"



STRAIGHT
wall end



BENDED
wall end



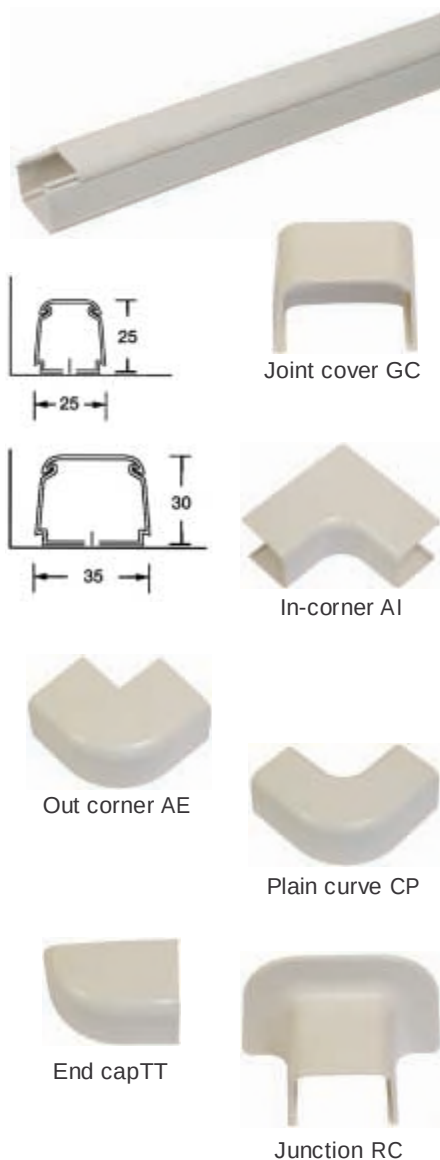
Part No.	Item	Packing units	€
PLAIN BASE			
- Includes a set square every 50 cm - Nylon clamp installation available			
AS 03 362	FBP-47 for FBP40-70 y 60-70	40/m	6.14/m
AS 03 363	FBP-610 for FBP60-100	32/m	8.88/m
STRAIGHT WALL END			
AS 03 366	FPMR-47	8	2.64
AS 03 367	FPMR-610	8	4.18
BENDED WALL END			
AS 03 372	FPMA-47	8	5.28
AS 03 373	FPMA-610	8	6.99

* The installation of FAC and FAS is not compulsory.

• WALL THROUGH PROTECTION

Part No.	Item	€
AS 03 750	- Wall through for air conditioning installation - Inner diameter Ø64mm - Length 350 mm, can be cutted depending on the wall dimension - Frame diameter Ø100 mm with 3 fixing points	9.80

03 DRAIN HOSE DUCT



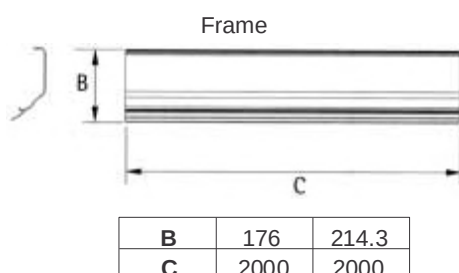
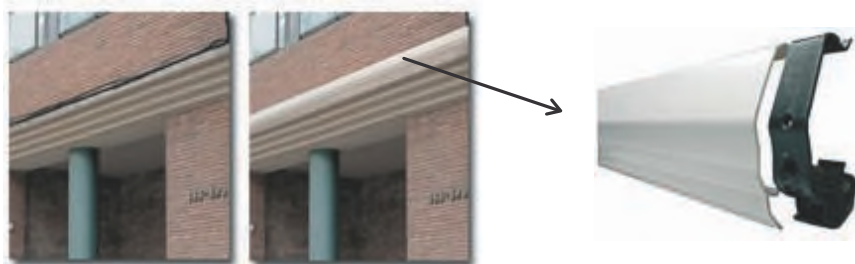
Part No.	Item	Box cont.	€
DUCTS			
AS 03 501 AS 03 511	Duct 25 x 25 Duct 35 x 30	64/m 64/m	4.56/m 5.70/m
JOINT COVER			
AS 03 502 AS 03 512	Hubcap GC Hubcap GC 35 x 30	20 20	2.40 3.30
IN-CORNER			
AS 03 503 AS 03 513	Corner AI Corner AI 35 x 30	20 20	2.40 3.30
OUT-CORNER			
AS 03 504 AS 03 514	Corner AE Corner AE 35 x 30	20 20	2.40 3.30
FLAT CORNER			
AS 03 505 AS 03 515	Corner CP Corner CP 35 x 30	20 20	2.40 3.30
TERMINAL			
AS 03 506 AS 03 516	Terminal TT Terminal TT 35 x 30	20 20	2.40 3.30
JUNCTION			
AS 03 507 AS 03 517	Junction RC Junction RC 35 x 30	20 20	2.40 3.30

ANGULAR MITER CUTTER FOR DUCT

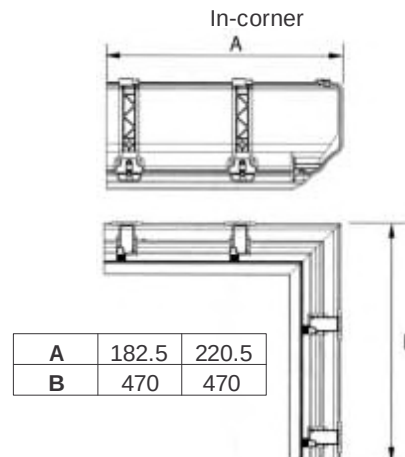
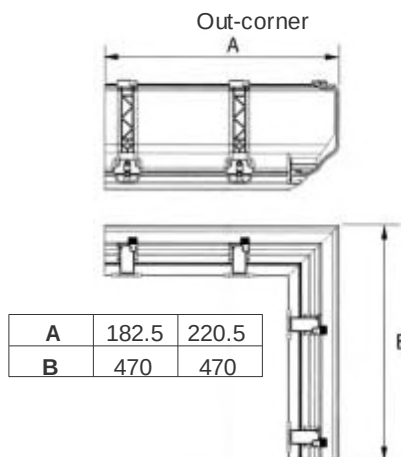
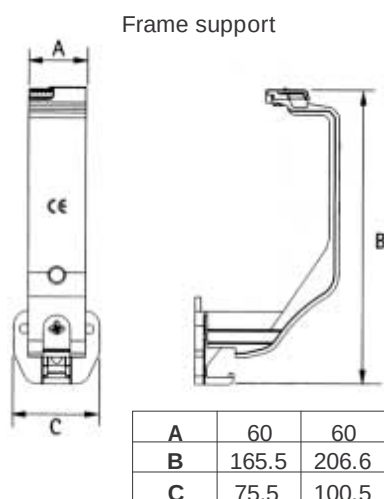


Part No.	Item	€
DUCT 100 mm		
MA 01 307	Angular miter cutter of 550 mm • Colter dimension: 350 mm • Base length: 245 mm • Base width: 56 mm • Cutting max. height: 110 mm • 90° cutting width: 155 mm • 45° cutting width: 100 mm	47.88
MA 01 308	Colter of 550 mm	18.69

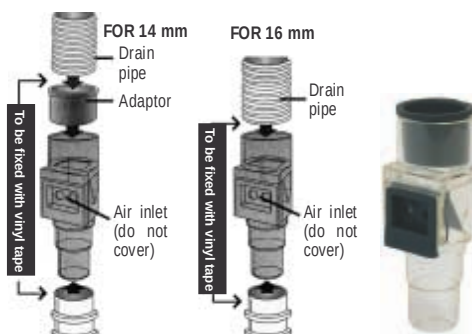
03 AESTHETIC FRONT DUCT



Part No.	Item	€
	• Plastic PVC M1 • White colour • Temperature working range: From -40°C to 60°C	
	FRAMES	
AF 15 351	Frame 176 x 74 length 2 m.	49.19/m
AF 15 352	Frame 218 x 109 length 2 m.	58.40/m
	FRAMES SUPPORTS	
AF 15 353	Wall mounted support 176 x 74	11.57
AF 15 354	Wall mounted support 218 x 109	12.69
	OUT-CORNER	
AF 15 355	Out-corner 176 x 74	79.55
AF 15 356	Out-corner 218 x 109	97.43
	IN-CORNER	
AF 15 357	In-corner 176 x 74	79.55
AF 15 358	In-corner 218 x 109	97.43

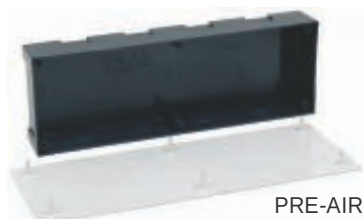


04 BAD ODORS VALVE



Part No.	Item	€
BAD ODORS VALVE		
• It acts as a siphon (water trap) avoiding the bad odors coming from the drainage pipe • Joint Ø14-16 mm • Adaptor diameter Ø14 y Ø16 mm • Dimensions: Length 72 mm, Outer diam. 21 mm		
AS 04 131	Mod. ESV-146	19.80

03 EMBEDDED PRE-INSTALLATION BOX



PRE-AIR

PRE-AIR
with outlet



PRE-INST
normal



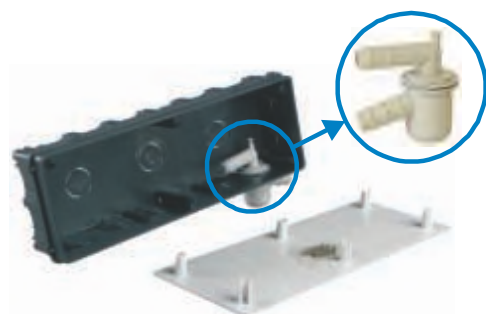
PRE-INST
with outlets

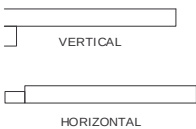


ESCOPRE-INST

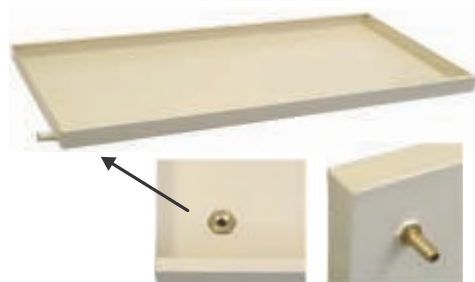


SUPER



Part No.	Item	€/unit	
BOX «PRE-AIR»			
AS 03 901	• Box to fit in ABS with white cover • Dimensions: 350 x 120 x 50 mm Orders 25-49 units Orders 50-99 units Orders 100+ units	12.38	
		11.70	
		11.25	
		10.13	
BOX «PRE-AIR» WITH OUTLET			
AS 03 905	• Box to fit in ABS with white cover • Reversible condensed fluids drainage tray • 90° elbow and isolated adhesive tape included • Dimensions: 392 x 134 x 55 mm Orders 25-49 units Orders 50-99 units Orders 100+ units	15.75	
		14.63	
		13.50	
		12.38	
NORMAL BOX «PRE-INST» 50 mm			
AS 03 903	• Box to fit in ABS with white cover • Dimensions: 430 x 110 x 50 mm Orders 25-49 units Orders 50-99 units Orders 100+ units	12.15	
		11.48	
		11.03	
		9.90	
NORMAL BOX «PRE-INST» 65 mm			
AS 03 902	• Box to fit in ABS with white cover • Dimensions: 430 x 110 x 65 mm Orders 25-49 units Orders 50-99 units Orders 100+ units	13.50	
		12.95	
		12.38	
		11.25	
LONG BOX «PRE-INST» WITH OUTLET			
AS 03 911	• Box to fit in ABS with white cover • Dimensions: 470 x 130 x 67 mm • A tray with 2 outlets for drain with thoric joints Orders 50-99 units Orders 100+ units	31.50	
		27.00	
		24.75	
		REVERSIBLE BOX «ESCOPRE-INST»	
AS 03 921	Vertical outlet		
AS 03 922	Horizontal outlet		
	• Box ABS to fit with separate and reversible tray • Dimensions: 420 x 95 x 65 mm • Drain outlets Ø 16/20 mm Orders 50-99 units Orders 100+ units		
			20.25
			16.88
			13.50
REVERSIBLE BOX «SUPER»			
AS 03 904	• Box to fit in ABS with white cover • Dimensions: 530 x 90 x 65 mm • Dimensions with tray and cover: 550 x 140 x 65 mm • Double-faced and separate tray with joint for drainage tube in Ø16, Ø18 and Ø20 mm Orders 25-49 units Orders 50-99 units Orders 100+ units	33.75	
		31.50	
		29.25	
		24.75	
SYPHON AND BOX			
AS 03 932	• Box to fit in ABS with white cover • Dimensions: 480 x 130 x 60 mm • Two taps and syphon included • Box with 2 untis	30.38	
SPARE COVERS			
AS 03 941	PRE-AIR cover 350x120 (AS 03 901)	5.90	
AS 03 942	PRE-AIR cover 392x134 (AS 03 905)	6.10	
AS 03 943	PRE-INST cover 470x110 (AS 03 902/903)	4,64	
AS 03 944	PRE-INST cover 470x130 (AS 03 911)	4.64	
AS 03 946	ESCOPRE-INST cover 420x95 (AS 03 921/922)	5.31	

04 CONDENSATION COLLECTING



Inferior exit detail



PLACING
BIOCIDA TABLET
ON CONDENSATION
COLLECTING TRAY



Biocide tablet



Adicomplet



Remote

• Condensation collecting tray

Part No.	Item	€/ut
AS 04 001	• Painted in ivory epoxy	57,08
AS 04 002	• Outlet coupling Ø 14	72,00
AS 04 003	• Cardboard box of 2 units	66.00
AS 04 021	Small model (380 x 875)	54.40
AS 04 022	Big model (450 x 925)	58.60
AS 04 023	Super model (475 x 1100)	63.84
	BELOW	
	LATERAL	
	STAINLESS	
AS 04 005	• Stainless AISI-304	148.56
AS 04 006	Stainless Small model (380 x 875)	156.48
AS 04 007	Stainless Big model (450 x 925)	192.24
	STAINLESS Super model (475 x 1100)	
	TRAY SUPPORT TO TRAY SUPPORT	
AS 04 011	Set of tray supports Small	34.60
AS 04 012	Set of tray supports Big	36.36
AS 04 013	Set of tray supports Super	28.04

• Plastic condensation tray

Part No.	Item	€
AS 04 016	• Ivory colour plastic tray with 16, 18 and 20 mm Ø vertical tube outlet	43.20
AS 04 017	• Includes plastic support set	49.20
	Small mod. 790P (790 x 390)	
	Big mod. 940P (940 x 420)	

• Biocide tablet for condensation collecting tray

Part No.	Item	€
18 HF 091	• It controls: formation of mould, growth of bacteria, smell of dampness, overflow of tray, anti legionnaire's disease	17.44
18 HF 092	• Medium use from 3 to 6 months all 24 hours	30.48
	Mod. FT/C up to 15.000 Kcal/h	
	Mod. AT/C up to 45.000 Kcal/h	
	ADICOMPLET	
18 HF 095	Biocida pill against legionella	14.20
	• 1 Pill for each 0,1 m and 6 months	13.36/ut
	• Official number of plaguicides01-100-02222	
	Box of 100 pills	

• Cans for condensed fluids

Part No.	Item	€
AS 04 401	• To unload the condensed fluids in a place where no close drain exists	4.40
AS 04 402	• Blind cap and handle for transport	8.00
	Can 5 litres 190 x 135 x 285 mm	
	Can 10 litres 245 x 165 x 370 mm	
	• Allows wall fixing. Includes anti-upset bar. Painted in ivory epoxy-polyester	
AS 04 411	Wall support for cans 5 lts	28.60
AS 04 412	Wall support for cans 10 lts	31.60

• Acoustic condensed fluid level controller

Part No.	Item	€
	STOP WATER	
AS 04 421	• Electronic unit with liquid-level controller and acoustic and bright alarm	84.00
	• Working with battery of 9 V	
	STOP WATER standard	
AS 04 422	• It is identical to the former one but with a wire of 2.5 m with a connector which allows a liquid-level control of the outdoor cans STOP WATER with a distance probe	110.00

04 DRAIN HOSE



Transparent drain hose



Reinforced spiral



Racord
1/2" a 10/14



Te



Racord
recto



Codo
90°



Derivación
Y



Abrazadera



Flexible pipe



Check Valve



Y junction



Te "Y"
Ø16 o Ø20



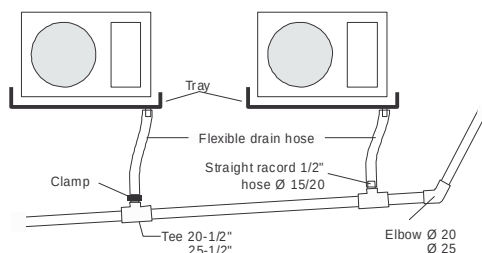
Te "Y"
Ø16-20
a 45°



Te "Y" Ø16-20
paralelo

Part No.	Item	€
TRANSPARENT DRAIN HOSE		
	• Great resistance to the atmospheric agents • It stands temperatures from -10 to 60°C • Rolls 25 m	
AS 04 100	Rolls of ultraviny pipe Ø 4/6 (from condensed pump to outlet)	9.60
AS 04 101	Rolls of ultraviny pipe Ø 6/9 (from condensed pump to outlet)	24.00
AS 04 102	Rolls of ultraviny pipe Ø 10/14 (from condensed pump to outlet)	48.00
AS 04 103	Rolls of ultraviny pipe Ø 15/20 (from machine to outlet)	93.15
AS 04 105	Rolls of ultraviny pipe Ø 20/25 (from machine to outlet)	111.00
AS 04 104	Rolls of ultraviny pipe Ø 25/31 (from machine to outlet)	141.60
PIPE WITH REINFORCED SPIRAL		
	• Flexible PVC pipe with a smooth interior shock-adsorption • It holds temperatures from -10 to 60°C • 25 m rolls BLACK	
AS 04 106	Rolls of pipe Ø 13/16	94.40
AS 04 107	Rolls of pipe Ø 15/20	115.80
AS 04 118	Rolls of pipe Ø 20/25	130.90
AS 04 119	Rolls of pipe Ø 26/32	165.30
	• 50 m rolls WHITE	
AS 04 121	Rolls of pipe Ø 13/16	94.20
AS 04 122	Rolls of pipe Ø 15/20	115.75
AS 04 123	Rolls of pipe Ø 20/25	130.86
AS 04 124	Rolls of pipe Ø 26/32	165.00
FLEXIBLE OUTLET PIPE FITTINGS		
AS 04 152	Straight junction 1/2" to pipe Ø 10/14	1.08
AS 04 155	Elbow 90° for pipes Ø 15/20	7.10
AS 04 156	Elbow 90° for pipes Ø 10/14	1.88
AS 04 157	Elbow 90° for pipes Ø 6/9	2.93
AS 04 161	Tee 90° for pipes Ø 15/20	1.98
AS 04 162	Tee 90° for pipes Ø 10/14	1.44
AS 04 170	Tee 90° for pipes Ø 6/9	2.93
AS 04 165	"Y" junction for pipes Ø 15/20	8.25
AS 04 164	"Y" junction for pipes Ø 6/9	4.86
AS 04 163	"Y" junction for pipes Ø 10/14	2.85
AS 04 171	Straight junction for pipes joining Ø 15/20	1.88
AS 04 172	Straight junction for pipes joining Ø 10/14	1.59
AS 04 173	Straight junction for pipes joining Ø 6/9	1.50
GALVANIZED PIPE-CLAMP FIXING		
AS 04 191	Endless pipe-clamp Ø 7-11. Single	0.90
AS 04 192	Endless pipe-clamp Ø 10-17. Single	0.81/unit
	Box 100 units	0.96
AS 04 193	Endless pipe-clamp Ø 15-25. Single	0.84/unit
	Box 100 units	1.02
	Box 100 units	0.90/unit
CHECK VALVE		
AS 06 122	Check valve Ø 6/9 mm	21.00
AS 06 123	Check valve Ø 10/14 mm	24.00
FLEXIBLE CONDENSATION OUTLET PIPE		
	• Polyethylene of low density ivory colour • Stretches of 1 metre • With a male/female sleeve	
AS 04 110	50 m. Rolls of pipe Ø14-16-18	96.00
AS 04 111	50 m. Rolls of pipe Ø18-20	114.00
	Supply: 14 rolls Ø16	97.50/unit
	Supply: 25 rolls Ø16	83.00/unit
AS 04 109	50 m. Rolls of pipe Ø20	135.00
AS 04 112	"Y" junction of Ø16 for flexible pipes with residue	9.90
AS 04 114	"Y" junction of Ø20 for flexible pipes with residue	12.60
AS 04 115	"Y" junction of Ø16-20 for flexible pipes	6.30
AS 04 116	"Y" junction of Ø16-20 at 45° for flexible pipes	7.05
AS 04 117	Collector 3 in Ø20 mm and outlet Ø32 mm	19.20

04 RIGID DRAIN HOSE

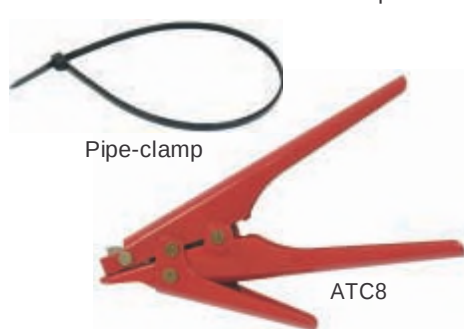
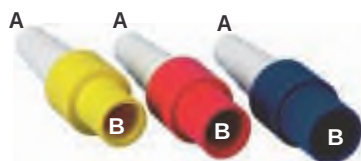


Part No.	Item	Box units	€
GREY RIGID PVC DRAIN HOSE			
AS 04 201	Drain hose of Ø 16 (5 m. stretches)		0.90/m
AS 04 202	Drain hose of Ø 20 (5 m. stretches)		1.32/m
AS 04 203	Drain hose of Ø 25 (5 m. stretches)		1.64/m
AS 04 204	Drain hose of Ø 32 (5 m. stretches)		2.52/m
AS 04 205	Drain hose of Ø 40 (5 m. stretches)		3.24/m
SLEEVE COUPLING			
AS 04 211	Sleeve Ø 16	200	1.00
AS 04 212	Sleeve Ø 20	100	1.10
AS 04 213	Sleeve Ø 25	75	1.35
AS 04 214	Sleeve Ø 32	50	1.60
AS 04 215	Sleeve Ø 40	125	1.90
REDUCING SLEEVE			
AS 04 221	Reduction from Ø 20 to Ø 16	550	1.20
AS 04 222	Reduction from Ø 25 to Ø 20	100	1.20
AS 04 223	Reduction from Ø 32 to Ø 25	100	1.58
AS 04 224	Reduction from Ø 40 to Ø 32	90	2.10
ELBOW 90°			
AS 04 231	Elbow Ø 16	200	0.86
AS 04 232	Elbow Ø 20	100	0.92
AS 04 233	Elbow Ø 25	60	1.20
AS 04 234	Elbow Ø 32	125	1.80
AS 04 235	Elbow Ø 40	75	2.66
ELBOW 45°			
AS 04 241	Elbow 45° of Ø 16	60	1.70
AS 04 242	Elbow 45° of Ø 20	180	1.70
AS 04 243	Elbow 45° of Ø 25	75	1.80
AS 04 244	Elbow 45° of Ø 32	40	2.25
AS 04 245	Elbow 45° of Ø 40	100	3.10
TEES 90°			
AS 04 251	Tee of Ø 16	100	1.10
AS 04 252	Tee of Ø 20	75	1.20
AS 04 253	Tee of Ø 25	40	1.68
AS 04 254	Tee of Ø 32	100	2.28
AS 04 255	Tee of Ø 40	50	3.66
REDUCING TEES			
AS 04 261	Tee of Ø 25 graft 20	40	2.30
AS 04 262	Tee of Ø 32 graft 20	80	2.30
AS 04 263	Tee of Ø 32 graft 25	80	2.30
AS 04 264	Tee of Ø 40 graft 20	50	4.80
AS 04 265	Tee of Ø 40 graft 25	50	4.30
AS 04 266	Tee of Ø 40 graft 32	50	4.00
THREADED SLEEVE MALE/TO GLUE FEMALE			
AS 04 272	Sleeve 20 x 1/2"	100	1.10
AS 04 273	Sleeve 25 x 3/4"	80	1.38
AS 04 274	Sleeve 32 x 1"	50	1.88
THREADED SLEEVE FEMALE GLUE/TO THREAD			
AS 04 276	Sleeve 20 x 1/2"	100	2.20
AS 04 277	Sleeve 25 x 3/4"	75	2.40
AS 04 278	Sleeve 32 x 1"	50	2.60
FEMALE CAP			
AS 04 256	Female cap Ø20	100	0.80
AS 04 257	Female cap Ø25	100	0.824
AS 04 258	Female cap Ø32	80	1.10
AS 04 259	Female cap Ø46	40	1.80
GRAFT TO PIPE			
AS 04 289	Graft to pipe PVC Ø110-125 to Ø32 mm		5.50
TEE-SOCKET FLANGE			
AS 04 282	Flange Ø 20 x 1/2"	It allows to plug in any point of a drainpipe	6.20
AS 04 283	Flange Ø 25 x 1/2"		6.20
AS 04 284	Flange Ø 32 x 1/2"		6.90
AS 04 285	Flange Ø 40 x 1/2"		7.50
AS 04 291	Glue tube 125 cm		3.96
AS 04 293	Glue bottle of 500 gr with brush plug		16.34
PVC PINCH-OFF PLIERS			
MA 01 021	Mod. K-42 up to 1-1/2" (42 mm), working rack		28.20

04 RIGID DRAIN HOSE "WHITE" COLOUR WITH JUNCTION



Part No.	Item	units/box	€
	• 2 m Rigid drain hose • White PVC fire protected • Solar UV protection • For condensated water (no pressure) • Rubber plug as spare part		
Ø20 OUTLET DRAIN HOSE			
AS 04 501	Ø20 Drain hose white	50	2.70
AS 04 502	Ø20 Sleeve coupling white	20	2.98
AS 04 503	Ø20 90° Elbow white	20	3.05
AS 04 504	Ø20 45° Elbow white	20	3.05
AS 04 505	Ø20 90° Tee white	20	3.92
AS 04 506	Pre-installation white junction Ø20	20	2.82
AS 04 507	White clamp Ø20	50	0.82
Ø25 OUTLET DRAIN HOSE			
AS 04 511	Ø25 Drain hose white	50	3.42
AS 04 512	Ø25 Sleeve complaint white	20	3.48
AS 04 513	Ø25 90° Elbow white	20	3.80
AS 04 514	Ø25 45° Elbow white	20	3.80
AS 04 515	Ø25 90° Tee white	20	4.30
AS 04 517	White clamp Ø25	50	0.88
Ø32 OUTLET DRAIN HOSE			
AS 04 521	Ø32 Drain hose white	50	3.80
AS 04 522	Ø32 Sleeve complaint white	20	3.96
AS 04 523	Ø32 90° Elbow white	20	4.20
AS 04 524	Ø32 45° Elbow white	20	4.00
AS 04 525	Ø32 90° Tee white	20	4.96
AS 04 527	White clamp Ø32	50	0.94
REDUCER JOINTS			
AS 04 531	Ø25 to Ø20 reducer joint white	20	2.86
AS 04 532	Ø32 to Ø25-Ø20 reducer joint white	20	3.20



• Straight/corrugated tube connector

Código	Artículo	€
	• Connector with reductions of Ø14-16-18 and 20 (A) to corrugated tube (B)	
AS 03 935	Connector Ø16 to yellow tube	3.72
AS 03 936	Connector Ø18 to red tube	3.72
AS 03 937	Connector Ø20 to blue	3.72

• Fixing for drain hose

Part No.	Item	Units	€
FIXING PIPE-CLAMP FOR DRAIN HOSE OR WIRE			
AS 04 300	Adhesive plate for pipe-clamp	100	0.30
AS 04 302	TP 6/C black screw clamp	100	0.12
	500 TP 6/C units	5 boxes	0.10/unit
AS 04 301	Connection plug TP 8/C (single)	100	0.14
	500 units box TP 8/C	5 boxes	0.12/unit
AS 04 311	Pipe-clamp N100x2.5 - up to Ø25	100/bag	1.40/bag
AS 04 312	Pipe-clamp N200x4.5 - up to Ø47	100/bag	7.20/bag
AS 04 313	Pipe-clamp N280x4.5 - up to Ø81	100/bag	10.80/bag
CA 07 969	ATC8 Plies (up to 8 mm)		70.00

• Fixing for drain hose (continues)



Fix-ring



Staple

Part No.	Item		€
	POLYAMIDE SIMPLE STAPLE WITH PLUG		
AS 04 321	Fixing-Ring Ø 16 black	100	0.68
AS 04 322	Fixing-Ring Ø 18 black	100	0.70
AS 04 323	Fixing-Ring Ø 20 black	100	0.72
AS 04 325	Fixing-Ring Ø 25 black	100	0.76
	GALVANIZED METAL SIMPLE STAPLE		
AS 04 331	Staple Ø 16	100	0.10
AS 04 333	Staple Ø 20	100	0.14
AS 04 335	Staple Ø 25	100	0.18
AS 04 337	Staple Ø 32	100	0.26
AS 04 339	Staple Ø 40	100	0.34

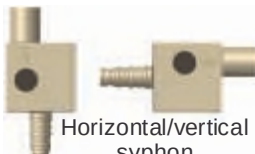


Ø19

Ø32



Orientable Syphon



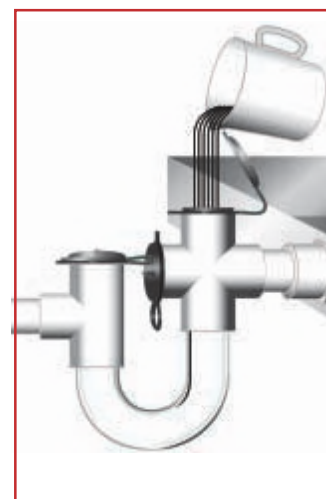
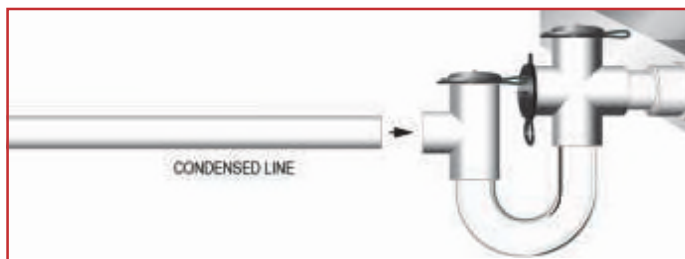
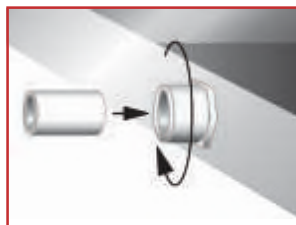
Horizontal/vertical syphon

• Drain hose elbow

Part No.	Item	€
AS 04 051	- It can be applied to the main condensers of the market - It is delivered with a joint and 2 stoppers Ø19 Drain hose elbow	5.80
AS 04 052	It allows to plug all the unusable holes of the condensers Additional stopper for the drain pipe elbow Ø19	1.80
AS 04 053		3.80
AS 04 055	Provided with 2 stoppers for drill Ø32 mm Ø32 mm Drain hose elbow	7.00

• Condensated water air traps (syphon)

Código	Artículo	€
ORIENTABLE SYPHON		
AS 03 933	- With air purge and plug - Orientable with joint - Ideal for electric boxes	10.76
HORIZONTAL/VERTICAL SYPHON		
AS 03 934	- Inlet Ø20 mm (A and C) - Reduced inlet Ø20-18-16 (B) - Ideal corrugated tubes	15.36
HIGH CAPACITY TUBES 3/4"		
AS 03 938	Mod. EZT-113B, includes: - Plate union - Transparent elbow 180° - Joint cross with covers - Flexible cleaning brush - T with cover	40.60

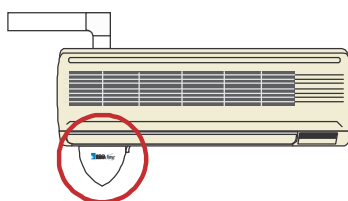
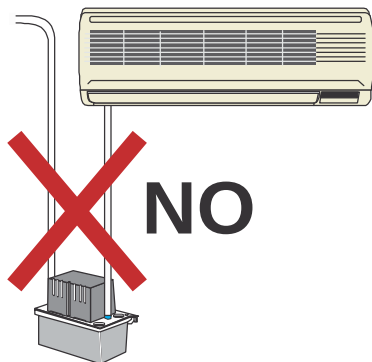


06 CONDENSED REMOVAL PUMP WITH A DEPOSIT INSTALLATION "VISTA"



Part No.	Item	€
AS 06 801	PUMP «MASTONE»	170.00 150.00/unit 120.00/unit
	Pump to install at wall "vista". It can be installed just under the indoor unit, thanks to its aesthetic design • Deposit of 300 cm³ • Elevation 2 mts • Capacity 30 lts/h • Outlet of a pipe Ø6x4 • Light function controller • Power: 10 W 1 Box of 10 units 2 Boxes of 20 units	
AS 06 803	PUMP «MASTONE PLUS»*	180.00 160.00/ut 140.00/ut 120.00/ut
	Wall mounting pump, under unit with direct drainage. Attractive design for interior ambients • Tank 550 cm • Normal height 1.5 mts; maximum 3.5 mts. • Capacity 60 lts/h • Tube outlet Ø6x4 • Power: 23 W • Sound level 40 dB • Weight: 1.6 Kg • Dimensions: 180x150x105 mm 1 - 5 units 6 - 10 units 11 - 24 units 25+ units	

*Includes plate, screws and fixing bolts in the wall.



*The solution to the
bothering condensate!*



MASTONE



MASTONE PLUS

COMPACT DRAINAGE PUMPS



Code	Item	€
AS 06 811	PUMP «CP 100»	188.00 178.00/unit 164.00/unit
	• Max. flow rate: 18 lts/h • Max height of elevation: 20 m • Dimensions: 46x50x134 mm • Outlet pipe Ø6x5 • Inlet filter • Voltage: 230V 50Hz, fastón connection (included) • It can be fixed at wall, floor or ceiling 1 UNIT 5 UNITS 10 UNITS	

06 CONDENSED REMOVAL PUMP



EASY 10



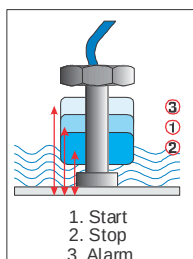
SI 2750



SI 3080
SI 3200



SI 1730



3 level
float
switch

Part No.	Item	Max. flow rate	€
AS 06 003	PUMP MINI «EASY 10» Special for splits until 10 Kw		170.00 164.00/unit 156.00/unit 150.00/unit
	• 3 Level float switch: Start/On/Alarm • Max. elevation: 6 m • Power: 18 W • Voltage: 230V 50/60Hz • Maximum intake: 1.5 m • Dimensions: pump55 x 55 x 42 mm detector 55 x 38 x 32 mm 1 Unit 5 Units 10 Units 25 Units		
	MINI PUMP «SI 2750» Special Splits up to 10 kW		
	• Three level float switch: Start / Stop / Alarm • Maximum elevation: 6 metres • Power: 18 W • Maximum intake: 2 metres • Noise level: 30 dB(A) • Dimensions: Pump: 75 x 38 x 60 mm. Detector: 55 x 38 x 35 mm. 1 UNIT 5 UNITS 10 UNITS 25 UNITS		
AS 06 001	10 l/h		165.00 159.00/unit 153.00/unit 147.00/unit
	SILENT MINI PUMP «SI 3080 / SI 3200»		
	• Three level float switch: Start / Stop / Alarm • Maximum elevation: 6 metres		
	• Three level float switch: Start / Stop / Alarm • Maximum elevation: 6 metres		
AS 06 006	Mod. SI 3080 • Maximum elevation: 1 metre • Maximum impulsion: 6 metres • Power: 10 W • Noise level: 28 dB • Dimensions: Pump: 66 x 44 x 60 mm. Detector: 55 x 38 x 32 mm.	8 l/h	187.50
AS 06 008	Mod. SI 3200 • Maximum elevation: 2 metres • Maximum impulsion: 6 metres • Power: 18 W • Noise level: 34 dB • Dimensions: Pump: 66 x 44 x 60 mm. Detector: 55 x 38 x 32 mm.	20 l/h	
	PUMP WITH FLOAT «SI 1730» Special Cassettes and Splits up to 30 kW		
	AS 06 005	• Three level float switch: Start / Stop / Alarm • Maximum intake: 2.5 metres • Maximum elevation: 10 metres • Power: 35 W • Dimensions: Pump: 95 x 74 x 52 mm. Detector: 55 x 40 x 35 mm.	

06 CONDENSED REMOVAL PUMP



EE 1650



SI 1805
SI 1820



PE 5000



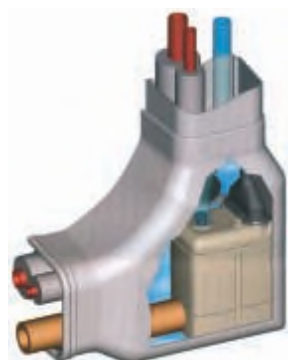
PE 600



PE 6250

Part No.	Item	Max. flow rate	€
AS 06 011	INTEGRATED PUMP WITH DEPOSIT «EE 1650» Special Air-conditioner up to 30 kW		333.00
	• Three level float switch: Start / Stop / Alarm • Maximum elevation: 13 metres • Power: 35 W • Dimensions: Pump: 159 x 84 x 100 mm.	30 l/h	
	CENTRIFUGAL PUMP WITH DEPOSIT «SI 1805 / 1820»		
	• Three level float switch: Start / Stop / Alarm • Maximum elevation: 5.4 m • Power: 30 VA		
AS 06 013	SI 1805 (Deposit 0.5 lts) • Dimensions: 195 x 130 x 122 mm	500 l/h	135.00
AS 06 014	SI 1820 (Deposit 2 lts) • Dimensions: 200 x 125 x 170 mm	500 l/h	138.00
AS 06 021	PERISTALTIC PUMPS		233.00
	• Maximum intake: 2 metres • Maximum elevation: 12 metres • Power: 11 W • Dimensions: 102 x 109 x 91 mm		
	Mod. PE 5000 Activated through compressor signal (without detection)	6 l/h	
	Mod. PE 5100 Activated through temperature sensors		
Mod. PE 5200 Activated through a detection block (included). Alarm contact 8A N.C.			
AS 06 029	PERISTALTIC PUMP AGAINST LEGIONELA		588.00
	Mod. PE 600 • Daily timer of 24 horas intervals of 15 minutes • Timer from 2 to 18 minutes • Maximum intake: 2 meters • Maximum elevation: 15 metrsers • Power: 3.5 W	1.5 l/h	
	PERISTALTIC PUMP BIG FLOW		
AS 06 024	Mod. PE 6250 • Designed to remove dirty water • Maximum intake: 2 meters • Maximum elevation: 10 meters • Power: 66 W		593.00

06 CONDENSED REMOVAL PUMPS



DELTA PACK 1082



SMALL PUMP
MONOBLOC

Rubber
tray-pump



Reduction pipe



Self-adhesive
fixing base



Adapter
auto-fixing



Filter in-line



Mounting kit
SI 2750



Detection block
SI 1730/1750

Extending wire
with connector

Part No.	Item	Max. flow rate	€
AS 06 031	IN LINE PUMP «DELTA PACK 1082»		210.00
	• Maximum elevation: 6 m • Built-in detector • Power: 10 W • Noise level: 28 dB(A) • Levels: Start 18 mm Stop 12 mm Alarm 21 mm • Inside dimension: 165 x 165 x 60 • Outside dimension (duct): 780 x 185 x 70	8 l/h	
	SMALL PUMP MONOBLOC		
AS 06 030	Mod. SI 1082 Monipiece water pump with built-in detection Made in one single piece • Maximum elevation: 6 m • Power: 10 W • Noise level: 28 dB(A) • Dimensions: 66 x 44 x 77	8 l/h	161.00
	ACCESSORIES		
AS 06 041	Reduction pipe Ø17 to Ø22		11.50
AS 06 042	Reduction pipe Ø17 to Ø32		14.50
AS 06 043	Reduction pipe Ø17 to Ø32 with flow reduc.		17.00
AS 06 044	Adapter auto fixing for evacuation pipe of condensed Ø6/9		6,80
AS 06 045	Self-adhesive fixing base pump with screws		6.50
AS 06 046	Insulating adhesive with double coat for detection block 45 x 32 x 3 mm		3.60
AS 06 047	Rubber tray-pump 50 cm		10.50
AS 06 051	Extending wire with 3 m connector		27.00
AS 06 052	Extending wire with 5 m connector		33.00
AS 06 053	Filter in-line for EE 1750 and SI 2750		9.90
AS 06 054	SI 2750 mounting kit composed of: – Ø 6/9 evacuation adaptor – Anti-vibration fixing kit – Rubber Ø 15 x 15 mm 90° elbow – Flexible derived Ø 15 adaptor		34.50
SPARE PARTS			
AS 06 055	SI 2858 Detection block SI 2750, SI 3080, SI 3100, SI 3200 and PE 5200		61.50
AS 06 057	SI 2758 Detection block SI 1730/1750		69.00
AS 06 025	PE 5002 Pipe for peristaltic pump PE 5000, PE 5100 and PE 5200		26.25
REPAIRS			
AS 06 099	Check the pumps, the filter, and its working		27.00

06 DRAINAGE PUMPS



• Pumps with condensed removal deposit



HI-FLOW



HIGH-LIFT



HEAVY DUTY

Part No.	Item	€
PUMP «HI-FLOW»		
AS 06 101	• Max. height 4 mts. • 100 lts/h height 3 mts. • 200 lts/h height 1.5 mts. • Motor 0.2 A at 220V • Automatic stop and start by levelling • Input 2 up to Ø25 mm • Output 1 Ø6 mm	
	HI-FLOW deposit 1 lt (Height 135, shaft 235x145 mm)	
	1 Unit	128.00
	5 Units	123.00/unit
	10 Units	112.50/unit
	25 Units	105.00/unit
AS 06 102	HI-FLOW deposit 2 lts (Height 162, shaft 235x145 mm)	
	1 Unit	135.00
	5 Units	128.00/unit
	10 Units	116.00/unit
	25 Units	110.00/unit
QUIET PUMP «HIGH-LIFT»		
AS 06 105	• Peristaltic pump • Flow rate: 11 lts/h height 12 mts. • Temperature: 0 - 100° C • Motor 0.2 A at 220V • Automatic stop and start by levelling • Security level with an auxiliary circuit to stop machine	
	HIGH-LIFT deposit 1 lt (Height 120, shaft 240x140 mm)	228.00
	HIGH-LIFT deposit 2 lts (Height 162, shaft 240x140 mm)	240.00
	PUMP HIGH-CAPACITY «HEAVY DUTY»	
	• Double level: one for the working of the pump, and the other for security, with terminals to switch off the equipment • Deposit capacity 4 lts • Input 2 up to Ø40 mm • Output 1 Ø10 mm	
AS 06 107	• Flow rate: 900 lts/h • Discharge height: 6 mts • Height 235, shaft 300 x 150 mm	
	HEAVY DUTY 6	210.00
	• Flow rate: 1250 lts/h • Discharge height: 8 mts • Height 265, shaft 300 x 150 mm	
AS 06 108	HEAVY DUTY 10	345.00

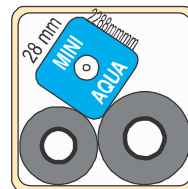
• Mini-pump for duct «MINI AQUA»



ONLY 28 x 28 mm

TO BE INSTALLED IN THE DUCT

Part No.	Item	€
PUMP «MINI AQUA»		
AS 06 100	• Max. flow 14 lts/h • Max. height 8 mts. • Max. intake: 1 metre • Power: 15W 220V 50/60Hz • Dimensions: 28 x 28 x 165 mm • Discharge tube Ø6 mm (included) • Assembled reservoir	
	MINI AQUA	
	1 Unit	140.00
	5 Units	136.00
	10 Units	133.00
	25 Units	128.00



06 DRAINAGE PUMPS



• Peristaltic pumps

General data:

- Height 175, shaft 142 x 83 mm
- Suction: 2 mts.
- Discharge: 12 mts.
- Flow rate: 6.25 lts/h at 12 mts.
- Temperature: 0 - 100° C
- Test switch
- Dry working
- Very silent
- Input/output tube Ø6 mm



STANDARD



MECHANICAL



Check Valve



UNIVERSAL

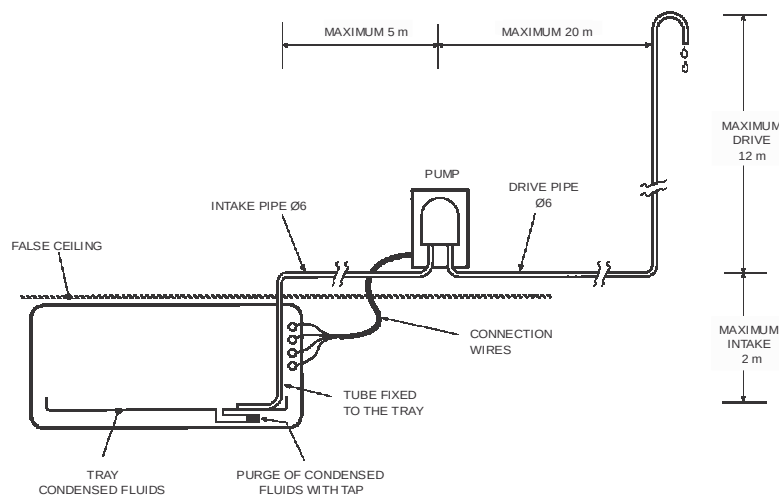


ECONOMY HOT



HEAVY DUTY HOT

Part No.	Item	€
PUMP «STANDARD»		
AS 06 111	Thanks to dry working, the pump can be connected in parallel with the indoor unit in cold circuit	210.00
PUMP «MECHANICAL»		
AS 06 114	Includes level control system, mechanical float and 3 m cable for remote control	232.50
PUMP «UNIVERSAL»		
AS 06 112	Includes 2 soundings to start up, in terms of difference in inlet and outlet temperature (7°C) of the indoor unit	258.00
PUMP «MK4 WATER SENSOR»		
AS 06 113	Includes a liquid-level sensor, which starts and stops the pump when there is left water to evacuate (level 5 mm)	312.00
AS 06 121	Spare silicone tube	19.50
AS 06 120	Can of grease for silicone tube	29.00
AS 06 122	Check valve 1/4" Ø 6/9 mm	9.00
AS 06 123	Check valve 3/8" Ø 10/14 mm	11.00



• Hot water pumps «Hot Water Tank»

Hot Water Pumps - Hot Water Pump		
Part No.	Item	€
AS 06 117	• To work with cycles of hot water drainage in air-conditioning systems, drying and hot water	570.00
	ECONOMY HOT	
	• Discharge height 6 mts • Flow rate 900 lts/h • Stainless steel deposit of 4 lts • Input 2 up to Ø40 mm • Output 1 Ø10 mm	
	ECONOMY HOT	
AS 06 116	HEAVY DUTY HOT	1020.00
	• Discharge height 15 mts • Flow rate 1800 lts/h • Stainless steel deposit of 5 lts • Input 2 up to Ø40 mm • Output 1 Ø15 mm	
	HEAVY DUTY HOT	

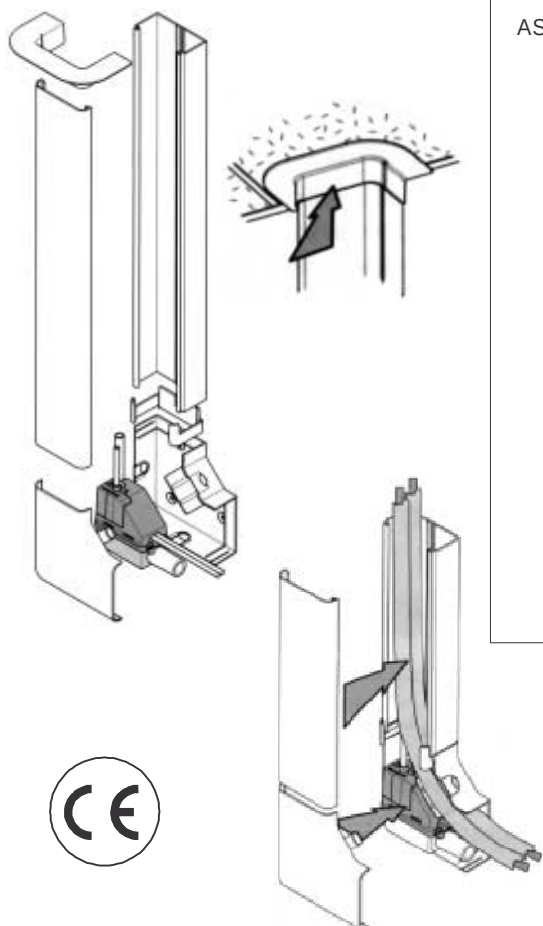
06 DRAINAGE PUMPS

• MINI pump with duct inclosed

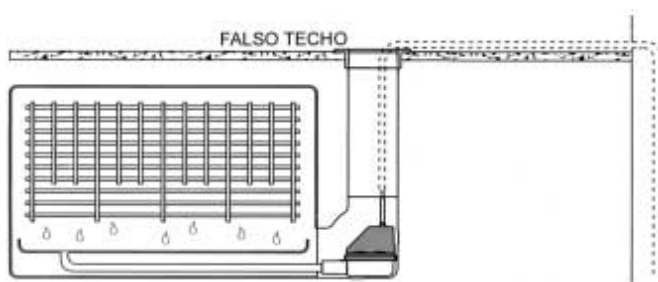


Part No.	Item	Max. flow rate	€
AS 06 119	PUMP «MINI LIME»		
	• Max. elevation: 8 metres • Max. intake: 1 metre • Power: 20W at 220V, 50/60Hz • Reversible, it can be set up at the right side or at the left side of the machine • Max. flow rate: 14 lts/h • Pump dimensions: 79 x 93 x 44 mm • Weight: 0.31 Kg.	14 l/h	
	The set MINI LIME includes:		
	• Mini pump • Level incorporated in receiver 9 mm Off - 20 mm On - 25 mm Security • Elbow with joined pump • 800 mm duct 70 x 65 mm • Joint hubcap • Reduction from Ø6 to Ø4 mm		
	1 Unit		180.00
	5 Units		174.00/unit
	10 Units		165.00/unit
	25 Units		150.00/unit

• MAXI pump with duct inclosed



Part No.	Item	Max. flow rate	€
AS 06 132	PUMP «MAXI LIME»		
	• Max. elevation: 20 metres • Max. intake: 1 metre • Power: 21.5W to 220V, 50Hz • Reversible, it can be set up at the right side or at the left side of the machine • Max. flow rate: 37 l/h • Noise level: 35 db(A) • Thermal protection • Pump dimensions: 115 x 97 x 43 mm • Weight: 0.47 Kg.	37 l/h	
	The set MAXI LIME includes:		
	• Maxi pump • Level incorporated in receiver 9 mm Off - 20 mm On - 25 mm Security • Elbow with joined pump • 800 mm duct 70 x 65 mm • Polivinyll tube of Ø6 and 2 meters length with one way valve • Conection diam. Ø15/20 500 mm • Isolation Ø10x9 and length 750 mm • Wall frame of 70 x 60 mm • Screws and wall plugs for fixing. • 2 polyamide clamp white colour with dimension 150 x 4.5 mm		
			207.00



06 DRAINAGE PUMPS “multipurpose”



Part No.	Item	€
AS 06 115	PUMP «MINI ORANGE»	
	• Max. elevation: 13 metres • Max. intake: 1 metre • Power: 10W • Voltage: 230V, 50/60 Hz • Max. flow rate: 14 lts/h • Pump dimensions: 42 x 122 x 38 mm • Weight: 0.23 Kg. • 2 Liquid-level deposits 42 x 70 x 40 mm (one to mount in trays of indoor units and another to mount direct to the pipe)	
	1 Unit	135.00
	5 Units	132.00/unit
	10 Units	130.00/unit
	25 Units	128.00/unit
AS 06 118	PUMP «MAXI ORANGE»	
	• Max. elevation: 20 metres • Max. intake: 1 metre • Power: 21.5W • Voltage: 230V, 50Hz • Max. flow rate: 37 lts/h • Pump dimensions: 66 x 122 x 44 mm • Weight: 0.45 Kg. • 2 Liquid-level deposit 42 x 75 x 40 mm (one to mount in trays of indoor units and another to mount direct to the pipe)	
	1 Unit	173.00

DRAINAGE PUMPS



Rotary diaphragm pump



Miniblu



BlueDiamond



Level



Sensor

Part No.	Item	Max. flow rate	€
AS 06 924	• Extremely silent • Supply 230V • Thermal protection • Operation by rotary diaphragm allows working in suspension exits and dirty fluids.		
	“MINIBLU” PUMP		
	• Discharge height: 10 mts • Aspiration height: 5 mts • Consumption: 70 mA • Without sensor • Dimensions: wide 51 x height 64 x long 90 mm	8 l/h	
	“BLUEDIAMOND” PUMP		
	• Flow 50 l/h • Discharge height: 20 mts • Aspiration height: 7 m • Dimensions: wide 51 x height 64 x long 276 mm	50 l/h	
AS 06 925	Blue Diamond Level • Detects water and starts. The auxiliary contact disconnects the conditioner		366.00
AS 06 926	Blue Diamond Sensor • Two temperature probes model which are place in the air intake and outlet		366.00

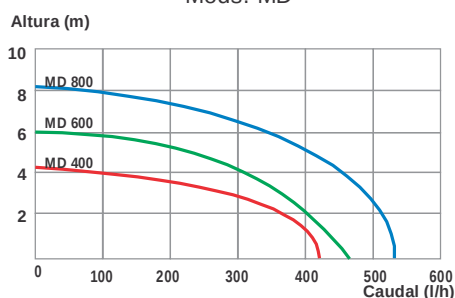
06 CONDENSED PUMPS



DEP-300H



Mods. MD



Float switch



Sound/light alarm

Part No.	Item	Flow max.	€
AS 06 825	PUMP «DEP-300H»		
	• Max. height: 4.3 m • Retention valve incorporated • 1.9 litres tank • 2.5 m electrical cable • Voltage 230 V 50 HZ • Dimensions 178 x 288 x 127 mm	250 l/h	108.00
AS 06 855	PUMP «MD 400»		
	• Maximum height: 4 m • Maximum flow: 400 l/h • Includes check valve • 2 l tank • Voltage 220V 50/60Hz • Dimensions: 185 x 135 x 256 mm • Power: 65 W • Optinal alarm level switch • Sound/light optional alarm	400 l/h	127.50
AS 06 856	PUMP «MD 600»		
	• Maximum height: 6 m • Maximum flow: 450 l/h • Includes check valve • 2 l tank • Voltage 220V 50/60Hz • Dimensions: 185 x 135 x 256 mm • Power: 100 W • Voltage 230 V 50 HZ • Sound/light optional alarm	450 l/h	147.00
AS 06 857	PUMP «MD 800»		
	• Maximum height: 8 m • Max flow: 535 l/h • Includes check valve • 2 l tank • Voltage 220V 50Hz • Dimensions: 185 x 135 x 256 mm • Power: 150 W • Optinal alarm level switch • Sound/light optional alarm	535 l/h	195.00
	OPTIONAL ACCESSORIES		
AS 06 861	Auxiliary float switch (level control)		16.25
AS 06 862	Sound/light optional alarm		48.75

CONDENSED EVAPORATOR



**NO NEED
FOR DRAINING
HOSES**



Part No.	Item	Flow max.	€
AS 06 931	SINGLE MODEL		
	• Dimensions: 90 x 110 x 50 mm • Weight: 280 gr. • Voltage: 110/220V • Intensity: 2 Amp.	2.5 l/h	125.00
AS 06 932	DOUBLE MODEL		
	• Dimensions: 190 x 110 x 50 mm • Weight: 565 gr. • Voltage: 110/220V • Intensity: 4 Amp.	5 l/h	173.00

06 CONDENSED PUMPS

Little GIANT



Part No.	Item	Flow max.	€	
AS 06 901	PUMP «VCMA-20S»		149.00	
	• Max. height: 4.3 m • Flow at 4 m: 70 l/h • 3/8" retention valve incorporated • 1.9 litres tank • IP20 motor protection • 1.8 m electrical cable • Voltage: 230V 50Hz • Dimensions: 178 x 288 x 127 mm • Weight: 2.4 Kg.	204 l/h		
AS 06 902	PUMP «VCL-24S»		278.00	
	• Max. height: 5.9 m • Flow at 4 m: 450 l/h • 3/8" retention valve incorporated • 3.8 litres tank • IP20 motor protection • 1.8 m electrical cable • Voltage: 230V 50Hz • Dimensions: 263 x 300 x 150 mm • Weight: 3.9 Kg.	900 l/h		
AS 06 905	MINI PUMP «EC-400»		150.00	
	• 3 Position float • Functions: Off / On / Alarm • Max. height: 12 m • Power: 20W at 230V, 50/60Hz • Dimensions: Pump 110 x 35 x 45 mm Detector 80 x 37 x 35 mm • Includes: 1 m drain tube of Ø4x6 150 mm drain tube of Ø4x6	17 l/h		
	1 Unit			145.00
	5 Units			140.00
	10 Units		140.00	

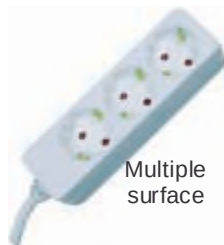
07 ELECTRICAL ACCESSORIES FOR AIR-CONDITIONING INSTALLATION



2 ways adapter



3 ways adapter



Multiple surface



Enlarger



Plug Schuko



Plug Schuko 90°



Surface

Código	Artículo	€
	ADAPTERS SURFACE/PLUG	
AS 07 105	T adapter 2 ways 16 Amp.	3.44
AS 07 106	Cross adapter 3 ways16 Amp.	5.10
	SURFACE MÚLTIPLE	
	• Wire 1.5 m, 1.5 mm • Voltage 220/240V • 3500W	
AS 07 110	Multiple surface 3 surfaces	7.80
AS 07 111	Multiple surface 4 surfaces	8.80
AS 07 112	Multiple surface 5 surfaces	9.70
	WIRE ENLARGER	
	• Ground surface/plug • Section 3 x 1.5 mm	
AS 07 115	Long 5 m	22.00
AS 07 116	Long 10 m	39.50
	SURFACE PLUG	
AS 07 101	Surface 16A a 250V ground	4.60.
AS 07 102	Plug “Schuko” 16A 250V earth	3.00
AS 07 103	Plug “Schuko” 16A 250V earth 90°	3.50

07 ELECTRICAL ACCESSORIES FOR AIR-CONDITIONING INSTALLATION



Insulating Tape

PVC Pipe



Polypropylene Pipe



Built in boxes



NSL



MSL



CS4



CS2

Part No.	Item			€/m
AS 07 119 AS 07 120 AS 07 121 AS 07 122 <				

07 ELECTRICAL ACCESSORIES FOR SPLIT ASSEMBLY



Outlet through ones



100 uts. bags



Pliers
ATC



Adhesive plate



White
staple



Black
staple



Cable Glands



Thread cable glands

Part No.	Item				Box units	€		
AS 07 131 AS 07 132 AS 07 133	TRANSPARENT CONNECTION LEAD					€/ut		
	Section 6 mm. 12 poles					2.28		
	Section 10 mm. 12 poles					3.25		
Section 16 mm. 12 poles					5.14			
CONNECTION BOXES IP54					€/ut			
AS 07 141	Dimensions Ø80 x 45 mm (clip)				8	1.90		
AS 07 142	Dimensions 80 x 80 x 50 (clip)				10	2.40		
AS 07 143	Dimensions 100 x 100 x 55 (screw)				6	4.16		
DUCT FOR ELECTRIC CONNECTION					€/m			
AS 07 301	Miniduct 10-20 (80 units)				80	3.98		
AS 07 302	Miniduct 16-16 (120 units)				120	2.52		
AS 07 303	Miniduct 16-25 (80 units)				80	3.98		
PIPE-CLAMP TO BIND AN ELECTRIC WIRE					€			
• Natural polyamide colour BLACK								
• Self-extinguishable								
• Use: from -40 to 110°C								
AS 04 311	Length 100 x 2.5 mm.						100	1.40/bag
AS 04 312	Length 200 x 4.5 mm.						100	7.20/bag
AS 04 313	Length 280 x 4.5 mm.						100	10.80/bag
CA 07 955	Length 550 x 7.8 mm.						100	0.80/unit
CA 07 959	Length 780 x 9 mm.				100	1.20/unit		
CA 07 961	Length 1000 x 12.5 mm.				50	2.40/unit		
• Polyamide colour WHITE								
AS 04 315	Length 100 x 2.5 mm						100	1.40/bag
AS 04 316	Length 200 x 4.5 mm						100	7.20/bag
AS 04 317	Length 280 x 4.5 mm				100	10.80/bag		
CA 07 969	ATC8 Alicates Tensado y corte (hasta 8 mm)				1	70.00		
CA 07 970	ATC Pliers (fasten up a width of 13 mm)				1	147.00		
AS 04 300	Adhesive plate for pipe-clamp				100	0.30/unit		
STAPLE WITH STEEL SCREW					€/box			
AS 07 284	Ø8 black (box 100 units)				100	6.64		
AS 07 285	Ø9 black (box 100 units)				100	8.24		
AS 07 286	Ø10 black (box 100 units)				100	9.98		
AS 07 287	Ø12 black (box 100 units)				100	11.15		
AS 07 293	Ø7 white (box 100 units)				100	6.56		
AS 07 294	Ø8 white (box 100 units)				100	6.64		
AS 07 295	Ø9 white (box 100 units)				100	8.24		
AS 07 296	Ø10 white (box 100 units)				100	9.98		
AS 07 297	Ø12 white (box 100 units)				100	11.15		
CABLE GLANDS								
Model				Ø Drill	Box units	€		
AS 07 322	QPG 11	6	8	16	50	1.04		
AS 07 323	QPG 13	10	12	21	50	1.32		
AS 07 324	QPG 16	12	14	23	50	1.62		
AS 07 325	QPG 21	14	18	29	50	2.08		
THREADED CABLE GLANDS								
AS 07 332	TPG 11				50	0.40		
AS 07 333	TPG 13				50	0.42		
AS 07 334	TPG 16				50	0.46		
AS 07 335	TPG 21				50	0.66		

07 ELECTRICAL ACCESSORIES FOR AIR-CONDITIONING INSTALLATION

Green electrical wire
"Halogen Free"
For the installation in public
facilities according to
ICT-BT



Part No.	Item	€/m
GREEN ELECTRICAL WIRE <i>"Halogen Free"</i>		
	• Hose: RZ1K • Maximum Voltage: 1000 V • Not reticulated polyethylene insulation and covered by flame retardant poliolefin • 100 metres rolls	
AS 07 061	Section 3 x 1.5	274.60
AS 07 062	Section 4 x 1.5	349.99
AS 07 063	Section 5 x 1.5	427,00
AS 07 064	Section 6 x 1.5	725,00
AS 07 065	Section 8 x 1.5	951,00
AS 07 071	Section 3 x 2.5	416,00
AS 07 072	Section 4 x 2.5	519,00
AS 07 073	Section 5 x 2.5	632,00
AS 07 074	Section 6 x 2.5	1045,00
AS 07 075	Section 8 x 2.5	1380,00
AS 07 082	Section 3 x 4	573,50
AS 07 083	Section 4 x 4	738,00
AS 07 084	Section 5 x 4	915,00
	Does not spread fire	
	Does not emit toxic fumes in case of fire	
	Does not emit corrosive fumes	
	Does not spread flame	
	Does not emit opaque fumes in case of fire	
• Acrylic hose RVK • Maximum voltage 1000 V • 100 metres rolls		
WHITE ELECTRIC WIRE		
AS 07 015	Section 2 x 1.5	186.20
AS 07 016	Section 2 x 2.5	252,00
AS 07 002	Section 3 x 1.5	219.00
AS 07 012	Section 3 x 2.5	324,00
AS 07 006	Section 4 x 1.5	298,00
AS 07 014	Section 5 x 1.5	370,00
BLACK ELECTRIC WIRE		
AS 07 001	Section 3 x 1.5	219,00
AS 07 003	Section 3 x 2.5	325,00
AS 07 004	Section 3 x 4	503,00
AS 07 005	Section 4 x 1.5	295,00
AS 07 007	Section 4 x 2.5	449,00
AS 07 008	Section 4 x 4	651,00
AS 07 009	Section 5 x 1.5	369,00
AS 07 010	Section 5 x 2.5	565,00
AS 07 011	Section 5 x 4	840,00
AS 07 017	Section 6 x 1.5	499,90
AS 07 018	Section 6 x 2.5	799,00
AS 07 019	Section 8 x 1.5	649,00
AS 07 020	Section 8 x 2.5	1070,00
AS 07 031	Section 10 x 1.5	838,00
INTERCONNECTION WIRE		
AS 07 051	Section 2 x 1 WHITE	120,00
AS 07 052	Section 3 x 1 WHITE	161,00
AS 07 053	Section 4 x 1 WHITE	208,00
AS 07 054	Section 5 x 1 WHITE/BLACK	268,00



Interconnexion
Wire

NOTE: The price of the wire changes every week according to the London Metal Exchange.

07 ELECTRICAL ACCESSORIES FOR SPLIT ASSEMBLY

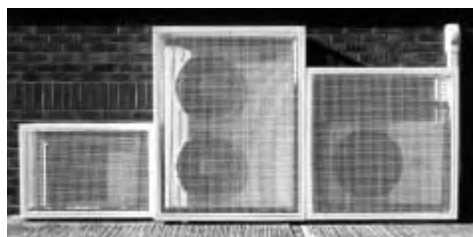


Part No.	Item	E/m
UNIPOLAR WIRE		
	• Hose: H07V-K • Insulating PVC T1 UNE 21031-1 • Maximum voltage: 450/750V • Maximum operating temperature 90°C	
AS 07 407	Section 1.5 mm BLACK	101,00
AS 07 408	Section 1.5 mm BLUE	101,00
AS 07 409	Section 1.5 mm BROWN	101,00
AS 07 410	Section 1.5 mm GREY	101,00
AS 07 411	Section 1.5 mm EARTH	101,00
AS 07 412	Section 1.5 mm RED	101,00
	200 m ROLL	
AS 07 413	Section 2.5 mm BLACK	174,00
AS 07 414	Section 2.5 mm BLUE	174,00
AS 07 415	Section 2.5 mm BROWN	174,00
AS 07 416	Section 2.5 mm GREY	174,00
AS 07 417	Section 2.5 mm EARTH	174,00
	200 m ROLL	
AS 07 419	Section 4 mm BLACK	133,00
AS 07 420	Section 4 mm BLUE	133,00
AS 07 421	Section 4 mm BROWN	133,00
AS 07 422	Section 4 mm GREY	133,00
AS 07 423	Section 4 mm EARTH	133,00
	100 m ROLL	
AS 07 425	Section 6 mm BLACK	Consult
AS 07 426	Section 6 mm BLUE	Consult
AS 07 427	Section 6 mm BROWN	Consult
AS 07 428	Section 6 mm GREY	Consult
AS 07 429	Section 6 mm EARTH	Consult
	100 m ROLL	
UNIPOLAR WIRE "Halogen free"		
	• Hose: ES07Z1-K • Maximum voltage: 450/750V • Termoplastic poliolefine insulation HFFR TIZ1 UNE 211002, 1 • Operation temperature 70°C	
AS 07 457	Section 1.5 mm BLACK	121,00
AS 07 458	Section 1.5 mm BLUE	121,00
AS 07 459	Section 1.5 mm BROWN	121,00
AS 07 460	Section 1.5 mm GREY	121,00
AS 07 461	Section 1.5 mm EARTH	121,00
	200 m ROLL	
AS 07 463	Sección 2.5 mm NEGRO	192,00
AS 07 464	Sección 2.5 mm AZUL	192,00
AS 07 465	Sección 2.5 mm MARRÓN	192,00
AS 07 466	Sección 2.5 mm GRIS	192,00
AS 07 467	Sección 2.5 mm TIERRA	192,00
	200 m ROLL	
AS 07 469	Section 4 mm BLACK	149,00
AS 07 470	Section 4 mm BLUE	149,00
AS 07 471	Section 4 mm BROWN	149,00
AS 07 472	Section 4 mm GREY	149,00
AS 07 473	Section 4 mm EARTH	149,00
	100 m ROLL	
AS 07 475	Section 6 mm BLACK	219,00
AS 07 476	Section 6 mm BLUE	219,00
AS 07 477	Section 6 mm BROWN	219,00
AS 07 478	Section 6 mm GREY	219,00
AS 07 479	Section 6 mm EARTH	219,00
	100 m ROLL	

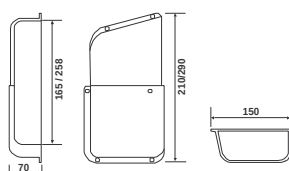
11 SPLITS PROTECTION SYSTEM



NEW!
SILK-PRINT YOUR
COMPANY LOGO
IN THE SUPER COVER



Mod.	EXTERNAL SIZES			INTERNAL SIZES		
	A	B	C	A	B	C
CSP	700	1000	450	600	900	350
CSM	1100	1100	600	1000	1000	500
CSG	1400	1100	600	1300	1000	500



SILICIONE SEALING

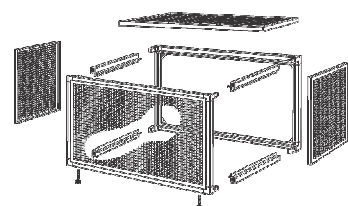
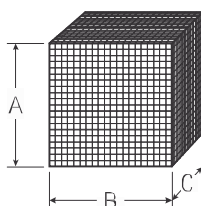


• Exterior units covers

Part No.	Item	Long	High	Deep	€
"NORMAL" series					
AS 11 011	Type 11	770	530	260	54.00
AS 11 012	Type 12	870	530	280	58.00
AS 11 013	Type 13	880	530	330	68.00
AS 11 014	Type 14	880	620	400	76.00
AS 11 015	Type 15	950	890	370	100.00
"SÚPER" series					
• Supplied in shop's show box					
AS 11 021	Small	760	550	270	44.00
AS 11 022	Medium	800	600	300	48.00
AS 11 023	Large	860	700	350	52.00
AS 11 024	Extralarge	950	850	400	60.00
"SÚPER" silkedprinted series					
• Only to be printed					
AS 11 026	Small Neutral	760	550	270	42.00
AS 11 027	Medium Neutral	800	600	300	46.00
AS 11 028	Large Neutral	860	700	350	50.00
AS 11 029	Extralarge Neutra	950	850	400	58.00
PRINTING:					
AS 11 034	Photolithograph and machine set				270.00
AS 11 035	Each colour marking				2.24/bag
AS 11 036	Handling (unpackaging and packaging)				2.24/bag
<i>Normal delivery time: 20-30 days</i>					

• External units protective cages

Part No.	Item	€
• Protects external units from sheets, birds, balls		
Cream colour painted		
AS 11 101	Small CSP	770.50
AS 11 102	Medium CSM	844.00
AS 11 103	Big CSG	1044.00



• Condenser valve covers

Part No.	Item	€
AS 11 211	2 insulating flexible covers for split valves 1/4" y 3/8"-1/2"	8.00

• Condenser valve telescope cover

Part No.	Item	€
AS 11 201	Adjustable cover 210 290 mm	46.00

Part No.	Item	€
JOINTS AND DUCTS SEALING		
AI 19 001	300 cm white silicone tube	6.14
AI 19 002	300 cm translucent silicone tube	6.14
Boxes 25 units		5.20/ut
AI 19 011	Gun H175 zip application	12.00

01 INSULATED AND LINED COPPER TUBE

SPECIFICATIONS:

Insulation: Closed cell class self-extinguisable

Lining: A compact polyethylene coating with external protection

Working temp.: from -45°C to +100°C



Detail of
sealed
end



Part No.	Size	Wall thickness		€ Roll
		mm	Insulation	
01 TF 431 01 TF 433 01 TF 434 01 TF 435 01 TF 438 01 TF 436 01 TF 437 01 TF 461 01 TF 463 01 TF 464 01 TF 467 01 TF 465 01 TF 466	25 metres ROLL			93.00 147.50 207.50 306.50 consult 369.00 607.00
	1/4"	0.8	9	
	3/8"	0.8	9	
	1/2"	0.8	10	
	5/8"	1	10	
	5/8"	0.8	10	
	3/4"	1	10	
	7/8"	1.10	10	
	50 metres ROLL			consult
	1/4"	0.8	9	
	3/8"	0.8	9	
	1/2"	0.8	10	
	5/8"	0.8	10	
	5/8"	1	10	
3/4"	1	10		

Attention: The prices must be consulted because of the continuous change of the LME (London Metal Exchange).

DOUBLE INSULATED AND LINED COPPER TUBE

SPECIFICATIONS:

Insulation: closed cell class self-extinguisable

Lining: a compact polyethylene coating with external protection

Working temp.: from -45°C to +100°C



Part No.	Size	Wall thickness				€ / Roll
		Copper		Insulation		
01 TF 411	Tubes 1/4"-3/8"	0.8	0.8	9	9	222.00
01 TF 412	Tubes 1/4"-1/2"	0.8	0.8	9	10	297.00
01 TF 413	Tubes 1/4"-5/8"	0.8	1	9	10	327.00
01 TF 417	Tubes 3/8"-1/2"	0.8	0.8	9	10	346.00
01 TF 418	Tubes 3/8"-5/8"	0.8	0.8	9	10	
01 TF 414	Tubes 3/8"-5/8"	0.8	1	9	10	
01 TF 415	Tubes 3/8"-3/4"	0.8	1	9	10	
01 TF 416	Tubes 1/2"-3/4"	0.8	1	10	10	
						448.50

• Double insulated copper tube with flared joint



Flared joint
and nut

Part No.	Size	Wall thickness				€ / Roll
		Copper		Insulation		
	3 METRES ROLLS					
01 TF 501	Tubes 1/4"-3/8"	0.8	0.8	9	9	51.50
01 TF 502	Tubes 1/4"-1/2"	0.8	0.8	9	10	60.40
01 TF 503	Tubes 1/4"-5/8"	0.8	1	9	10	69.60
01 TF 504	Tubes 3/8"-5/8"	0.8	1	9	10	80.00
01 TF 505	Tubes 3/8"-3/4"	0.8	1	9	10	92.00
	5 METRES ROLLS					
01 TF 511	Tubes 1/4"-3/8"	0.8	0.8	9	9	83.10
01 TF 512	Tubes 1/4"-1/2"	0.8	0.8	9	10	89.70
01 TF 513	Tubes 1/4"-5/8"	0.8	1	9	10	105.00
01 TF 514	Tubes 3/8"-5/8"	0.8	1	9	10	123.00
01 TF 515	Tubes 3/8"-3/4"	0.8	1	9	10	140.00

Attention: The prices must be consulted because of the continuous change of the LME (London Metal Exchange).

• Insulated tube accessories



Part No.	Item	€
IA 20 903	PAINT FOR INSULATION WITH UV PROTECTION	47.50
	1 Kg Can WHITE colour	
IA 05 995	INSULATING SELF-ADHESIVE TAPE "WHITE"	32.00 24.00/ut 20.00/ut
	Ivory-white colour. Rolls of 10 m x 50 mm x 3 mm 12 rolls per box	
	5 boxes with 12 rolls (60 rolls)	
AI 09 000	WHITE SELF-ADHESIVE TAPE "PLASTIESC 50"	5.88 5.35/ut
	White colour. Rolls of 25 m x 50 mm 48 rolls per box	

TF REFRIGERATION COPPER TUBE



Note: Prices could be modified according to international market quotations, without any previous advice: CONSULT US

Part No.	Size	Wall thick. (mm)	Box cont.	Ø Ext. tube (mm)	€/Roll
"EUROPEAN" Norm 12735-1-2001					
• 15 metres Rolls					
01 TF 092	1/4"	0.8	10	6.35	36.00
01 TF 094	3/8"	0.8	6	9.52	54.00
01 TF 095	1/2"	0.8	7	12.70	72.00
01 TF 096	5/8"	0.8	6	15.87	90.00
01 TF 099	5/8"	1	6	15.87	Consult
01 TF 097	3/4"	1	4	19.05	130.50
01 TF 098	7/8"	1	3	22.22	155.00
"OUTOKUMPU" Norm 12735-1-2001					
• 15.25 metres Rolls					
01 TF 142	1/4"	0.8	10	6.35	Consult
01 TF 143	5/16"	0.8	6	-	
01 TF 144	3/8"	0.8	6	9.52	
01 TF 145	1/2"	0.8	7	12.70	
01 TF 146	5/8"	0.8	6	15.87	
01 TF 147	3/4"	1	4	19.05	
01 TF 148	7/8"	1	3	22.22	

COPPER REFRIGERATION TUBE COILS



Part No.	Item	Wall (mm)	Aprox. metres	€
	25 kgs coils - Norm 12735-1-2001			Consult
01 TF 171	Coil 1/4"	0.80	203	
01 TF 173	Coil 3/8"	0.80	130	
01 TF 174	Coil 1/2"	0.80	95	
01 TF 175	Coil 5/8"	0.80	75	
01 TF 176	Coil 3/4"	1.00	53	
	50 m, coils - Norm 12735-1-2001			Consult
01 TF 181	Coil 1/4"	0.80	50	
01 TF 183	Coil 3/8"	0.80	50	
01 TF 184	Coil 1/2"	0.80	50	
01 TF 185	Coil 5/8"	0.80	50	
01 TF 186	Coil 3/4"	1.00	50	

REFRIGERATION COPPER TUBE BARS



Note: Prices could be modified according to international market quotations, without any previous

Part No.	Size	Wall thick. (mm)	Ø Ext. tube (mm)	€/mt. lineal
• 5 metres Bars				
RIGID COPPER PIPE (Norm EN 12735-1-2001)				
01 TF 118	3/8"	0.8	9.52	Consult
01 TF 119	1/2"	0.8	12.70	
01 TF 120	5/8"	0.8	15.87	
01 TF 121	5/8"	1	15.87	
01 TF 122	3/4"	1	19.05	
01 TF 123	7/8"	1	22.22	
01 TF 124	1"	1	25.40	
01 TF 125	1-1/8"	1	28.57	
01 TF 126	1-1/8"	1.25	28.57	
01 TF 127	1-3/8"	1.25	34.92	
01 TF 128	1-5/8"	1.25	41.27	
01 TF 028	2-1/8"	1.25	53.97	
01 TF 029	2-5/8"	1.65	66.68	
01 TF 133	3-1/8"	1.65	79.37	
01 TF 134	3-1/8"	2.5	79.37	
01 TF 135	3-5/8"	2.5	92.08	

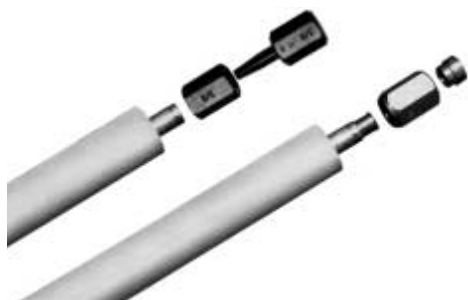
TF COPPER FITTINGS FOR AIR CONDITIONING

Part No.	Size	Units per box	€
COUPLING SLEEVE FEMALE / FEMALE			
02 TF 001	1/4"	100	0.44
02 TF 002	3/8"	50	0.44
02 TF 003	1/2"	50	0.68
02 TF 004	5/8"	50	0.56
02 TF 005	3/4"	25	1.56
02 TF 006	7/8"	25	1.68
02 TF 012	1"	25	3.28
02 TF 007	1-1/8"	10	2.36
90° ELBOW FEMALE / FEMALE			
02 TF 021	1/4"	50	3.44
02 TF 022	3/8"	50	3.28
02 TF 023	1/2"	50	3.88
02 TF 024	5/8"	50	3.44
02 TF 025	3/4"	50	3.76
02 TF 026	7/8"	25	4.72
02 TF 027	1-1/8"	10	6.80
90° ELBOW FEMALE / FEMALE			
02 TF 041	1/4"	50	1.48
02 TF 042	3/8"	50	1.80
02 TF 043	1/2"	50	1.72
02 TF 044	5/8"	50	1.76
02 TF 045	3/4"	50	2.28
02 TF 046	7/8"	25	2.24
02 TF 047	1-1/8"	10	3.92
45° ELBOW			
02 TF 061	1/4"	50	4.72
02 TF 062	3/8"	50	4.68
02 TF 063	1/2"	50	3.28
02 TF 064	5/8"	50	1.32
02 TF 065	3/4"	50	6.28
02 TF 066	7/8"	25	2.56
02 TF 075	1"	25	13.52
02 TF 067	1-1/8"	10	5.56
180° ELBOW			
02 TF 201	1/4"	25	2.64
02 TF 202	3/8"	25	3.16
02 TF 203	1/2"	50	3.32
02 TF 204	5/8"	25	5.80
02 TF 205	3/4"	10	10.88
02 TF 206	7/8"	10	14.48
FEMALE THREAD-NUT SAE FOR WELDING			
03 TF 201	1/4" SAE to copper 1/4"		7.20
03 TF 202	3/8" SAE to copper 3/8"		8.00
03 TF 203	1/2" SAE to copper 1/2"		8.84
03 TF 204	5/8" SAE to copper 5/8"		12.80
03 TF 205	3/4" SAE to copper 3/4"		16.72
90° ELBOW MALE / FEMALE			
02 TF 163	3/8"	50	3.52
02 TF 164	1/2"	50	2.68
02 TF 165	5/8"	50	1.76
02 TF 166	3/4"	50	4.28
02 TF 167	7/8"	25	2.96
90° ELBOW MALE / FEMALE			
02 TF 182	1/4"	100	5.00
02 TF 183	3/8"	50	4.68
02 TF 184	1/2"	50	8.92
02 TF 185	5/8"	50	6.60
02 TF 186	3/4"	50	7.28
02 TF 187	7/8"	25	7.72

Part No.	Size	Units per box	€
TEE			
02 TF 081	1/4"	100	4.52
02 TF 082	3/8"	50	4.68
02 TF 083	1/2"	50	1.76
02 TF 084	5/8"	50	1.70
02 TF 085	3/4"	25	7.60
02 TF 086	7/8"	25	3.36
02 TF 087	1-1/8"	10	8.40
U-TRAP FEMALE / FEMALE			
02 TF 141	5/8"	1	21.06
02 TF 142	3/4"	1	27.10
02 TF 143	7/8"	1	25.34
02 TF 144	1 1/8"	1	34.50
REDUCER FEMALE / FEMALE			
02 TF 101	3/8x1/4"	50	3.20
02 TF 102	1/2x3/8"	50	1.28
02 TF 103	1/2x1/4"	50	0.73
02 TF 104	5/8x1/2"	50	1.36
02 TF 105	5/8x3/8"	50	1.32
02 TF 106	5/8x1/4"	50	1.36
02 TF 107	3/4x5/8"	50	3.20
02 TF 108	3/4x1/2"	50	3.20
02 TF 109	3/4x3/8"	50	1.60
02 TF 110	7/8x3/4"	50	2.40
02 TF 111	7/8x5/8"	50	1.20
02 TF 112	7/8x1/2"	50	2.40
02 TF 132	1-1/8x1/2"	25	4.26
02 TF 115	1-1/8x3/4"	25	4.12
02 TF 114	1-1/8x3/4"	25	4.12
02 TF 113	1-1/8x7/8"	25	4.12
REDUCER MALE / FEMALE			
02 TF 251	3/8-1/4"	50	1.52
02 TF 252	1/2-3/8"	50	1.84
02 TF 253	1/2-1/4"	50	1.92
02 TF 254	5/8-1/2"	50	1.52
02 TF 255	5/8-3/8"	50	1.52
02 TF 256	3/4-1/2"	50	3.64
02 TF 257	3/4-3/8"	50	3.48
02 TF 258	7/8-3/4"	50	2.24
02 TF 259	7/8-5/8"	50	1.12
02 TF 260	7/8-1/2"	50	2.40
COUPLING SLEEVE WITH SCHRADER VALVE 1/4 SAE AND CAP			
06 TF 051	1/4" x 1/4"		8.92
06 TF 052	5/16" x 5/16"		8.92
06 TF 053	3/8" x 3/8"		8.92
06 TF 054	1/2" x 1/2"		14.28
06 TF 055	5/8" x 5/8"		6.28
06 TF 056	3/4" x 3/4"		7.32
06 TF 057	7/8" x 7/8"		7.32
06 TF 058	1-1/8"x1-1/8"		8.20
CAP FOR TUBE			
02 TF 401	1/4"	50	0.76
02 TF 402	3/8"	50	0.72
02 TF 403	1/2"	50	1.16
02 TF 404	5/8"	50	0.36
02 TF 405	3/4"	50	1.28
02 TF 406	7/8"	25	1.56
02 TF 407	1-1/8"	25	2.40

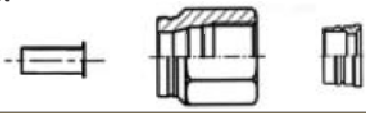
(*) For other fittings and sizes, please see our REFRIGERATION Catalogue

TF COUPLING CONNECTIONS FOR SPLITS



- Without welding
- Direct connection to SAE coupling
- Easy assembly and disassembly
- Low cost
- Meet the EN 378/1 and EN 378/2 standards
- It avoids gas losses by defective welding in inaccessible places

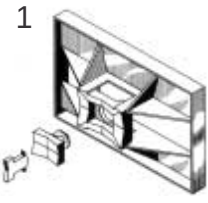
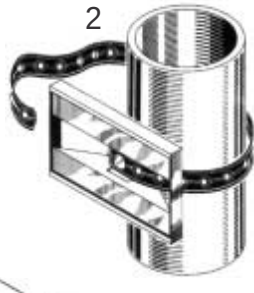
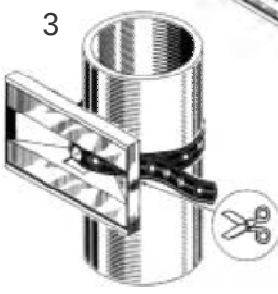


Part No.	Item	Boxes	€
	Whole set		
			
	«SERTO» COUPLINGS		
03 TF 501	Set 1/4" x 0.8 SAE	10	4.36
03 TF 502	Set 3/8" x 0.8 SAE	10	6.60
03 TF 503	Set 1/2" x 0.8 SAE	10	7.94
03 TF 504	Set 5/8" x 1 SAE	10	11.40
03 TF 505	Set 3/4" x 1 SAE	10	17.60
	CALIBRATION TOOL		
03 TF 511	Tool 1/4" x 0.8		76.90
03 TF 512	Tool 3/8" x 0.8		84.80
03 TF 513	Tool 1/2" x 0.8		91.00
03 TF 514	Tool 5/8" x 1		106.00
03 TF 515	Tool 3/4" x 1		117.30

AI TUBE IDENTIFICATION PLATES

Escofix

Label holder PT:

1  2  3 

Placing the label

vertical or horizontal tube mounting

PT

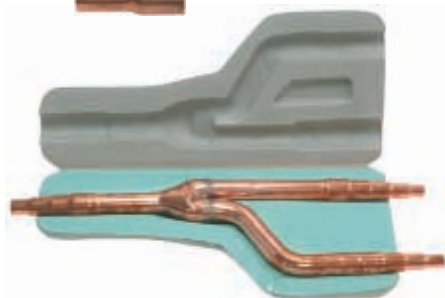
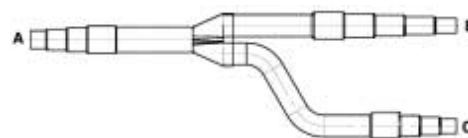
FAS

ETB

Software

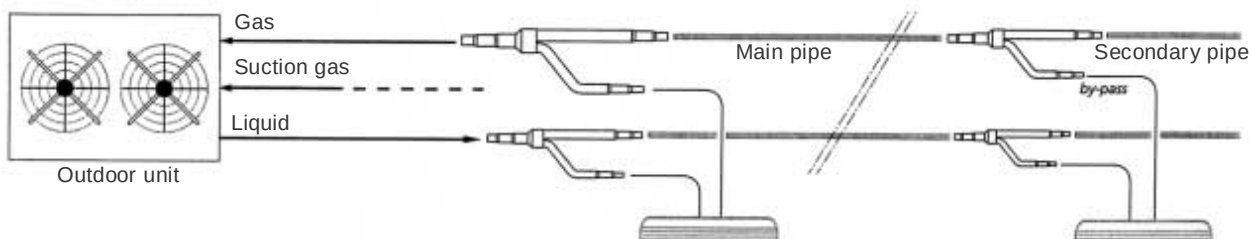
Part No.	Item	€
	LABEL HOLDER WITH CLAMP	
AI 28 101	• This system allows mounting vertically or horizontally. • Includes plastic hoops Model PT (20 uts boxes)	9.50/ut
	ELASTIC CLAMP	
AI 28 105	• It allows enlarging the label holder diameter of the tube PT Model FAS	6.64
	STICKERS	
AI 28 108	• Supplied in Din A-4 leaves. - Boxes of 10 white stickers Modelo ETB	1.95
	STICKERS SOFTWARE	
AI 28 109	Software for stickers printing ETB	125.00

03 UNIVERSAL DERIVATION FOR MULTI-SPLITS SYSTEMS



- To be used with new refrigerants.
- Can be cutted according to our needs.
- Insulation included.
- Models 30 and 45 content:
1 for suction, 1 liquid line and 1 adapter.
- Model 90 content:
1 for suction line, 1 for liquid line and 3 adapters (7/8" to 1/4", 1/2" to 1" and 1/4" to 1/2")

Part No.	Item	Ø Suction			Ø Liquid			€
		A	B	C	A	B	C	
03 TF 601	Kit n° 30 + Adapter (1" to 7/8")	1/2" to 7/8"	3/8" to 7/8"	3/8" to 3/4"	1/4" to 1/2"			182.00
03 TF 602	Kit n° 45 + Adapter (1" to 1-1/8")	5/8" to 1"	1/2" to 1"	1/2" to 7/8"	1/4" to 1/2"			192.00
03 TF 603	Kit n° 90 + Adapters	1-1/8" to 1-1/2"	1" to 1-1/2"	1/2" to 1"	5/8" to 7/8"	1/2" to 7/8"	1/2" to 3/4"	330.00

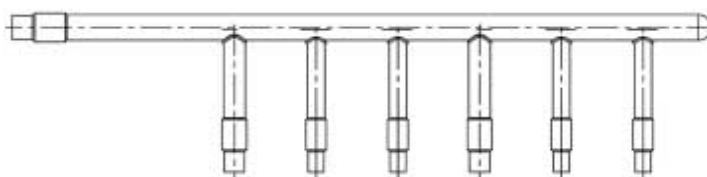


UNIVERSALS COLLECTOR FOR MULTI-SPLITS SYSTEMS



- To be used with new refrigerants
- Can be cutted according to our needs
- Insulation included

Part No.	Item	€
03 TF 604	Collector 5/8" suction-1/2" liquido 4 out both sides	233.00
03 TF 605	Collector 5/8" suction-1/2" liquido 6 out both sides	225.00
03 TF 606	Collector 3/4" suction-3/8" liquido 8 out both sides	270.00



WAY CHANGE



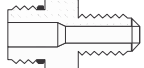
Part No.	Item	€
03 TF 525	* Joint Male/Female Thread 1/4"-1/4"	5.50
03 TF 526	Thread 3/8"-3/8"	9.10
03 TF 527	Thread 1/2"-1/2"	15.00
03 TF 528	Thread 5/8"-5/8"	18.50

TF BRASS FITTINGS "SAE"

Part No.	Size	€		Part No.	Size	€
NUTS "SAE"				MALE x MALE NIPPLE "SAE"		
03 TF 071	1/4" SAE	1.13		03 TF 091	1/4" SAE	2.03
03 TF 072	3/8" SAE	2.07		03 TF 092	3/8" SAE	4.28
03 TF 073	1/2" SAE	2.75		03 TF 093	1/2" SAE	6.57
03 TF 074	5/8" SAE	4.08		03 TF 094	5/8" SAE	8.18
03 TF 075	3/4" SAE	9.63		03 TF 095	3/4" SAE	12.90
REDUCED NUTS "SAE"				MALE/FEMALE ELBOW "SAE"		
03 TF 081	3/8"x1/4"	2.52		03 TF 151	1/4"x1/4"	6.98
03 TF 082	1/2"x3/8"	3.75		03 TF 152	3/8"x 3/8"	8.45
03 TF 083	5/8"x1/2"	4.59		03 TF 153	1/2"x1/2"	12.38
03 TF 084	3/4"x5/8"	9.85		03 TF 154	5/8"x5/8"	15.10
COPPER JOINTS				03 TF 155	3/4"x3/4"	33.55
03 TF 191	For tube in 1/4"	0.39		NUTS CUPSEAL		
03 TF 192	For tube in 3/8"	0.45		03 TF 181	For tube 1/4"	0.39
03 TF 193	For tube in 1/2"	0.54		03 TF 182	For tube 3/8"	0.45
03 TF 194	For tube in 5/8"	0.63		03 TF 183	For tube 1/2"	0.54
03 TF 195	For tube in 3/4"	1.20		03 TF 184	For tube 5/8"	0.63
MALE/FEMALE COUPLING "SAE" FOR WELDING				03 TF 185	For tube 3/4"	1.20
03 TF 171	1/4"	2.07		DOUBLE FEMALE SWIVEL ADAPTER		
03 TF 172	3/8"	3.56		03 TF 281	1/4" x 1/4" SAE	5.40
03 TF 173	1/2"	4.56		03 TF 282	3/8" x 3/8" SAE	7.52
03 TF 174	5/8"	5.00		03 TF 283	1/2" x 1/2" SAE	9.05
03 TF 175	3/4"	8.60		03 TF 284	5/8" x 5/8" SAE	9.95
MALE TEE "SAE"				03 TF 285	3/4" x 3/4" SAE	15.42
03 TF 131	1/4"	9.63		REDUCER MALE - FEMALE		
03 TF 132	3/8"	18.45		03 TF 120	1/4" x 1/4" SAE	4.46
03 TF 133	1/2"	24.53		03 TF 121	1/4" x 3/8" SAE	4.62
03 TF 134	5/8"	37.13		03 TF 122	1/4" x 1/2" SAE	6.06
03 TF 135	3/4"	56.65		03 TF 119	1/4" x 5/8" SAE	7.25
FEMALE THREAD-NUT "SAE" FOR WELDING				03 TF 123	3/8" x 1/4" SAE	4.46
03 TF 201	1/4" SAE to copper 1/4"	8.10		03 TF 124	3/8" x 3/8" SAE	5.85
03 TF 202	3/8" SAE to copper 3/8"	9.00		03 TF 118	3/8" x 1/2" SAE	6.60
03 TF 203	1/2" SAE to copper 1/2"	9.95		03 TF 117	3/8" x 5/8" SAE	8.19
03 TF 204	5/8" SAE to copper 5/8"	14.40		03 TF 125	1/2" x 3/8" SAE	8.22
03 TF 205	3/4" SAE to copper 3/4"	18.82		03 TF 116	1/2" x 1/2" SAE	7.55
				03 TF 126	1/2" x 5/8" SAE	7.65
				03 TF 130	5/8" x 3/8" SAE	7.77
				03 TF 127	5/8" x 1/2" SAE	7.77
				03 TF 128	5/8" x 3/4" SAE	16.56
				03 TF 129	3/4" x 5/8" SAE	17.43

(*) For other fittings and sizes, please see our REFRIGERATION Catalogue.

BRASS SCREW-THREAD COUPLINGS

1/4" SAE		1/2" ACME
1/2" ACME		1/4" SAE
1/2" ACME		1/4" SAE
1/4" SAE		1/2" ACME

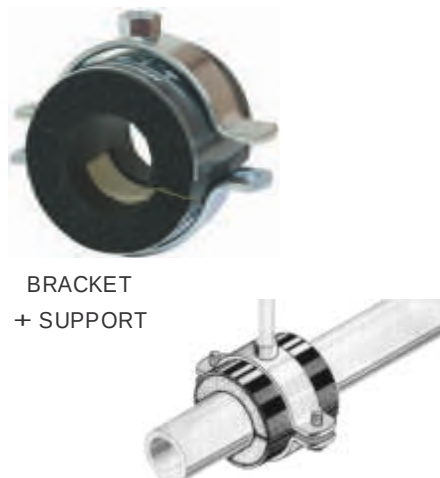
Part No.	Item	€
06 TF 231	• It allows to couple analysers, hoses, charge valves, etc. 1/4" SAE female / 1/2" ACME male	4.32
06 TF 232	1/4" SAE male / 1/2" ACME female	14.97
06 TF 233	1/4" SAE female / 1/2" ACME female	13.17
06 TF 234	1/4" SAE male / 1/2" ACME male with joint	4.41

QUICK CONNECTIONS



Part No.	Item		Size	€
	FEMALE CONNECTOR WITH SERVICE VALVE AND COPPER BELL-SHAPED TUBE			
07 TF 000	FD57 - 1084	4 - 6	1/4"	37.13
07 TF 002	FD57 - 1084	6 - 6	3/8"	37.58
07 TF 003	FD57 - 1084	8 - 10	1/2"	52.13
07 TF 008	FD57 - 1084	10 - 10	5/8"	52.13
07 TF 005	FD57 - 1084	12 - 11	3/4"	52.13
07 TF 006	FD57 - 1084	14 - 11	7/8"	63.45
07 TF 007	FD57 - 1084	18 - 12	1-1/8"	93.85

AI INSULATED BRACKETS FOR TUBES



BRACKET
+ SUPPORT

It safely protects against the condensate formation and reduces the tube support thermal losses, as per DIN 4140, part 2, art. 3, 4.

Part No.	Item	For tubes from ... to ... mm	Dimensions			€
			Plate	Insulation	Nut	
AI 07 401	1/4"	10 - 14	20 x 3	13	M8	12.25
AI 07 402	3/8"	15 - 18	20 x 3	13	M8	12.75
AI 07 403	1/2"	20 - 25	20 x 3	13	M8	13.25
AI 07 404	3/4"	26 - 28	20 x 3	13	M8	13.90
AI 07 405	1"	32 - 35	20 x 3	13	M8	14.95
AI 07 406	1-1/4"	40 - 43	30 x 3	13	M10	25.45
AI 07 407	1-1/2"	48 - 50	30 x 3	13	M10	18.70
AI 07 408	2"	59 - 62	30 x 3	13	M10	22.30
AI 07 409	2-1/2"	75 - 78	30 x 3	19	M10	40.10
AI 07 410	3"	88 - 90	40 x 4	19	F.1/2"-F.M.12	55.10
AI 07 411	4"	112 - 114	40 x 4	19	F.1/2"-F.M.12	63.50

TF HEAVY DUCT PIPE CLAMP WITH EPDM RUBBER M8



Part No.	Size		Units per box	€
04 TF 321	Ø18	(15-19)	50	1.14
04 TF 322	Ø22	(20-25)	50	1.22
04 TF 323	Ø28	(26-30)	50	1.26
04 TF 324	Ø35	(32-36)	50	1.32
04 TF 325	Ø40	(38-43)	25	1.44
04 TF 326	Ø48	(47-51)	25	1.56
04 TF 327	Ø54	(53-56)	25	1.62
04 TF 328	Ø60	(60-64)	25	1.73
04 TF 329	Ø70	(68-72)	25	1.97
04 TF 330	Ø75	(75-80)	25	2.04
04 TF 331	Ø83	(81-86)	25	2.19
04 TF 332	Ø90	(87-92)	25	2.24
04 TF 333	Ø100	(99-105)	25	2.24

VALVES FOR AIR CONDITIONING



Part No.	Item		€
	• 1/4" Plug of VALVE CORE		
06 TF 101	RR.603	1/4"	10.90
06 TF 102	RR.603	3/8"	12.90
06 TF 103	RR.603	1/2"	16.80
06 TF 104	RR.603	5/8"	20.70
06 TF 105	RR.603	3/4"	44.25

VF STRAIGHT PASS VALVES WHEEL

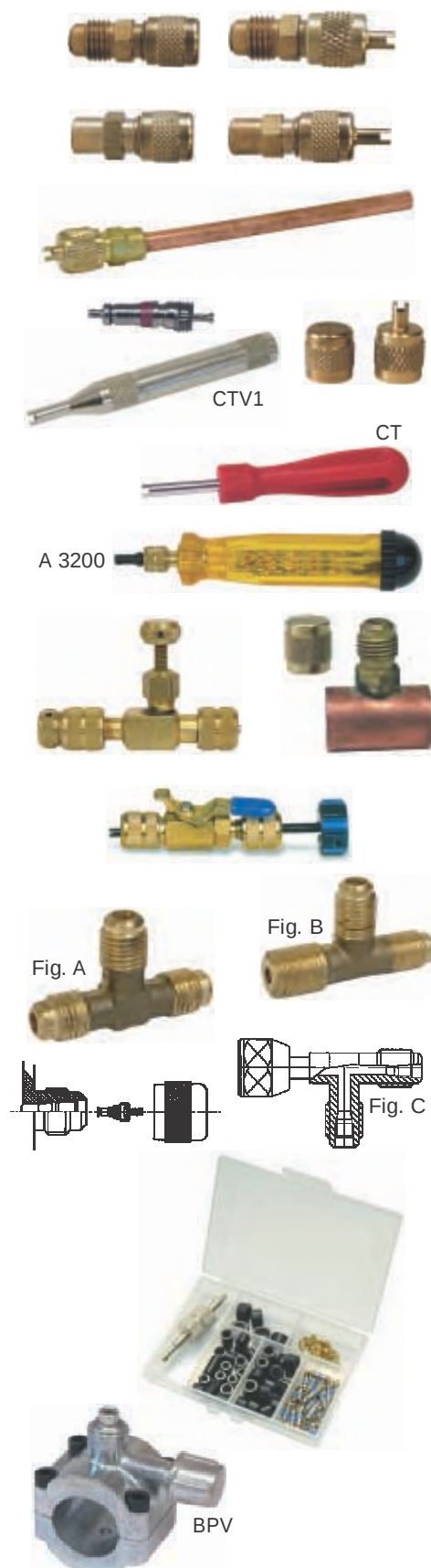


STRAIGHT PASS
VALVES WHEEL

Part No.	Item		€
01 VF 301	CT-D-04	1/4" SAE	16.25
01 VF 302	CT-D-06	3/8" SAE	16.25
01 VF 303	CT-D-08	1/2" SAE	20.70
01 VF 304	CT-D-10	5/8" SAE	26.00
01 VF 305	BL - 6 F	3/4" SAE	45.45
01 VF 351	CT-D-04S	1/4" ODS	16.25
01 VF 352	CT-D-06S	3/8" ODS	16.25
01 VF 353	CT-D-08S	1/2" ODS	20.70
01 VF 354	CT-D-10S	5/8" ODS	26.00
01 VF 355	BL - 6 S	3/4" ODS	45.45
01 VF 356	BL - 7 S	7/8" ODS	48.60

TF LOADING VALVES AND ACCESSORIES

• Valve cores



Part No.	Item	€
THREAD SERVICE VALVE		
06 TF 002	1/4" SAE thread with normal cap	2.36
06 TF 032	1/4" SAE thread with cap with key	2.73
SOLDERING SERVICE VALVE		
06 TF 000	1/4" soldering without cap and valve core	0.83
06 TF 001	1/4" soldering with normal cap	1.25
06 TF 031	1/4" soldering with cap with key	1.45
SOLDERING SERVICE VALVE WITH TUBE		
06 TF 009	1/4" Soldering with 45 mm tube. Cap	1.95
06 TF 010	1/4" Soldering with 100 mm tube. Cap	2.40
06 TF 011	5/16" Soldering with 45 mm tube. Cap	2.10
VALVE CORE SPARE		
06 TF 005	Valve core spare	0.33
CAPS		
06 TF 181	Knurl cap 1/4"	0.78
06 TF 182	Knurl cap 1/4" with key-tool to dismount valve core	1.28
TOOLS TO EXTRACT VALVE CORES		
06 TF 021	Mini valve key-tool	3.30
06 TF 025	Metallic key-tool CTV1	8.65
06 TF 022	Valve key-tool with handle CT	3.75
06 TF 023	Valve core tool screwdriver A 3200	22.25
06 TF 024	Valve core separator without charge loose	145.35
06 TF 026	Valve core separator without charge loose R410 (5/16")	127.80
06 TF 027	Valve core separator with closing valve	48.30
JOINING SLEEVE WITH VALVE CORE AND CAP		
• Valve core 1/4 SAE		
06 TF 051	1/4" x 1/4" ODS	6.69
06 TF 052	5/16" x 5/16" ODS	6.69
06 TF 053	3/8" x 3/8" ODS	6.69
06 TF 054	1/2" x 1/2" ODS	10.73
06 TF 055	5/8" x 5/8" ODS	4.71
06 TF 056	3/4" x 3/4" ODS	5.50
06 TF 057	7/8" x 7/8" ODS	5.502
06 TF 058	1-1/8" x 1-1/8" ODS	6.15
MALE T COUPLING FOR VALVE CORE		
06 TF 007	1/4" NPT x 1/4" charge x 1/4" SAE	4.35
06 TF 003	1/8" NPT x 1/4" charge x 1/4" SAE 	4.35
06 TF 008	1/4" SAE x 1/4" charge x 1/4" SAE 	4.35
06 TF 017	1/4" SAE revolving x 1/4" charge x 1/4" charge 	13.95
06 TF 015	1/4" SAE male x 1/4" SAE revolving x 1/4" charge	6.85
VALVE CORE-JOINT SET. Ref. 4000		
06 TF 028	Mounting kit composed of: 1 valve to dismount and replace valve cores 20 valve cores 20 1/4" SAE rubber joints 20 5/16" SAE rubber joints 10 hose depressors 5 3/8" empty hose joints	46.30

• Charge and intervention valves

Part No.	Item	€
• It allows to charge or Size the pressure in any point of the system		
VALVES WITH FLANGE «BPV»		
06 TF 121	BPV - 21 for 1/2" and 5/8"	9.35
06 TF 122	BPV - 31 for 1/4", 5/16" and 3/8"	7.60
06 TF 123	BPV - 36 for 3/16"	8.70
06 TF 124	BPV - 34 for 3/4"	45.30
06 TF 125	BPV - 78 for 7/8"	45.30

IA TUBULAR INSULATION ROLL (M1 Class)

Isocell®

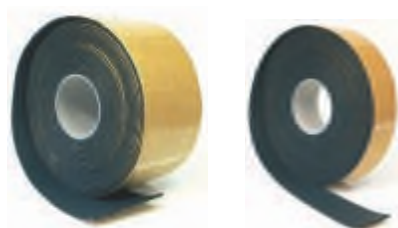


**SUPER
FLEXIBLE**
μ 5.000

Part No.	Item					Lineal metre	Full box
	Ref.	Ø Nom.	Ø Copper	Ø Iron	Box cont.	€	€
6 mm THICKNESS (D)							
IA 04 001	6 x 6	6	1/4"	—	496	0.84	0.82
IA 04 002	10 x 6	10	3/8"	—	364	0.98	0.92
IA 04 003	12 x 6	12	1/2"	—	316	1.11	1.05
IA 04 004	15 x 6	15	5/8"	—	266	1.31	1.25
IA 04 005	18 x 6	18	3/4"	3/8"	220	1.44	1.38
IA 04 006	22 x 6	22	7/8"	1/2"	180	1.61	1.55
IA 04 007	25 x 6	25	1"	—	152	2.07	1.97
IA 04 008	28 x 6	28	1-1/8"	3/4"	130	2.34	2.24
9 mm THICKNESS (F)							
IA 04 021	6 x 9	6	1/4"	—	352	1.38	1.31
IA 04 022	10 x 9	10	3/8"	—	266	1.46	1.40
IA 04 023	12 x 9	12	1/2"	—	234	1.58	1.49
IA 04 024	15 x 9	15	5/8"	—	192	1.85	1.77
IA 04 025	18 x 9	18	3/4"	3/8"	166	2.00	1.89
IA 04 026	22 x 9	22	7/8"	1/2"	136	2.22	2.12
IA 04 027	25 x 9	25	1"	—	108	2.49	2.37
IA 04 028	28 x 9	28	1-1/8"	3/4"	98	3.02	2.88
13 mm THICKNESS (F)							
IA 04 052	10 x 13	10	3/8"	—	172	2.48	2.34
IA 04 053	12 x 13	12	1/2"	—	162	2.54	2.40
IA 04 054	15 x 13	15	5/8"	—	136	2.84	2.69
IA 04 055	18 x 13	18	3/4"	3/8"	118	3.11	2.94
IA 04 056	22 x 13	22	7/8"	1/2"	98	3.32	3.18
IA 04 057	25 x 13	25	1"	—	80	3.68	3.47
IA 04 058	28 x 13	28	1-1/8"	3/4"	78	4.28	4.07
19 mm THICKNESS (F)							
IA 04 071	10 x 19	10	3/8"	—	98	4.19	3.98
IA 04 072	12 x 19	12	1/2"	—	88	4.00	4.26
IA 04 073	15 x 19	15	5/8"	—	78	5.82	5.52
IA 04 074	18 x 19	18	3/4"	3/8"	72	6.35	6.05
IA 04 075	22 x 19	22	7/8"	1/2"	64	6.77	6.46
AI 04 076	25 x 19	25	1"	—	50	6.98	6.62
AI 04 077	28 x 19	28	1-1/8"	3/4"	48	7.85	7.49

For other sizes and thickness, please see our "MERCAILLAMENT" INSULATION CATALOGUE

ACCESSORIES



• Insulating self-adhesive tape

Part No.	Item	Box content	€/Roll
IA 05 991	• Rolls of 10 mt x 50 mm x 3 mm Tape ISOCELL	24	24.00
	Full box: 24 rolls		21.00
IA 05 992	• Rolls of 10 mt x 100 mm x 3 mm Tape ISOCELL	12	52.95
	Full box: 12 rolls		46.29
IA 05 993	• Rolls of 15 mt x 50 mm x 3 mm BLACK tape	12	30.90
IA 05 994	• Rolls of 30 mt x 50 mm x 3 mm BLACK tape	10	62.90
IA 05 995	• Rolls of 10 mt x 50 mm x 3 mm Tape WHITE, ivory colour	12	24.00
	Compleat box (12 rolls)	12	21.00

• Glue

Part No.	Item	€
AI 20 000	0.5 kg Can of glue	5.64
AI 20 001	1 kg Can of glue	10.26

• Dissolvent

Part No.	Item	€
AI 20 051	• It is a product for cleaning tools, brushes or possible stains 1 lt Can of dissolvent	18.00

• Insulating paint

Part No.	Item	€
IA 20 901	Can 1 Kg GREY	35.65
IA 20 902	Can 1 Kg BLUE	35.65
IA 20 903	Can 1 Kg WHITE	35.65



IA ROLL OF TUBULAR INSULATION



Easiness of transport in all kind of vehicles



Using temperature: -40°C to +105°C
Thermic conductivity: λ 0°C = 0,035 W/(m.K)
Tightness factor: M > 7000
Fire resistance: M1

• Insulation boxes

Part No.	Item	Internal diameter			BOX cont.	€ BOX
		mm	Copper	Iron		
6 mm THICKNESS						
IA 04 901	6 x 6	6	1/4"	-	50	49.50
IA 04 902	10 x 6	10	3/8"	-	46	49.50
IA 04 903	12 x 6	12	1/2"	-	40	49.50
IA 04 904	15 x 6	15	5/8"	-	38	49.50
IA 04 905	18 x 6	18	3/4"	3/8"	30	49.50
IA 04 906	22 x 6	22	7/8"	1/2"	23	49.50
IA 04 907	28 x 6	28	1-1/8"	3/4"	20	49.50
9 mm THICKNESS						
IA 04 911	6 x 9	6	1/4"	-	40	49.50
IA 04 912	10 x 9	10	3/8"	-	34	49.50
IA 04 913	12 x 9	12	1/2"	-	31	49.50
IA 04 914	15 x 9	15	5/8"	-	27	49.50
IA 04 915	18 x 9	18	3/4"	3/8"	23	49.50
IA 04 916	22 x 9	22	7/8"	1/2"	19	49.50
IA 04 917	28 x 9	28	1-1/8"	3/4"	14	49.50
13 mm THICKNESS						
IA 04 921	6 x 13	6	1/4"	-	26	49.50
IA 04 922	10 x 13	10	3/8"	-	23	49.50
IA 04 923	12 x 13	12	1/2"	-	18	49.50
IA 04 924	15 x 13	15	5/8"	-	17	49.50
IA 04 925	18 x 13	18	3/4"	3/8"	15	49.50
IA 04 926	22 x 13	22	7/8"	1/2"	14	49.50
IA 04 927	28 x 13	28	1-1/8"	3/4"	10	49.50

• Insulating rolls and sheets

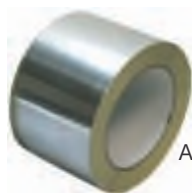


Part No.	Item	BOX Cont.	€/m²
SHEET M1			
AI 04 361	PL 06 (2000 x 1000)	48	18.35
AI 04 362	PL 10 (2000 x 1000)	32	23.40
AI 04 363	PL 13 (2000 x 1000)	24	29.45
AI 04 364	PL 19 (2000 x 1000)	16	45.30
M1 ROLL			
AI 04 371	R 06 (30 x 1 m)	30	18.35
AI 04 372	R 10 (20 x 1 m)	20	23.40
AI 04 373	R 13 (14 x 1 m)	14	29.45
AI 04 374	R 19 (10 x 1 m)	10	45.30

ADHESIVE TAPES



PLASTIESC



ALUESC

Part No.	Item	Rolls x box	€/unit
TAPE PVC			
AI 09 001	PLASTIESC 50 white (roll 25 m x 50 mm)	48	4.41
AI 09 001	PLASTIESC 50 black (roll 25 m x 50 mm)	48	4.32
AI 09 002	PLASTIESC 50 gray (roll 25 m x 50 mm)	48	4.32
Order of 48 rolls (1 box)			4.00
Order of 96 rolls (2 boxes)			3.75
Order of 240 rolls (5 boxes)			3.29
ALUMINIUM TAPE			
AI 09 005	ALUESC 50 (roll 50 m x 50 mm)	24	11.85
Order of 5 rolls			10.38
Order of 24 rolls (1 box)			8.78
Order of 48 rolls (2 boxes)			7.80
Order of 120 rolls (5 boxes)			6.92
AI 09 006	ALUESC 65 (roll 50 m x 65 mm)	20	13.11
Order of 20 rolls (1 box)			11.22
Order of 40 rolls (2 boxes)			9.75
Order of 100 rolls (5 boxes)			8.78
Order of 200 rolls (10 boxes)			7.88
AI 09 011	ALUESC 75 (roll 50 m x 75 mm)	16	10.08
Order of 16 rolls (1 box)			15.15
Order of 32 rolls (2 boxes)			10.88
Order of 80 rolls (5 boxes)			10.31
Order of 160 rolls (10 boxes)			9.38

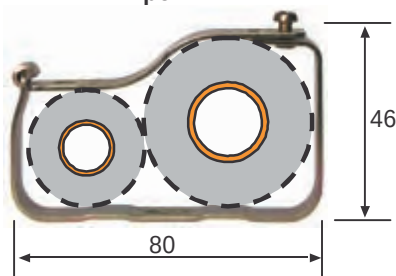
!VERY IMPORTANT!
Our roll length is
50 meters

TAKE CARE OF OTHER SUPLIERS
(50 Yards = 45 meters)

TF FIXING SYSTEMS FOR INSULATED PIPES



Tipo 4

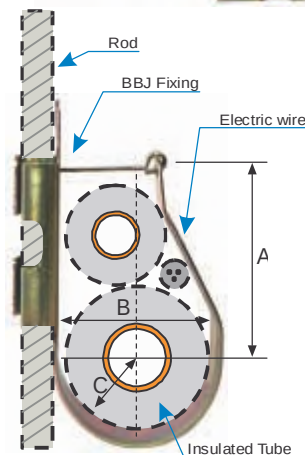


• Wall fixing

Part No.	Model	Box units	€
04 TF 151	• Chromium-plated with 8 microns • Drilling fixing on base		2.06
	"GRIP LOCKS"		
	Type 1 (54 x 30 mm) pipe size 1/4" liquid up to 1/2" gas	10	
	Type 2 (60 x 32 mm) pipe size 3/8" liquid up to 5/8" gas	10	
	Type 3 (67 x 37 mm) pipe size 1/2" liquid up to 7/8" gas	10	
04 TF 152	Type 4 (80 x 46 mm) pipe size 5/8" liquid up to 1-1/8" gas	10	2.31
04 TF 153			2.48

HANGER FOR INSULATED PIPES

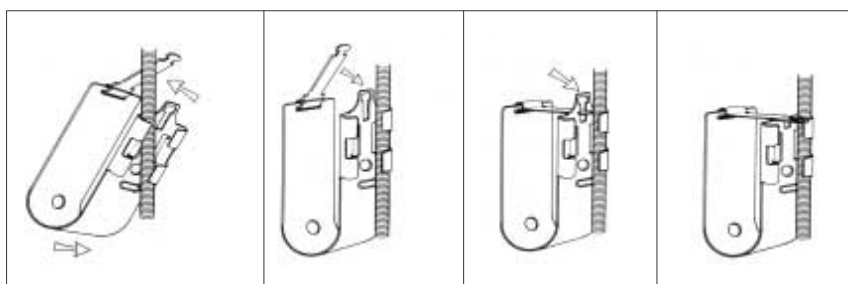
• Of threaded bar



Dimensions (mm)

75	55	35
87	62	35
100	70	35

Part No.	Model	For pipes	Box units	€
04 TF 161	- Chromium-plated with 8 microns - For use on threaded bar M8, M10		10	3.42
	BBJ-2	5/8" and 3/8"		
	BBJ-3	7/8" and 1/2"		
	BBJ-4	1-3/8" and 5/8"		
04 TF 162	BBJ-3	7/8" and 1/2"	10	3.48
04 TF 163	BBJ-4	1-3/8" and 5/8"	10	3.56



ANTI-CONDENSATION TAPE FOR REFRIGERATION



Code No.	Article	€
IA 10 206	- Preformed ribbon made from bituminous resin and cork - Work temperature: -30 to +80° C - Protected with silicone paper 8.5 mts x 50 mm x 3 mm roll	14.40

AV ANTIVIBRATION DAMPERS

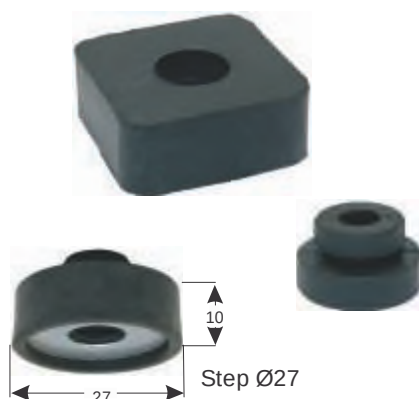


Part No.	Item	Thread	Load Kgr.	€
THREADED BARS ON BOTH SIDES				
AV 01 000	A 20	M6	12	1.80
AV 01 005	A 28/20 with 20-30 mm threaded bar	M8	25	1.80
AV 01 001	A 35b	M8	30	1.08
AV 01 002	• 100 units	M8	50	0.86/ut
	A 35			1.08
	• 100 units			0.86/ut
	• 250 units			0.75/ut
AV 01 006	• 500 units	M8	50	0.63/ut
	Antivibration A35 black "INOX"			1.50
	A 45			1.80
AV 01 003	• 50 units	M8	85	1.50/ut
	• 100 units	M10	250	1.15/ut
	• 250 units			0.90/ut
	A 6045			6.33
	FLAT WITHOUT THREADED BARS CONIC STEM			
AV 01 008	A 25	M8	45	2.79
AV 01 010	A 30	M8	80	3.03
AV 01 011	A 60	M10	150	7.38
AV 01 012	A 70	M12	350	14.88
AV 01 013	A 90	M12	850	15.00
AV 01 014	A 130	M16	1,500	41.10
SURFACE WITH THREADED BARS AND NUTS				
AV 01 020	S 40	M8	20 to 45	1.80
AV 01 021	• 50 units	M10	80 to 150	1.50/ut
	• 100 units			1.20/ut
	• 250 units			0.90/ut
	S 60			3.75
AV 01 022	• 50 units	M12	120 to 350	3.00/ut
	• 100 units			2.25/ut
	• 250 units			1.80/ut
	S 70			7.05
AV 01 023	S 90	M12	450 to 850	11.85
AV 01 024	S 120	M16	950 to 1,500	21.98
AV 01 025	S 160	M16	1,000 to 1,750	53.25
COMPLETE WITH BOLTS, WASHERS AND NUTS FOR OUTSIDE				
AV 01 018	ANTI (stainless AISI 304)	M8	35	7.47
AV 01 028	ANTI-1 (galvanized steel)	M8	35	3.33
FIXING PLATE SURFACE WITH THREADED BAR				
AV 01 031	A 35 / B	M8	12 to 50	2.93
AV 01 032	A 45 / B	M8	20 to 85	3.74
NEOPRENO FLOOR FIXING ANTIVIBRATOR				
AV 02 546	VC NRM-300	M10	100-300	16.68
AV 02 547	VC NRM-500	M12	400-500	27.53
AV 02 548	VC NRM-1000	M12	600-1000	41.21
LOW PROFILE SURFACE AND GREAT DIAMETER OF SUPPORT "LONG BENCH"				
• With fixing claws to the ground				
AV 01 321	B085/45	M8	15 a 45	9.15
AV 01 322	B105/45	M10	25 a 75	11.78
AV 01 323	B105/60	M10	50 a 160	12.21
AV 01 324	B155/60	M14	90 a 300	24.45
AV 01 325	B205/45	M18	150 a 500	39.00

RUBBER PADS

Part No.	Item	Load Kg	€
PLATE OF RUBBER/CORK/RUBBER (22 mm.)			
AV 01 231	50 x 50 x 22	75	1.32
AV 01 232	75 x 75 x 22	175	3.12
AV 01 233	100 x 100 x 22	315	4.88
AV 01 234	150 x 150 x 22	700	10.45
AV 01 237	457 x 457 x 22	6000	97.50
RUBBER PLATES FOR CUTTING			
AV 01 201	300 x 300 x 8	1000	11.67
AV 01 203	400 x 400 x 12	2000	19.14
AV 01 204	50 x 50 x 12	31	1.13
AV 01 205	75 x 75 x 12	70	1.65
AV 01 206	100 x 100 x 12	125	2.10
AV 01 207	150 x 150 x 12	280	5.93

AV ANTIVIBRATION RUBBER



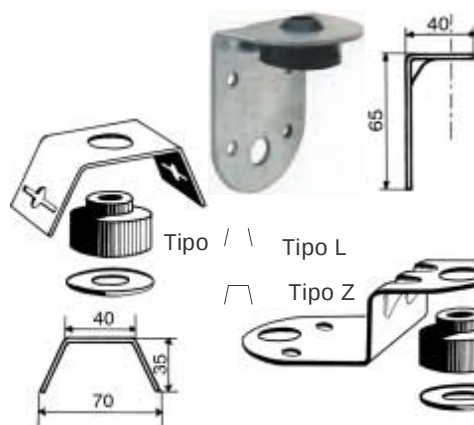
Part No.	Item	Load Kg	€
ANTIVIBRATION RUBBER			
AV 01 213	50 x 50 x 15	70 to 150	2.70
AV 01 214	50 x 50 x 20	100 to 250	3.38
AV 01 215	80 x 80 x 25	250 to 500	5.07
AV 01 216	80 x 80 x 35	300 to 600	6.42
AV 01 218	100 x 100 x 60	1.000 to 2.700	11.55
ANTIVIBRATION FOR FUN			
AV 01 099	Ø 5 mm step		0.48
AV 01 100	Ø 8 mm step		0.90
ANTIVIBRATOR FOR CHANNEL RAIL			
• With internal metal washer			
AV 01 041	Antivibrator M8	55	1.25
AV 01 042	Antivibrator M10	55	2.05



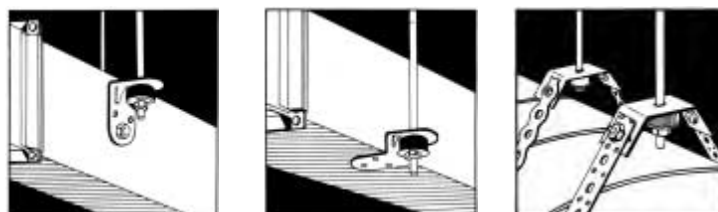
CEILING RUBBER SUPPORTS

Part No.	Item	Load Kg	€
SUSPENSION BY SLIDE«TVA»			
AV 01 016	TVA 40	8 to 25	6.10
AV 01 017	TVA 60	18 to 50	6.55
AV 01 015	TVA 75	25 to 75	6.98
RUBBER HANGER ANTIVIBRATOR			
AV 02 541	VC RH-B Thread Ø10	100-400	24.75
AV 02 542	VC RH-C Thread Ø12	500-750	45.25
VERTICALLY ADJUSTABLE SUSPENSION			
• It allows to regulate 25 mm			
• Thread M10			
AV 01 019	RDAS - 60	20 to 60	12.15

PIPES-APPLIANCES SUSPENSION



Part No.	Item	€
• With rubber antivibrator and washer		
AV 01 045	Support type L "BRA-L"	1.62
AV 01 046	Support type Z "BRA-Z"	1.62
AV 01 047	Support type "BRA- / \ "	1.85



BOLTS AND ANTIVIBRATING ACCESSORIES



Part No.	Item	Units/bag	€
GALVANIZED STEEL NUT			
AI 21 105	M 6	100	2.70/bag
AI 21 106	M 8	100	4.32/bag
AI 21 108	M 10		0.12
AI 21 111	M 12		0.15
GALVANIZED STEEL WASHER			
AI 21 034	M 8	100	4.05/bag
AI 21 035	M 10		0.08
GALVANIZED NOTCHED WASHER			
AV 01 057	M 8 notched		0.08
AV 01 058	M 10 notched		0.12

AV METAL ANTIVIBRATORS AND SHOCK ABSORBERS

Part No.	Item	Load Kgr.	€
GROUND SUBJECTION			
AV 02 002	M - 25	10 to 25	7.35
AV 02 003	M - 50	20 to 50	7.80
AV 02 004	M - 75	30 to 75	9.15
AV 02 005	M - 100	45 to 110	11.52
AV 02 006	M - 150	60 to 150	23.32
AV 02 007	M - 250	120 to 250	29.06
AV 02 008	M - 350	150 to 350	30.78
BED SUBJECTION			
AV 02 021	M - 25 - M	10 to 25	10.05
AV 02 022	M - 50 - M	20 to 50	10.28
AV 02 023	M - 75 - M	30 to 75	11.48
AV 02 024	M -100 - M	45 to 110	12.24
AV 02 025	M -150 - M	60 to 150	25.26
AV 02 026	M -250 - M	120 to 250	31.13
AV 02 027	M -350 - M	150 to 350	39.41
DOUBLE BED			
AV 02 031	AM - 25 - R	10 to 25	12.20
AV 02 032	AM - 50 - R	20 to 50	13.38
AV 02 033	AM - 75 - R	30 to 75	14.10
AV 02 034	AM -100- R	45 to 110	16.28
AV 02 035	AM -150- R	60 to 150	27.30
AV 02 036	AM -250- R	120 to 250	36.09
AV 02 037	AM -350- R	150 to 350	42.72
DOUBLE BED MORE THAN ONE SPRING			
AV 02 041	2M -300	150 to 300	61.68
AV 02 043	2M -500	250 to 500	63.62
AV 02 044	2M -700	300 to 700	76.05
AV 02 051	3M -450	200 to 450	88.13
AV 02 052	3M -750	300 to 750	94.80
AV 02 053	3M -1050	400 to 1050	112.25
AV 02 055	4M -1000	450 to 1000	113.91
AV 02 056	4M -1400	600 to 1400	119.25
AV 02 061	6M -1500	700 to 1500	161.65
AV 02 062	6M -2100	900 to 2100	177.00
CEILING SUBJECTION			
AV 02 102	TM - 25	10 to 25	11.19
AV 02 103	TM - 50	20 to 50	12.17
AV 02 104	TM - 75	30 to 75	14.01
AV 02 105	TM -100	45 to 100	14.25
AV 02 106	TM -150	60 to 150	36.85
AV 02 107	TM -250	120 to 250	45.60
AV 02 108	TM -350	150 to 350	47.70
SUPPORT/MACHINE SUBJECTION WITH THREADED BAR			
AV 02 110	RM - 10	2 to 10	5.25
AV 02 111	RM - 20	7 to 20	5.33
AV 02 112	RM - 30	9 to 30	5.40
AV 02 113	RM - 40	12 to 40	5.63
AV 02 114	RM - 50	50	5.73
CEILING SUBJECTION WITH THREADED BAR			
AV 02 121	TV 10	2 to 10	9.75
AV 02 122	TV 20	9 to 30	9.82
AV 02 123	TV 30	12 to 40	9.90
AV 02 124	TV 40	18 to 50	9.98

02 SHOCK-ABSORBERS



SMB



VSH

Part No.	Item	Thread	Load Kg/cm	€
METAL ANTIVIBRATOR				
Specially designed to absorb the brusque movement during the machine starting, which enlarges the unit's life.				
AV 02 501	VC SMB-A-25	M10	10-25	23.40
AV 02 502	VC SMB -A-50	M10	25-50	23.40
AV 02 503	VC SMB -A-75	M10	50-75	24.72
AV 02 504	VC SMB -A-100	M10	75-100	24.72
AV 02 505	VC SMB -A-150	M12	100-150	41.21
AV 02 506	VC SMB -A-200	M12	150-200	44.00
AV 02 507	VC SMB -A-300	M12	200-300	46.64
AV 02 508	VC SMB -A-400	M12	300-400	49.44
AV 02 509	VC SMB -A-500	M16	400-500	75.48
AV 02 510	VC SMB -A-600	M16	500-600	79.59
AV 02 511	VC SMB -A-750	M16	600-750	83.87
AV 02 512	VC SMB -A-1000	M16	750-1000	87.84
SPRING HANGER METALLIC ANTIVIBRATOR				
Specially designed for working in places were the verticality between the suspension point and the hanging element is not possible.				
AV 02 532	VC VSH-25	M8	10-25	20.60
AV 02 533	VC VSH-50	M8	25-50	20.60
AV 02 534	VC VSH-75	M8	50-75	21.92
AV 02 535	VC VSH-100	M8	75-100	21.92
AV 02 536	VC VSH-150	M10	100-150	38.40
AV 02 537	VC VSH-200	M10	150-200	41.21
AV 02 538	VC VSH-300	M10	200-300	44.00
AV 02 539	VC VSH-400	M10	300-400	46.64

REFRIGERANT GAS IN REFILLING PORTABLE BOTTLE

LIGHT
EASY TO CARRY
Only 4 kg
when
LOADED



maximum security

Part No.	Item	€
GAS		
01 GF 029	Gas R22	12.00/kg
01 GF 139	Gas R407C	30.00/kg
01 GF 159	Gas R410A	33.50/kg
01 GF 059	Gas R134a	30.50/kg
01 GF 069	Gas R404A	30.00/kg
2 Kg REFILLABLE BOTTLE		
02 GF 021	•Weight 4 Kg with GAS • Connection 1/4" • Valve • 47 bar	85.50/ut
	Sold bottles ARE NOT REFUND, but exchanged for a bottle full of gas	

GF REFRIGERANT GASES FOR SPLITS



The 60kg bottles are given in free for a maximum period of 3 months. If they are not given back they will be invoiced.

**STANDARD BOTTLES:
6, 12, 25 and 60/65 Kg.**

Part No.	Item	€/kg
Gas R-134a		
01 GF 052	Bottle of 6 Kg	31.00
01 GF 058	Bottle of 12 Kg	31.00
01 GF 057	Bottle of 25 Kg	31.00
01 GF 055	Bottle of 60 Kg	29.00
Gas R-22		
01 GF 021	Bottle of 6 Kg	16.50
01 GF 060	Bottle of 12 Kg	16.50
01 GF 026	Bottle of 25 Kg	16.50
01 GF 025	Bottle of 60 Kg	14.50
Gas R-407C — replace the R-22—		
01 GF 132	Bottle of 6 Kg (content 5 Kg)	32.00
01 GF 133	Bottle of 12 Kg (content 10 Kg)	32.00
01 GF 134	Bottle of 25 Kg (content 20 Kg)	32.00
01 GF 135	Bottle of 60 Kg (content 55 Kg)	27.00
Gas R-410A		
01 GF 152	Bottle of 6 Kg (content 5 Kg)	35.00
01 GF 153	Bottle of 12 Kg (content 10 Kg)	35.00
01 GF 154	Bottle of 25 Kg (content 20 Kg)	35.00
01 GF 155	Bottle of 60 Kg (content 55 Kg)	31.00
• 47 bar can		
Gas R-404a -replace the R-502-		
01 GF 068	Bottle 6 Kg (content 4 Kg)	32.00
01 GF 067	Bottle 12 Kg (content 9 Kg)	32.00
01 GF 066	Bottle 25 Kg (content 20 Kg)	32.00
01 GF 065	Bottle 60 Kg (content 50 Kg)	27.00

Other gases: please see our Refrigerant Gas Price List.

REFRIGERANT GAS IN DISPOSABLE CANS



02 GF 105



02 GF 100



02 GF 119

Part No.	Item	€
Gas R-407C (*)		
01 GF 109	Bottle of 750 ml (connection 1/4")	72,50
Gas R-410A (*)		
01 GF 114	Bottle of 750 ml (connection 5/16")	88.50
Gas R-404A (*)		
01 GF 106	Bottle of 750 ml (connection 1/4")	75.00
(*) Bottles according to E.C.		
Note: for the removal of gas, use the suitable service valve (02 GF 100)		
ULTRAVIOLET DETECTOR GAS		
01 GF 216	Bottle R407C 750 ml U/V DYE	83.00
01 GF 217	Bottle R410A 750 ml U/V DYE	100.50
VALVE FOR 1000 g DISPOSABLE BOTTLES		
02 GF 100	Service valve 1/4" SAE square	28.28
02 GF 105	Straight ball service valve with fixing nut to portable bottle 1/4" SAE	28.20
BOTTLE COUPLING		
02 GF 119	Reducer female 5/8" to 1/4 male with joint	6.00
EMPTY CONTAINERS WITH VALVE		
02 GF 010/007	6 Kg bottle	85.00
02 GF 009/006	12 Kg bottle	95.00
02 GF 012/008	25 Kg bottle	215.05
02 GF 001/005	60/65 Kg bottle	265.50
IMPORTANT: Bottles of 2-6-12-25kg are not refund, but exchanged by refilled ones		

GF OILS FOR COOLING SYSTEMS



Part No.	Item		€
	«SUNISO» MINERAL ANTIFREEZE OILS		
	• Valid: R12, R22 (medium/low)		
03 GF 021	5 litre can	Suniso 3GS	48.40
03 GF 013	20 litre can	Suniso 3GS	193.60
	• Valid: R12, R22 (medium/high)		
03 GF 022	5 litre can	Suniso 4GS	48.40
03 GF 014	20 litre can	Suniso 4GS	193.60
	SYNTHETIC SL «SUNISO» POLYOL-ESTER ANTIFREEZE OILS		
	• Valid: R134a, R404a, R407C, 410a, etc.		
03 GF 200	4 litre can	SL 32	95.00
03 GF 201	4 litre can	SL 68	95.00
03 GF 202	4 litre can	SL 100	97.00
03 GF 203	1 litre can	SL 32	25.00
03 GF 204	1 litre can	SL 68	25.00
03 GF 205	1 litre can	SL 100	25.00

CF SPARE PARTS ACCESSORIES FOR AIR CONDITIONING

• Speed control in terms of PRESSURE



Part No.	Model	GAS	Bar	Amp.	€
	SINGLE-PHASE FAN				
04 CF 505	P215 LR 9110	R-22/404A	14 - 24	3	209.25
04 CF 503	P215 SH 9100	R-22/404A	14 - 24	4	250.00
04 CF 508	P215 ST 9100	R-22/404A	14 - 24	6	351.00
04 CF 502	P215 DP 9600	R-22/404A	14 - 24	8	490.00
04 CF 531	P215 SH 9102	R410A	22 - 42	4	250.00
04 CF 532	P215 ST 9102	R410A	22 - 42	6	351.00
04 CF 533	P215 DP 9102	R410A	22 - 42	8	490.00
04 CF 511	P215 LR 9611	R-134a	8 o 14	3	209.25
04 CF 512	P215 SH 9101	R-134a	8 o 14	4	250.00
04 CF 513	P215 ST 9101	R-134a	8 o 14	6	351.00
04 CF 514	P215 DP 9601	R-134a	8 o 14	8	490.00
	SINGLE-PHASE FAN				
	• Direct assembly 1/4" SAE female				
04 CF 541	P215 PR 9200	R-407C, R-404A, R-134a	10 - 25	3	155.00
04 CF 542	P215 PR 9202	R-410A	22 - 42	3	155.00
	THREE-PHASE FAN				
04 CF 522	P255 MM 9100	R-22	14 - 24	5	1099.00
04 CF 521	P255 MM 9601	R-134a	8 or 14	5	1099.00
04 CF 536	P255 MM 9503	R-410A	22 - 42	5	1099.00
	<i>Note: models P215 and P255 include anti-interferences filter according to the standard 89/336/EEC</i>				
	SPARE PARTS				
04 CF 523	P35 AC 9100 (Pressure transducer for P15 and P215)				245.0
04 CF 524	P35 AC 9106 (Pressure transducer for P255)				245.00

• Speed control in terms of TEMPERATURE



Part No.	Model	Scale °C	€
	SINGLE-PHASE FAN		
	• Fan of 1000W (7 Amp.) • DIN mounting • Octal base • Dimensions: 45 x 92 x 80 mm • Power supply: 220V		
CO 32 201	FOR CONDENSER UNITS FASEC 33 (without temperature sensor)	0 to 60°C	108.80
CO 35 001	FOR EVAPORATOR Temperature sensor PTC Ø6x30 PVC cable of 1.5 m.	-20 to +80°C	11.40

CF MINIATURE PRESSURE CONTROLS



Part No.	Model	Scale (bar)		€
		Open	Close	
	• With automatic rearmament • Thread 1/4" female			
04 CF 153	P100 AA-3D (1)	10.3	15.5	26.25
04 CF 155	P100 AA-5D (2)	0.7	2.8	21.00
04 CF 156	P100 AA-6D (2)	2.4	4.1	20.65
04 CF 162	P100 CA-1D (1)	27.5	20.6	21.75
04 CF 157	P100 CP-108 D (R-410A)	38	28	33.40
	• With manual rearmament			
04 CF 169	P100 DA-1D (1)	27.5	Manual rearm.	26.25
04 CF 164	P100 DA-2D (R-410A)	32.8	Manual rearm.	49.20
04 CF 165	P100 DA-72D (R-410A)	38	Manual rearm.	50.50
04 CF 166	P100 DA-75D (R-410A)	42	Manual rearm.	50.50
	(1) Wire length 1.22 m			
	(2) Connection through terminals "faston"			

FOUR-WAY VALVE FOR R-22

• JOHNSON - SANHUA



Part No.	Model	Capacity Kcal/h	Connections		€
			Suction	Compression	
04 CF 181 04 CF 182 04 CF 186 04 CF 187 04 CF 183 04 CF 185 04 CF 184	• Includes coil				
	SHF4-23	3,870	3/8"	5/16"	50.20
	SHF7-34	6,536	1/2"	3/8"	55.00
	SHF9-35	7,740	5/8"	3/8"	56.95
	SHF11-45	9,460	5/8"	1/2"	69.30
	SHF20-46	17,200	3/4"	1/2"	105.70
	SHF20-47	17,200	3/4"	1/2"	116.20
	SPARE COIL				
	Coil SHF at 220V 50/60Hz				16.45

• RANCO

EQUIVALENCES TABLE:

SANHUA JOHNSO	RANCO	AGINOMIYA	Capacity kW
SHF4	V1-306	CHV-0101	4.5
SHF7	V2-310	CHV-0201	7
SHF9	V2-310	It does not exist	9
SHF11	V3-310	CHV-0301	11
SHF20-46	V4-312	CHV-0401	20
SHF20-47	V6	CHV-0601	20

Part No.	Model		Connections		€ without coil
	Old	Present	Suction	Compression	
03 CF 901	V26-0100	V2-308060-200	1/2"	3/8"	93.00
03 CF 902	V26-0150	V2-310060-400	5/8"	3/8"	93.00
03 CF 903	V38-0321	V3-312080-800	3/4"	1/2"	115.00
03 CF 904	V30-2101	V6-312080-100	3/4"	1/2"	168.00
03 CF 911	V30-2103	V6-314080-100	7/8"	1/2"	168.00
03 CF 912	V25-2750	V10-314120-100	7/8"	3/4"	195.00
03 CF 913	V25-2762	V10-318140-100	1-1/8"	7/8"	243.00
03 CF 914	V39-0321	V12-3220T-015	1-3/8"	1-1/8"	408.00
03 CF 915	-	VH2.J0311100	1-3/4"	1-1/2"	1650.00
VALVE COILS					
03 CF 993	Coils L30-42480-100 (220V 50Hz)				27.75
03 CF 994	Coils L30-12480-100 (24V 50Hz)				31.50
03 CF 995	Coils LB-640120000				31.50

VF MUFFLERS



Part No.	Model	Connection	€
04 VF 101	CM-2203	3/8"	19.50
04 VF 102	CM-2204	1/2"	20.25
04 VF 103	CM-2205	5/8"	21.30
04 VF 104	CM-2307	7/8"	52.80
04 VF 105	CM-2311	1-1/8"	59.10
04 VF 106	CM-2413	1-3/8"	61.90
04 VF 107	CM-2415	1-5/8"	65.25

VF REFRIGERATION ❄️ ACCESSORIES



- Dryer filters
R22, R134a, R407c y R404a

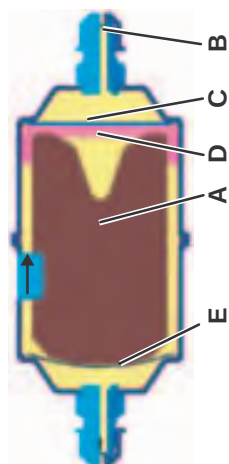


Code No.	Model	Con- nec- tion	Capacity (Kw)					€
			R22	R134	R404A	R407C	R410A	
03 VF 601 03 VF 602 03 VF 603 03 VF 604 03 VF 605 03 VF 606 03 VF 607 03 VF 608 03 VF 609 03 VF 610 03 VF 611 03 VF 612 03 VF 621 03 VF 622 03 VF 623 03 VF 624 03 VF 625 03 VF 626 03 VF 627 03 VF 628 03 VF 629 03 VF 630 03 VF 631 03 VF 632 03 VF 635 03 VF 633 03 VF 637 03 VF 639	THREADED CONNECTIONS							13.20 17.00 21.00 25.00 17.00 21.00 25.00 21.00 26.00 44.00 31.00 44.00 13.20 17.00 21.00 25.00 17.00 21.00 25.00 21.00 25.00 44.00 31.00 44.00 49.00 125.00 125.00 125.00
	WEU 032	1/4"	10.8	10.0	7.2	10.3	10.8	
	WEU 052	1/4"	10.8	10.0	7.2	10.3	10.8	
	WEU 082	1/4"	10.8	10.0	7.2	10.3	10.8	
	WEU 162	1/4"	10.8	10.0	7.2	10.3	10.8	
	WEU 053	3/8"	25.8	23.9	17.3	24.5	25.8	
	WEU 083	3/8"	26.5	24.6	17.8	25.2	26.5	
	WEU 163	3/8"	26.5	24.6	17.8	25.2	26.5	
	WEU 084	1/2"	40.2	37.3	26.9	38.2	40.2	
	WEU 164	1/2"	40.2	37.3	26.9	38.2	40.2	
	WEU 304	1/2"	42.7	39.6	28.6	40.6	42.7	
	WEU 165	5/8"	55.6	51.5	37.3	52.8	55.6	
	WEU 305	5/8"	58.1	53.9	38.9	55.2	58.1	
	WELDED CONNECTIONS							
	WEU 032 S	1/4"	10.8	10.0	7.2	10.3	10.8	
	WEU 052 S	1/4"	10.8	10.0	7.2	10.3	10.8	
	WEU 082 S	1/4"	10.8	10.0	7.2	10.3	10.8	
	WEU 162 S	1/4"	10.8	10.0	7.2	10.3	10.8	
	WEU 053 S	3/8"	25.8	23.9	17.3	24.5	25.8	
	WEU 083 S	3/8"	26.5	24.6	17.8	25.2	26.5	
	WEU 163 S	3/8"	26.5	24.6	17.8	25.2	26.5	
	WEU 084 S	1/2"	40.2	37.3	26.9	38.2	40.2	
	WEU 164 S	1/2"	40.2	37.3	26.9	38.2	40.2	
	WEU 304 S	1/2"	42.7	39.6	28.6	40.6	42.7	
	WEU 165 S	5/8"	55.6	51.5	37.3	52.8	55.6	
WEU 305 S	5/8"	58.1	53.9	38.9	55.2	58.1		
WEU 307 S	7/8"	74.1	68.7	49.6	70.4	74.1		
WEU 756 S	3/4"	69.4	64.3	46.5	65.9	69.4		
WEU 757 S	7/8"	118.4	109.8	79.3	112.5	118.4		
WEU 759 S	1-1/8"	172.2	159.6	115.4	163.6	172.2		

- Bi-flow dryer filters for heat pump

Code No.	Model	Con- nec- tion	Capacity (Kw)					€
			R-22	R134a	R404a	R407C	R410A	
03 VF 651 03 VF 652 03 VF 653 03 VF 654 03 VF 655 03 VF 661 03 VF 662 03 VF 663 03 VF 664 03 VF 665	THREADED CONNECTIONS							62.50 63.50 68.50 71.50 74.50 62.50 63.50 68.50 71.50 74.50
	V2A-083	3/8"	26.5	24.6	17.8	25.2	26.5	
	V2A-084	1/2"	40.2	37.3	26.9	38.2	40.2	
	V2A-163	3/8"	26.5	24.6	17.8	25.2	26.5	
	V2A-164	1/2"	40.2	37.3	26.9	38.2	40.2	
	V2A-165	5/8"	55.6	51.5	37.3	52.8	52.8	
	WELDED CONNECTIONS							
	V2A-083S	3/8"	26.5	24.6	17.8	25.2	26.5	
	V2A-084S	1/2"	40.2	37.3	26.9	38.2	40.2	
	V2A-163S	3/8"	26.5	24.6	17.8	25.2	26.5	
V2A-164S	1/2"	40.2	37.3	26.9	38.2	40.2		
V2A-165S	5/8"	55.6	51.5	37.3	52.8	52.8		

VF DRYER FILTERS



- A Solid DCL core
- B Flared or welded joints
- C Drilled surface
- D Polyester filter.
- E Elastic part

DCL Series

Mixture of molecule Sieves and Activated Alumina.

- Used in solid core DCL.
- Recommended for use with mineral oils and alquilbencenics and compatible with HCFC, CFC and HFC refrigerants.
- Elimination of humidity and acids before the inclusion of these elements into the refrigeration system



- Dryer filters with acid prevention with solid core for R22, R134A, R404A, R410A . . .

Part No.	Type	Junction inches	Volume cm	Danfoss		€
				Worm	Welded	
03 VF 211	DCL-032/S	1/4"	50	023Z5000	—	14.90
03 VF 212				—	023Z4501	14.90
03 VF 219	DCL-033/S	3/8"	50	023Z5001	—	14.90
03 VF 220				—	023Z4504	14.90
03 VF 213	DCL-052/S	1/4"	65	023Z5002	—	16.80
03 VF 214				—	023Z4506	16.80
03 VF 221	DCL-053/S	3/8"	65	023Z5003	—	16.80
03 VF 222				—	023Z4509	16.80
03 VF 215	DCL-082/S	1/4"	100	023Z5004	—	21.00
03 VF 216				—	023Z4511	21.00
03 VF 223	DCL-083/S	3/8"	100	023Z5005	—	21.00
03 VF 224				—	023Z4514	21.00
03 VF 229	DCL-084/S	1/2"	100	023Z5006	—	21.00
03 VF 230				—	023Z4516	21.00
03 VF 217	DCL-162/S	1/4"	225	023Z5007	—	28.50
03 VF 218				—	023Z4518	28.50
03 VF 225	DCL-163/S	3/8"	225	023Z5008	—	28.50
03 VF 226				—	023Z4521	28.50
03 VF 231	DCL-164/S	1/2"	225	023Z5009	—	28.50
03 VF 232				—	023Z4523	28.50
03 VF 235	DCL-165/S	5/8"	225	023Z5010	—	28.50
03 VF 236				—	023Z4524	28.50
03 VF 227	DCL-303/S	3/8"	480	023Z0012	—	48.30
03 VF 228				—	023Z4528	48.30
03 VF 233	DCL-304/S	1/2"	480	023Z0013	—	50.90
03 VF 234				—	023Z4530	50.90
03 VF 237	DCL-305/S	5/8"	480	023Z0014	—	50.90
03 VF 238				—	023Z4531	50.90
03 VF 242	DCL-307/S	7/8"	480	—	023Z4534	50.90
03 VF 239	DCL-415/S	5/8"	705	023Z0103	—	78.90
03 VF 240				—	023Z4539	78.90
03 VF 244	DCL-417/S	7/8"	705	—	023Z4540	78.90

Mixture of molecule Sieves and Activated Alumina.

- Dryer filters (Biflow) type DCB

Part No.	Type	Junction inches	Volume cm	Danfoss		€
				Worm	Welded	
03 VF 151	DCB-162	1/4"	225	23Z1406	—	62.50
03 VF 152	DCB-163/S	3/8"	225	23Z1405	—	62.50
03 VF 153				—	23Z1467	
03 VF 154	DCB-164/S	1/2"	225	23Z1404	—	62.50
03 VF 155				—	23Z1466	
03 VF 156	DCB-165/S	5/8"	225	23Z1403	—	62.50
03 VF 157				—	23Z1465	
03 VF 158	DCB-303	3/8"	480	23Z1409	—	70.70
03 VF 159	DCB-304/S	1/2"	480	23Z1408	—	70.70
03 VF 160				—	23Z1470	70.70
03 VF 161	DCB-305/S	5/8"	480	23Z1407	—	70.70
03 VF 162				—	23Z1469	

MF ROTARY HERMETIC COMPRESSOR FOR AIR-CONDITIONER



• R22



Part No.	Model	Capacitor μF	BTU	Output (Kcal/h)	€
SINGLE-PHASE MOTOR 220 V 50Hz					
15 MF 221	RH 135 VHAT	25	7,777	1,960	326.00
15 MF 222	RH 145 VHAT	25	8,372	2,110	332.00
15 MF 223	RH 165 VHAT	25	9,603	2,420	336.00
15 MF 224	RH 174 VHAT	25	10,118	2,550	339.00
15 MF 201	RH 207 VHAT	30	12,221	3,080	356.00
15 MF 202	RH 231 VHAT	30	13,690	3,450	399.00
15 MF 225	RH 247 VHAT	35	14,600	3,610	413.00
15 MF 203	RH 277 VHAT	40	16,467	4,150	422.00
15 MF 204	PH 31 VNET	45	18,333	4,620	534.00
15 MF 205	PH 33 VPET	50	20,040	5,050	579.00
15 MF 206	PH 39 VPET	60	23,050	5,810	608.00
15 MF 231	NH 36 VLDT	50	20,435	5,150	650.00
15 MF 232	NH 38 VMDT	50	21,983	5,540	653.00
15 MF 207	NH 41 VNDT	45	24,602	6,200	656.00
15 MF 208	NH 47 VNDT	50	28,570	7,200	681.00
15 MF 209	NH 52 VNDT	60	31,982	8,062	710.00
15 MF 210	NH 56 VNDT	60	34,839	8,780	725.00
THREE-PHASE MOTOR 380 V 50Hz					
15 MF 211	NH 41 YDPT		24,800	6,250	728.00
15 MF 212	NH 47 YDET		28,570	7,200	744.00
15 MF 213	NH 52 YDET		32,220	8,120	756.00
15 MF 214	NH 56 YDET		35,117	8,850	800.00

• R407C

Part No.	Model	Capacitor μF	BTU	Output (Kcal/h)	€
SINGLE-PHASE MOTOR 220/240 V 50Hz					
15 MF 251	RE 135 VHSMT	25	7,642	1,910	390.00
15 MF 252	RE 145 VHSMT	25	8,257	2,065	398.00
15 MF 253	RE 165 VHSMT	25	9,452	2,365	404.00
15 MF 254	RE 174 VHSMT	25	9,964	2,490	407.00
15 MF 255	RE 207 VHSMT	30	12,011	3,000	419.00
15 MF 256	RE 231 VHSMT	30	13,444	3,360	467.00
15 MF 257	RE 277 VHSMT	40	16,039	4,000	497.00
15 MF 258	PE 31 VNEMT	45	18,050	4,510	627.00
15 MF 259	PE 33 VPENT	50	19,725	4,930	675.00
15 MF 260	PE 36 VPENT	55	21,260	5,315	702.00
15 MF 261	PE 39 VPENT	60	22,693	5,675	716.00
THREE-PHASE MOTOR 380/415 V 50Hz					
15 MF 271	NE 41 YDNMT	–	24,399	6,100	848.00
15 MF 272	NE 47 YDNMT	–	28,494	7,125	864.00
15 MF 273	NE 52 YDNMT	–	32,351	8,088	879.00
15 MF 274	NE 56 YDNMT	–	34,807	8,700	905.00

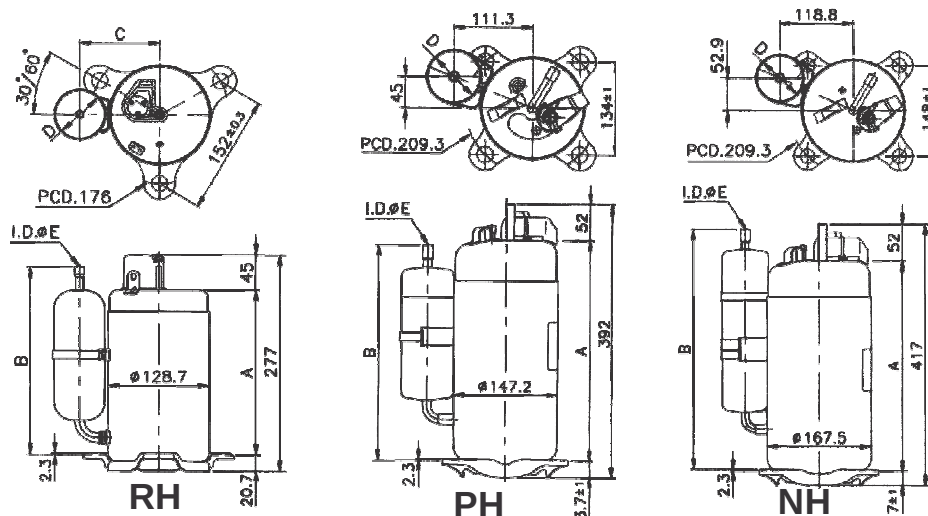
* R410 A, next models forthcoming

MF ROTARY HERMETIC COMPRESSOR FOR AIR-CONDITIONER



FEATURES

- Rotary hermetic compressor.
- Applications: window type, split type, cooling and heating air-conditioner
- Refrigerant: R-22.
- Evaporation temperature: -10°C to 15°C.
- Condensation temperature: 28°C to 65°C.
- Compression ratio
RH series: 6 max.
PH and NH series: 8 max.
- Outdoor ambient temp.:
Air conditioning 20°C to 43°C
Heat pump -10°C to 43°C



Series	RH								PH				NH					
Model	50Hz	135	145	165	174	207	231	277	31	33	39	41	41	47	47	52	52	56
		VHAT	VHAT	VHAT	VHAT	VHAT	VHAT	VHAT	VNET	VPET	VPET	VNDT	YDPT	VNDT	YDET	VNDT	YDET	YDET
Displacement	cm³	13.5	14.5	16.5	17.3	20.7	23.1	27.7	31	33	39.1	41.8	41.8	47	47	52	52	56.9
Capacity	Kcal/h	1,960	2,110	2,420	2,550	3,080	3,450	4,150	4,620	5,050	5,810	6,200	6,200	7,200	7,200	8,060	8,060	8,850
	Watt	2,279	2,454	2,812	2,966	3,582	4,012	4,826	5,373	5,873	6,757	7,211	7,211	8,374	8,374	8,780	8,780	10,293
	BTU/h	7,778	8,373	9,603	10,116	12,222	13,691	16,469	18,334	20,040	23,056	24,604	24,604	28,572	28,572	31,985	32,223	35,120
Power cons.	Watt	750	810	910	960	1,160	1,300	1,560	1,730	1,900	2,210	2,420	2,420	2,930	2,930	3,550	3,550	3,620
Weight	Kg.	13.2	13.2	13.2	13.2	14.6	14.6	15.1	22.2	22.8	22.8	28.6	28.6	29.6	29.6	30.6	30.6	30.8
Voltage 50Hz	V	220/240 II								220/240 II				220/240 II		380V III		380V III
Dimensions	A mm	211.3	211.3	211.3	211.4	246.2	246.2	256.2	291.3	316.3	316.3	341.3	326.3	341.3	341.3	341.3	341.3	341.3
	B mm	240.8	240.8	240.8	251	260.5	260.5	260.5	293.9	308.9	308.9	392.3	317.3	392.3	392.3	392.3	392.3	392.3
	C mm	101	101	101	110.5	110.5	110.5	110.5	-	-	-	-	-	-	-	-	-	-
	D mm	60.5	60.5	60.5	60.5	74	74	74	74	74	74	74	74	74	74	74	74	74
	E mm	9.6	9.6	9.6	9.6	12.7	12.7	12.7	16	16	16	16	16	16	16	19.1	19.1	19.1

Important: place the µF indicated capacitor of 450V

STARTER CONDENSERS FOR COMPRESSORS



- Faston 6.35
- Threaded outgoing M8 (VDE)

Part No.	Model	Dimensions	Voltage (V)	€
VE 01 961	1.5 MF	28 x 55	450	7.46
VE 01 962	2 MF	28 x 55	450	7.54
VE 01 963	2.5 MF	28 x 55	450	7.54
VE 01 964	3 MF	28 x 55	450	7.60
VE 01 965	4 MF	28 x 55	450	8.12
VE 01 966	5 MF	28 x 55	450	8.64
VE 01 967	6 MF	32 x 55	450	9.20
VE 01 968	8 MF	32 x 55	450	11.30
VE 01 970	10 MF	36 x 55	450	12.96
VE 01 971	12 MF	36 x 70	450	13.92
VE 01 972	14 MF	36 x 70	450	14.76
VE 01 973	16 MF	40 x 70	450	16.78
VE 01 974	18 MF	40 x 70	450	17.76
VE 01 975	20 MF	40 x 70	450	19.92
VE 01 977	25 MF	40 x 93	450	22.34
VE 01 978	30 MF	40 x 93	450	23.88
VE 01 979	35 MF	45 x 93	450	28.40
VE 01 980	40 MF	45 x 93	450	31.20
VE 01 981	45 MF	45 x 119	450	36.20
VE 01 982	50 MF	45 x 119	450	38.30
VE 01 986	55 MF	50 x 119	450	42.00
VE 01 983	60 MF	50 x 119	450	43.42
VE 01 987	65 MF	55 x 118	450	45.50
VE 01 988	70 MF	55 x 118	450	47.20
VE 01 989	75 MF	60 x 118	450	49.76
VE 01 990	80 MF	60 x 118	450	61.30
VE 01 991	90 MF	65 x 118	450	57.96
VE 01 992	100 MF	65 x 118	450	61.60

ROTARY HERMETIC COMPRESSOR FOR AIR-CONDITIONER



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**MITSUBISHI
ELECTRIC**

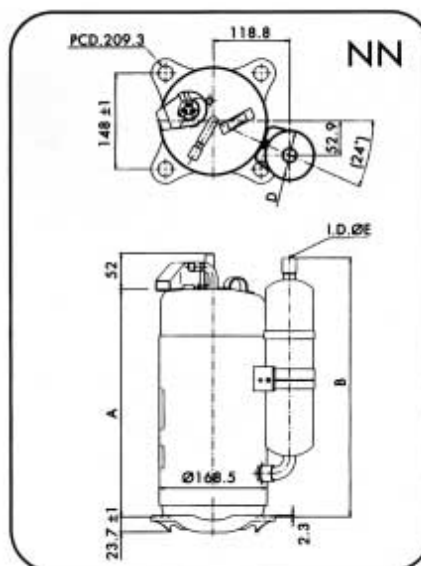
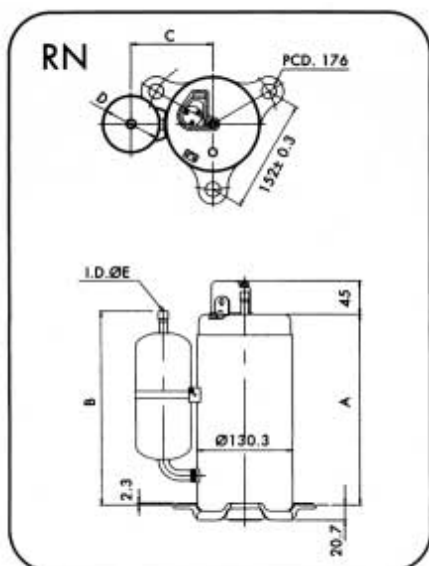
• R-410A



Part No.	Model	Capacitor μF	BTU	Output (Kcal/h)	€
SINGLE-PHASE MOTOR 220 V II 50Hz					
15 MF 101	RN092VHSMT	20	7,643	1,926	354.00
15 MF 103	RN099VHSMT	25	8,155	2,055	359.00
15 MF 104	RN104VHSMT	25	8,564	2,159	365.00
15 MF 107	RN125VHSMT	25	10407	2,623	414.30
15 MF 109	RN135VHSMT	30	11,225	2,829	425.50
15 MF 111	RN145VHSMT	30	12,181	3,070	436.50
15 MF 113	RN165VHSMT	30	13,887	3,500	457.50
15 MF 115	RN196VHSMT	40	16,378	4,128	458.50
15 MF 116	RN220VHSMT	40	18,700	4,713	475.00
15 MF 118	NN23VBAMT	50	19,790	4,988	755.00
15 MF 120	NN27VBAMT	55	22,929	5,779	779.00
15 MF 121	NN29VAAMT	55	25,249	6,364	790.00
15 MF 123	NN33VAAMT	55	28,968	7,301	813.00
15 MF 124	NN37VAAMT	60	32,073	8,084	824.00
15 MF 125	NN40VAAMT	60	34,802	8,772	835.00

Technical features:

Model	Input		Nominal input		Capacitor μF/VAC	Weight Kg	Oil CC.	Dimensions (mm)				
	Watts	Amp.	HP	kW				A	B	C	D	E
RN092VHSMT	770	3.6	0.80	0.60	20/370	13.6	300	213.1	243.8	101.0	60.5	9.6
RN099VHSMT	820	3.8	0.87	0.65	25/370	13.6	300	213.1	243.8	101.0	60.5	9.6
RN104VHSMT	865	4.0	0.94	0.70	25/370	13.6	300	213.1	243.8	101.0	60.5	9.6
RN125VHSMT	1,050	4.9	1.07	0.80	25/370	13.6	300	213.1	243.8	101.0	60.5	9.6
RN135VHSMT	1,120	5.2	1.21	0.90	30/370	15.7	520	257.5	260.5	110.5	74.0	12.7
RN145VHSMT	1,220	5.8	1.34	1.00	30/370	15.7	520	257.5	260.5	110.5	74.0	12.7
RN165VHSMT	1,410	6.6	1.47	1.10	30/400	15.7	520	257.5	260.5	110.5	74.0	12.7
RN196VHSMT	1,680	7.9	1.74	1.30	40/370	15.7	520	257.5	260.5	110.5	74.0	12.7
NN23VBAMT	1,950	9.2	2.01	1.50	50/400	29.2	1,200	327.8	318.6	—	74.0	16.0
NN27VBAMT	2,260	10.4	2.28	1.70	55/400	30.4	1,200	327.8	318.6	—	74.0	16.0
NN29VAAMT	2,440	11.2	2.55	1.90	55/400	30.4	1,200	342.8	393.6	—	74.0	16.0
NN33VAAMT	2,800	13.1	2.95	2.20	55/420	31.9	1,300	342.8	393.6	—	74.0	16.0
NN37VAAMT	3,130	14.7	3.35	2.50	60/420	31.9	1,300	342.8	393.6	—	74.0	19.1



19 SCROLL HERMETIC COMPRESSOR FOR AIR-CONDITIONER



• For R-22

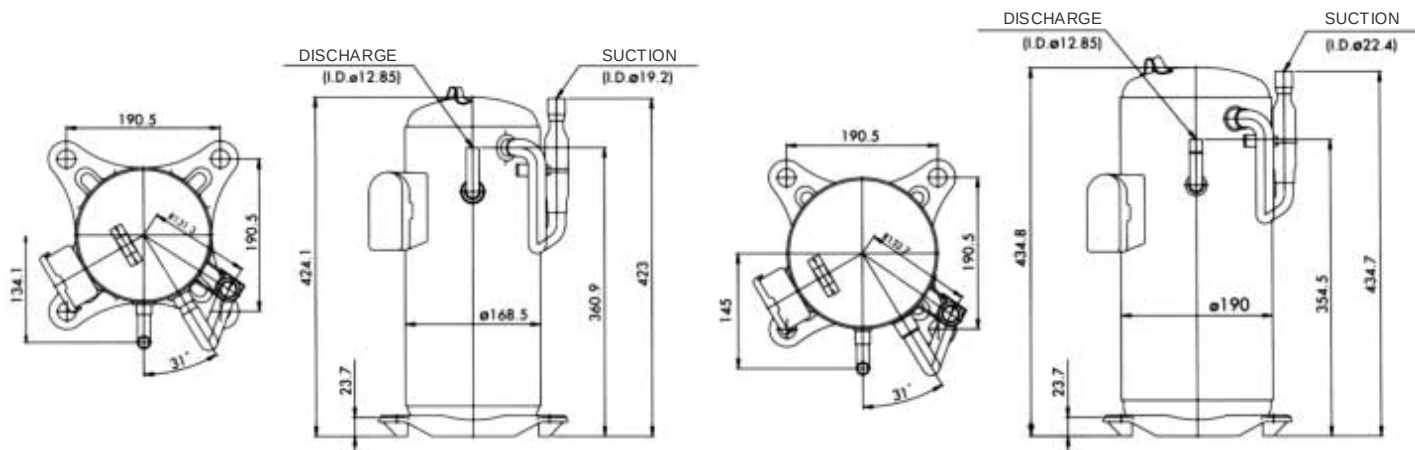


Part No.	Model	BTU/h	Kcal/h	W	€
THREE-PHASE 380-415V/50-60 Hz					
15 MF 141	AH-60 YBFT	38,180	9,620	11,190	1698.00
15 MF 142	BH-67 YFAT	42,550	10,730	12,470	1839.00
15 MF 143	BH-82 YFAT	52,230	13,420	15,600	2058.00
15 MF 144	BH-96 YFAT	63,400	15,980	18,580	2114.00
MOTOR FOR INVERTER 3 PHASES WITH CHANGING FREQUENCY					
15 MF 145	AHV-60F*	45,040 (87,000)	11,350 (21,930)	13,200 (25,500)	1972.00

• For R-410A

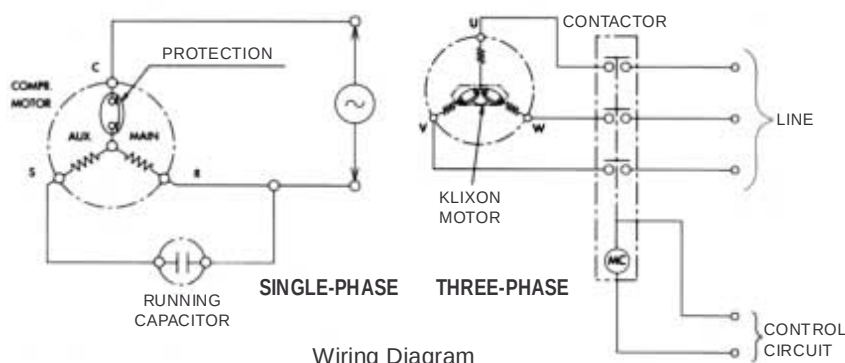
Part No.	Model	BTU/h	Kcal/h	W	€
SINGLE-PHASE 220V/50 Hz					
15 MF 146	AN-30-VBFMT	25,930	6,540	7,600	1533.00
15 MF 147	AN-36-VBFMT	37,530	9,460	11,000	1605.00
THREE-PHASE 380-415/460V - 50/60 Hz					
15 MF 148	BN-52YFAMT	47,430	11,960	13,900	2027.00
15 MF 149	BN-62YFAMT	56,640	14,280	16,600	2108.00
MOTOR FOR INVERTER 3 PH. WITH CHANGING FREQ. (20-120 Hz)					
15 MF 150	ANB-33F*	36,870 (73,730)	9,290 (18,580)	10,800 (21,600)	2080.00

* The inverter models can be replaced only by the same model.



Possible equivalences between Scroll compressors:

Model Copeland	Mitsubishi
R22	
ZR-40 TFD/TWD	AH-60
ZR-48 TFD/TWD	BH-67
ZR-61 TFD/TWD	BH-82
ZR-81 TFD/TWD	BH-96
R410A	
ZP-32 PFJ	AN 30V
ZP-41 PFJ	ANY-36V
ZP-54 TFD/TWD	BN-52Y
ZP-67 TFD/TWD	BN-62Y



MF HERMETIC COMPRESSORS



• Compressors MT for R-22, high temperature



MT-36, MT-40

- Range of temperature MT-18 to MT-40 from +15°C to -10°C, MT-50 to MT-160 from +15°C to -15°C with condensation temperature +55°C
- Indicated efficiency: condensation temperature +55°C

Part No.	Model	CV	Cyl. cm	Volt. (V)	CAPACITY IN WATTS				€
					+5°C	0°C	-5°C	-10°C	
14 MF 001	MT - 18	1-1/2	30	220 M	3430	2630	1980	1450	924.50
14 MF 003	MT - 22	1-3/4	37.5		4800	3760	2860	2090	985.70
14 MF 005	MT - 28	2	47.2		6700	5430	4300	3300	1062.00
14 MF 007	MT - 32	2-1/4	53		7300	5860	4610	3530	1149.00
14 MF 022	MT - 22	1-3/4	37.5	220 T	4800	3760	2860	2090	985.70
14 MF 023	MT - 22			380 T					
14 MF 024	MT - 28	2	47.2	220 T	6700	5430	4300	3300	1062.00
14 MF 025	MT - 28			380 T					
14 MF 026	MT - 32	2-1/4	53	220 T	7300	5860	4610	3530	1149.00
14 MF 027	MT - 32			380 T					
14 MF 028	MT - 36	3	60.47	220 T	8450	6890	5500	4260	1231.00
14 MF 029	MT - 36			380 T					
14 MF 030	MT - 40	3.5	67.89	220 T	9550	7740	6130	4690	1374.00
14 MF 031	MT - 40			380 T					
14 MF 032	MT - 50	4	85.64	220 T	11040	8700	6740	5120	1535.80
14 MF 033	MT - 50			380 T					
14 MF 034	MT - 64	5	107.71	220 T	14300	11480	9050	6990	1943.00
14 MF 035	MT - 64			380 T					
14 MF 036	MT - 80	6-1/2	135.78	220 T	17750	14420	11510	8990	2521.00
14 MF 037	MT - 80			380 T					
14 MF 038	MT - 100	8	171.26	220 T	21060	16750	13080	9990	3420.30
14 MF 039	MT - 100			380 T					
14 MF 040	MT - 125	10	215.44	220 T	27490	22120	17540	13670	3872.00
14 MF 041	MT - 125			380 T					
14 MF 044	MT - 160	13	271.55	220 T	34550	27770	22020	17180	4558.00
14 MF 045	MT - 160			380 T					

• Accessories



Part No.	Applications	€
"ROTALOCK" SERVICE VALVES (*)		
01 VF 602	V06 for MT/MTZ-18/22/28. Asp. 1/2	22.10
01 VF 601	V01 for MT/MTZ-18/22/28. Comp. 3/8	22.40
01 VF 603	V09 for MT/MTZ-32/LT-22, MT/MTZ-36/LT-28, MT/MTZ-40. Asp. 5/8	24.10
01 VF 602	V06 for MT/MTZ-32/LT-22, MT/MTZ-36/LT-28, MT/MTZ-40. Comp 1/2	22.10
01 VF 605	V07 for MT/MTZ-50/LT-40, MT/MTZ-64/LT-44. Asp. 7/8	36.00
01 VF 604	V04 for MT/MTZ-50/LT-40, MT/MTZ-64/LT-44. Comp. 3/4	33.10
01 VF 607	V02 for MT/MTZ-80, LTZ-50-88-100, MT/MTZ-100/125/160. Asp. 1-1/8	49.20
01 VF 609	V05 for MT/MTZ-100, 125, 160. Comp. 7/8	36.00
01 VF 604	V04 for MT/MTZ-80, LTZ-50-88-100, MT/MTZ-100/125/160. Comp. 3/4	33.10
JOINTS FOR ROTALOCK		
01 VF 621	Joint of 1"	1.65
01 VF 622	Joint of 1-1/4"	1.98
01 VF 623	Joint of 1-3/4"	2.40
01 VF 624	Joint of 2-1/4"	2.70
ELBOWS FOR WELDING		
14 MF 787	C07 (models to be replaced)	37.50
14 MF 788	C04 (models to be replaced)	37.50
SELF-ADJUSTABLE CRANKCASE HEATER		
14 MF 801	PTC 35 W for MT/MTZ-18 to 40/LTZ-22 to 100	49.50
14 MF 802	Kit 100W (8 cyl.)	314.50
14 MF 803	50W 230V for MT/MTZ-44-80/LTZ-40 to 44	61.50
14 MF 804	75W 230V for MT/MTZ-100-160/LTZ-50 to 100	92.90
LUBRICANTS FOR COMPRESSORS		
14 MF 851	POE 160 PZ 1 litre for MTZ with R404/R507/R407C/R134a	90.00
14 MF 852	POE 160 PZ 2 litres for MTZ with R404/R507/R407C/R134a	157.40
14 MF 853	Mineral 160 P 2 litres for MT/LT with R22/R502	54.60
14 MF 854	Mineral 160 P 5 litres for MT/LT with R22/R502	102.30
14 MF 855	160 ABM 2 litres for MT/LT with refig. transition	104.00
14 MF 856	POE 160 Z 1 litre for LTZ with R404A/R507	96.60
14 MF 857	POE 160 Z 2 litres for LTZ with R404A/R507	162.90

(*) NOTE: discounts on our range of valves available in subdivision "VF"

MF HERMETIC COMPRESSORS



• Compressors MTZ-VI for R-404A/R-507/R-134a and R-407C



Range of temperature
R134a from -15°C to
+20°C,
R404a from -25°C to
+10°C

Indicated efficiency:
condensation
temperature +55°C

Part No.	Model	CV	Cyl. cm	Voltage V	Gas	CAPACITY IN WATTS for R404a/R507 (*)				€
						+5°C	0°C	-5°C	-10°C	
14 MF 211 14 MF 212	MTZ - 18	1-1/2	30.23	220 M	R134A	2,250	1,720	1,270	890	880.50
				380 T	R404A	3,500	2,730	2,080	1,550	
					R407C	3,290	2,540	1,930	-	
14 MF 213 14 MF 214 14 MF 215	MTZ - 22	1-3/4	38.12	220 M	R134A	2,960	2,250	1,670	1,190	939.00
				380 T	R404A	4,460	3,590	2,840	2,180	
				220 T	R407C	4,290	3,290	2,500	-	
14 MF 257	MPZ - 038	1-3/4	38.12	400 T	R404A	5,720	4,670	3,770	3,000	971.50
14 MF 216 14 MF 217 14 MF 218	MTZ - 28	2	48.06	220 M	R134A	3,720	2,830	2,130	1,570	1011.00
				380 T	R404A	5,890	4,720	3,720	2,870	
				220 T	R407C	5,470	4,260	3,230	-	
14 MF 258	MPZ - 048	2	48.06	400 T	R404A	7,210	6,010	4,940	4,010	1045.50
14 MF 219 14 MF 220 14 MF 221	MTZ - 32	2-1/4	53.86	220 M	R134A	4,370	3,320	2,470	1,790	1094.00
				380 T	R404A	6,800	5,410	4,230	3,240	
				220 T	R407C	6,190	4,830	3,660	-	
14 MF 259	MPZ - 054	2-1/4	53.86	400 T	R404A	8,220	6,800	5,550	4,460	1132.00
14 MF 222 14 MF 223	MTZ - 36	3	60.47	380 T	R134A	5,380	4,250	3,300	2,510	1172.50
				220 T	R404A	7,740	6,200	4,910	3,830	
					R407C	7,170	5,690	4,400	-	
14 MF 260	MPZ - 061	3	60.47	400 T	R404A	9,020	7,530	6,200	5,030	1213.00
14 MF 224 14 MF 225	MTZ - 40	3-1/2	67.89	380 T	R134A	5,810	4,720	3,770	2,960	1309.00
				220 T	R404A	8,670	7,000	5,570	4,340	
					R407C	8,230	6,600	5,180	-	
14 MF 261	MPZ - 068	3-1/2	67.89	400 T	R404A	10,090	8,450	6,990	5,710	1354.00
14 MF 226 14 MF 227	MTZ - 50	4	85.64	380 T	R134A	7,140	5,470	4,100	2,990	1462.50
				220 T	R404A	11,340	8,930	6,930	5,290	
					R407C	10,010	7,750	5,840	-	
14 MF 228 14 MF 229	MTZ - 64	5	107.71	380 T	R134A	9,170	7,020	5,240	3,780	1850.25
				220 T	R404A	14,540	11,960	9,240	7,160	
					R407C	12,990	10,100	7,660	-	
14 MF 230 14 MF 231	MTZ - 80	6-1/2	135.78	380 T	R134A	12,130	9,480	7,250	5,380	2400.25
				220 T	R404A	18,390	14,910	11,890	9,280	
					R407C	16,600	13,110	10,100	-	
14 MF 232 14 MF 233	MTZ - 100	8	171.26	380 T	R134A	13,780	10,630	8,020	5,880	3257.50
				220 T	R404A	21,750	17,290	13,520	10,390	
					R407C	19,680	15,360	11,740	-	
14 MF 234 14 MF 235	MTZ - 125	10	215.44	380 T	R134A	16,940	13,080	9,840	7,150	3687.50
				220 T	R404A	27,690	22,250	17,640	13,760	
					R407C	26,160	20,690	16,050	-	
14 MF 236 14 MF 237	MTZ - 160	13	271.55	380 T	R134A	23,140	18,230	14,120	10,720	4341.00
				220 T	R404A	35,440	28,650	22,860	17,970	
					R407C	38,650	26,910	21,150	-	
14 MF 251 14 MF 252	MTZ - 200	17	342.50	380 T	R134A	27,300	21,060	15,890	11,650	7244.50
				220 T	R404A	43,070	34,230	26,770	20,560	
14 MF 253 14 MF 254	MTZ - 250	20	430.88	380 T	R134A	33,530	25,880	19,480	14,160	7973.50
				220 T	R404A	54,810	44,050	34,920	27,240	
14 MF 255 14 MF 256	MTZ - 320	26	543.10	380 T	R134A	45,790	36,070	27,940	21,200	8907.50
				220 T	R404A	70,190	56,740	45,580	35,590	

(*) R134a, R407c capacity, consult

• Compressors LTZ for R-404A, low temperature

Part No.	Model	CV	Cyl. cm	Voltage V	CAPACITY IN WATTS for R404A			€
					-20°C	-25°C	-35°C	
14 MF 262	NTZ-048	1-3/4	48.05	400 T	2,006	1,493	712	1328.00
14 MF 263	NTZ-068	2	67.87	400 T	3,057	2,255	1,079	1502.00
14 MF 264	NTZ-096	3	96.14	400 T	4,047	2,955	1,417	1816.00
14 MF 265	NTZ-108	4	107.47	400 T	4,827	3,586	1,720	1830.00
14 MF 266	NTZ-136	5	135.74	400 T	6,053	4,566	2,359	2325.50
14 MF 267	NTZ-215	7-1/2	215.4	400 T	9,363	7,054	3,530	3999.00
14 MF 268	NTZ-271	10	271.48	400 T	12,728	9,710	5,143	4466.50

MF HERMETIC COMPRESSORS «SCROLL PERFORMER»

Maneurop®

• Compressores SM for R22 - High Temperature



Part No.	Model	CV	Cyl. cm	Voltage V	CAPACITY IN WATTS			€
					+5°C	0°C	-5°C	
14 MF 901	SM090	7,5	120,5	400T	19,900	16,400	13,300	3632.50
14 MF 902	SM110	8	144,2	400T	23,800	19,600	15,900	4137.00
14 MF 903	SM120	10	166,6	400T	27,600	22,800	18,600	4320.00
14 MF 905	SM160	13	216,6	400T	35,800	29,600	24,100	5269.00
14 MF 906	SM185	15	249,9	400T	41,800	34,600	28,400	5989.00

Calculated performance: superheat 11K, subcooling 8,3K and condensation temperature 55°C

• Compressors SZ for R134A/R407



Part No.	Model	CV	Cyl. cm	Voltage V	CAPACITY IN WATTS				€
					Gas	+5°C	0°C	-5°C	
14 MF 930	SZ090	7,5	120,5	400T	R134A	13,200	10,700	8,500	3632.50
					R407C	18,500	15,000	12,000	
14 MF 931	SZ110	8	144,2	400T	R134A	16,000	13,000	10,400	4137.00
					R407C	22,300	18,100	14,500	
14 MF 932	SZ120	10	166,6	400T	R134A	18,400	14,900	11,900	4320.00
					R407C	26,100	21,200	17,000	
14 MF 933	SZ160	13	216,6	400T	R134A	24,500	19,800	15,800	5269.00
					R407C	35,200	28,800	23,200	
14 MF 934	SZ185	15	249,9	400T	R134A	27,700	22,400	17,800	5989.00
					R407C	39,200	32,000	25,700	

Calculated performance: superheat 11K, subcooling 8,3K and condensation temperature 55°C

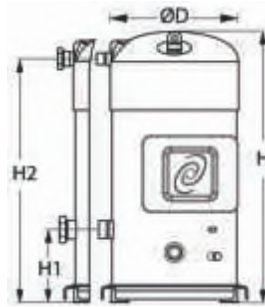
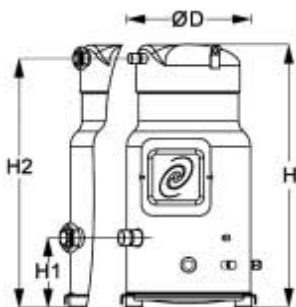
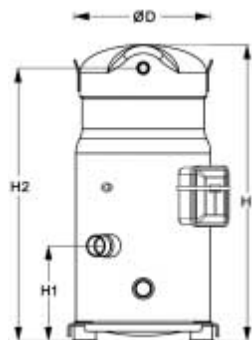
TECHNICAL CHARACTERISTICS:

Model	Aspiration	Discharge	I máx. (A)	Oil charge (liters)
SM/SZ 090	1-1/8"	3/4"	17	3.3
SM/SZ 110	1-3/8"	7/8"	20	3.3
SM/SZ 120	1-3/8"	7/8"	29	3.3
SM/SZ 160	1-5/8"	1-1/8"	29	4.0
SM/SZ 185	1-5/8"	1-1/8"	35	6.2

TANDEM COMPRESSORS:

Model	Composition
SM/SZ 320	S160+S160
SM/SZ 370	S185+S185

COMPRESSOR DIMENSIONS:



	D	H	H1	H2
S084/S090/S100	254	508	142	465
S110/S120	254	558	178	515
S148/S161	266	591	180	556

	D	H	H1	H2
S115/S125	254	586	180	538
S160	266	631	180	596
S175/S185	316	678	180	641

	D	H	H1	H2
S240	344	729	196	656
S300	344	740	196	667
S380	344	770	203	695

HERMETIC COMPRESSORS



Bristol
Compressors

• «STANDARD and ULTRA-QUIET» Series R-22

Part No.	Model	CV	Cylind. cm	Capacity in Watts				Voltage	€
				+5°C	0°C	-5°C	-10°C		
16 MF 001 16 MF 002 16 MF 010 16 MF 005 16 MF 006 16 MF 007 16 MF 008 16 MF 009 16 MF 012 16 MF 013 16 MF 014 16 MF 021 16 MF 022 16 MF 023 16 MF 024 16 MF 025 16 MF 026 16 MF 027 16 MF 031 16 MF 032 16 MF 033 16 MF 035 16 MF 037 16 MF 041 16 MF 045 16 MF 046 16 MF 047 16 MF 051 16 MF 055 16 MF 056 16 MF 057 16 MF 058 16 MF 201 16 MF 202 16 MF 203 16 MF 204 16 MF 205 16 MF 206 16 MF 207 16 MF 208 16 MF 209 16 MF 210 16 MF 211 16 MF 212 16 MF 213 16 MF 214 16 MF 215 16 MF 216 16 MF 217 16 MF 218 16 MF 219 16 MF 220 16 MF 221	SINGLE-PHASE 220/240V 50Hz								757.50 757.50 798.50 843,50 902.50 956.00 988.50 1027.00 1047.50 1108.50 1181.00 <

Measured efficiency: condensation temperature +55°C; Undercooling: 8.33°C; Overheating: 11.11°C; For other voltages, please contact us. Prices do not include electrical sets, connectors nor service valves.

19 HERMETIC COMPRESSORS

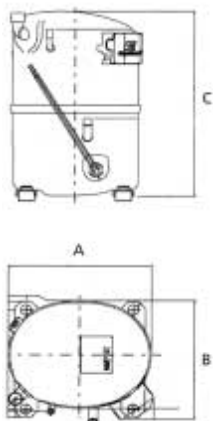
DWM COPELAND

• CR, QR series for R-22



Old models	New models
CRAQ-0150	CRAQ-0150-550
CRAQ-0150	CR18KQ-28SBM
CRDQ-0200	CRDQ-0200-550
CRDQ-0200	CR24KQ-28SBM
CREQ-0225	CREQ-0225-550
CREQ-0225	CR28KQ-28SBM
CRGQ-0250	CR33KQ-28SBM
CRJQ-0300	CR37KQ-28SBM
CRKQ-0325	CR41KQ-28SBM
CRLQ-0350	CR47KQ-28SBM
CRMQ-0400	CR53KQ-28SBM
CRNQ-0500	CRNQ-0500-550

Old models	Replacement
QR-85-K1	ZR-81-KC
QR-90-K1	ZR-90-K3
QR-11-M1	ZR-11-M3
QR-12-M1	ZR-12-M3



Part No.	Model	Voltage	Movement m/h	P. abs. (Kw)	€
TUBES FOR WELDING					
19 MF 076	QR-11M1	TFD	34.3	8.49	1924.50
CR SERIES "NEW"					
19 MF 151 19 MF 152	CR18-KQ-28SBM	PFZ TFD	6.3	1.6	1483.50 1545.00
19 MF 153 19 MF 154	CR24KQ-28SBM	PFZ TFD	7.7	1.98	1515.00 1575.00
19 MF 155 19 MF 156	CR28KQ-28SBM	PFZ TFD	8.6	2.2	1545.00 1620.00
19 MF 157 19 MF 158	CR33KQ-28SBM	PFT TFD	10.5	2.67	1575.00 1635.00
19 MF 159 19 MF 160	CR37KQ-28SBM	PFT TFD	11.6	3.19	1620.00 1695.00
19 MF 161 19 MF 162	CR41KQ-28SBM	PFT TFD	12.8	3.52	1710.00 1770.00
19 MF 163 19 MF 164	CR47KQ-28SBM	PFZ TFD	14.1	3.9	2010.00 2070.00
19 MF 165	CR53KQ-28SBM	TFD	15.6	4.34	2190.00
19 MF 070	CRNQ-0500	TFD	17.7	5.02	2295.00

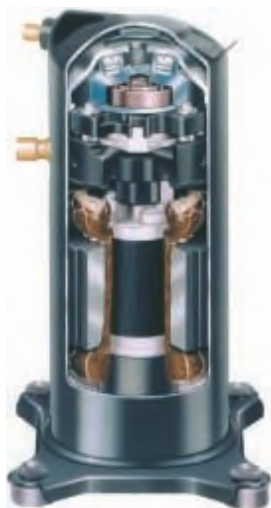
Motor type		Motor protection		Motor voltage			
					V	F	Hz
P	Single-phase motor	F	Klixon	J	220-240 265	1 1	50 60
T	Three-phase motor			C	200 208-230	3 3	50 60
		W	KRIWAN	D	380-420 460	3 3	60 50
				E	500 575	3 3	50 60
				R	220-240	3	50
				5	200-220 200-230	3 3	50 60
				7	380	3	60

Model	Dimensions			Fixing	Suction Welded	Discharge Welded
	A	B	C			
CR-18-KQ	237	235	338	190x190	5/8	3/8
CR-24-KQ	237	235	341	190x190	5/8	3/8
CR-28-KQ	237	235	334	190x190	5/8	3/8
CR-33-KQ	234	235	349	190x190	3/4	3/8
CR-37-KQ	234	235	362	190x190	3/4	3/8
CR-41-KQ	234	235	370	190x190	3/4	3/8
CR-47-KQ	255	231	377	190x190	7/8	1/2
CR-53-KQ	255	235	377	190x190	7/8	1/2
CRNQ-0500-TFD	235	255	420	190x190	7/8	1/2

MF «SCROLL» COMPRESSORS AIR CONDITIONERS

DWM COPELAND

• Use for R-22



VOLTAGE:

Compressor	Volt. +/-Hz
PFJ	220-240/1/50
TFD/TWD	380-420/3/50
TF5	200-220/3/50
TWR	220-240/3/50
TFD/TWD	460/3/60
PFJ	265/1/60

Part No.	Model	CV	Cyl. m/h	Motor type	CAPACITY IN WATTS				€
					+5°C	0°C	-5°C	-10°C	
	FOR WELDING								
19 MF 528	ZR-18-K4	1.5	4.35	PFJ	3,945	3,270	2,680	2,170	1449.00
19 MF 500	ZR-22-K3	2	5.34	PFJ	4,895	4,025	3,255	2,575	1593.00
19 MF 501				TFD					1639.50
19 MF 502	ZR-28-K3	2.25	6.83	PFJ	6,320	5,270	4,345	3,535	1685.00
19 MF 527				TFD					1715.00
19 MF 503	ZR-34-K3	2.5	8.03	PFJ	7,530	6,275	5,170	4,210	1761.00
19 MF 504				TFD					1806.00
19 MF 506	ZR-40-K3	3.25	9.44	PFJ	8,865	7,380	6,095	4,980	1943.00
19 MF 505				TFD					1881.00
19 MF 508	ZR-48-K3	4	11.93	PFJ	10,760	8,950	7,380	5,775	2141.00
19 MF 507				TFD					2064.00
19 MF 509	ZR-61-KC	5	14.4	TFD	13,130	10,850	8,810	7,040	2384.00
19 MF 510				TF5					2520.00
19 MF 511	ZR-72-KC	6	17.0	TFD	15,980	13,400	11,110	9,090	2717.00
19 MF 512				TF5					2885.00
19 MF 530	ZR-81-KC	7	19.2	TFD	18,060	15,020	12,320	9,990	3050.00
19 MF 531				TF5					3233.00
	TO THREAD								
19 MF 513	ZR-90-K3	7.5	20.9	TWD	19,560	16,370	13,610	11,180	4038.00
19 MF 514				TWR					4326.00
19 MF 515	ZR-11-M3	9	24.9	TWD	23,840	19,920	16,470	13,430	5039.00
19 MF 516				TWR					5403.00
19 MF 517	ZR-12-M3	10	28.8	TWD	27,620	23,080	19,090	15,560	5495.00
19 MF 518				TWR					5888.00
19 MF 519	ZR-16-M3	13	35.6	TWD	34,250	28,620	23,680	19,310	6237.00
19 MF 520				TWR					6694.00
19 MF 529	ZR-19-M3	15	42.1	TWD	40,580	33,950	28,160	23,140	6783.00
19 MF 532				TWR					7286.00
19 MF 538	ZR-250-KC	20	55.3	TWD	54,000	45,000	37,000	29,600	10517.00
	ACCESSORIES								
	• Single-Phase equipment (Run Capacitor)								82.50
19 MF 521	Mod. ZR 18/22 K3								82.50
19 MF 523	Mod. ZR 28 K3								88.50
19 MF 522	Mod. ZR 34 K3								91.50
19 MF 524	Mod. ZR 40 K3								99.00
19 MF 533	Mod. ZR 48 K3								
	• Crank Case Resistance								
19 MF 526	Mod. ZR 18 (40 W) at 240V II								75.00
19 MF 534	Mod. ZR 22/81 (59/70 W) at 240V II								78.00
19 MF 525	Mod. ZR 90/19 (45/70 W) at 240V II								87.00
19 MF 535	Mod. ZR 250 (120 W) at 240V II								150.00

Condensation temperature: +50°C
Intake gas temperature: +25°C

IMPORTANT: For CR and QR models, please see our Refrigeration and Machinery Price List.

MF HERMETIC COMPRESSORS «R22»



• Air conditioning and Heat pump

Part No.	Model	CV	Ref. Comp.	Cyl. cm	Expan.	Capacity in Watts				Motor	€
						+10°C	+5°C	0°C	-5°C		
12 MF 112 12 MF 102 12 MF 113 12 MF 103 12 MF 114 12 MF 104 12 MF 115 12 MF 105 12 MF 116 12 MF 106	SINGLE-PHASE 220V 50Hz										343.50 362.00 347.00 365.80 377.80 398.00 400.75 421.50 431.20 434.70
	S19UN	7/8	F	18.10	C	2,546	2,058	1,623	1,242	PSC CSR	
	S22UN	1	F	21.77	C	2,925	2,392	1,908	1,473	PSC CSR	
	S26UN	1-3/8	F	26.16	C	3,787	3,121	2,526	2,002	PSC CSR	
	S33UN	1-3/4	F	32.71	C	4,710	3,894	3,171	2,540	PSC CSR	
	S34UN	1-7/8	F	34.42	C	4,997	4,151	3,408	2,766	PSC CSR	

HERMETIC COMPRESSORS «R22»



• Air conditioning and Heat pump

Part No.	Model	CV	Ref. Comp.	Cyl. m	Motor	Capacity in Watts				€	
						0°C	+5°C	+10°C	+15°C		
11 MF 102 11 MF 103 11 MF 105 11 MF 106 11 MF 107 11 MF 108 11 MF 109 11 MF 110 11 MF 111 11 MF 112 11 MF 113 11 MF 114 11 MF 115 11 MF 116 11 MF 117 11 MF 118 11 MF 121 11 MF 122 11 MF 123	SINGLE-PHASE 220V 50Hz									306.50	
	NE-7213-E	½	F	12.12	I-220	1,346	1,683	2,115	2,644		
	NE-7215-E	5/8	F	13.54	I-220	1,487	1,848	2,289	2,811	310.60	
	T-7220-F	¾	F	17.40	PSC	1,835	2,391	2,995	3,646	366.20	
					CSR					417.30	
	T-7223-F	7/8	F	20.40	PSC	2,277	2,854	3,511	4,247	383.20	
					CSR					433.70	
	J-7225-F	1	F	21.70	PSC	2,360	3,027	3,842	4,804	447.00	
					CSR					496.70	
	J-7228-F	1-1/4	F	23.50	PSC	2,720	3,501	4,430	5,507	439.80	
					CSR					486.20	
	J-7231-F	1-1/4	F	26.20	PSC	3,189	3,878	4,649	5,502	462.30	
					CSR					507.60	
	J-7238-E	1-1/2	F	32.70	PSC	3,894	4,736	5,769	6,992	474.90	
					CSR					522.00	
	J-7240-F	1-5/8	F	34.37	PSC	4,232	5,199	6,282	7,481	600.70	
					CSR					546.20	
	THREE-PHASE 380V 50Hz										
	J-7231-P	1-1/4	F	26.20	3 PHASE	3,189	3,878	4,649	5,502	544.80	
	J-7238-P	1-1/2	F	32.70	3 PHASE	3,894	4,736	5,769	6,992	565.60	
J-7240-P	1-5/8	F	34.37	3 PHASE	4,232	5,199	6,282	7,481	572.10		

Efficiency obtained under a room temperature of +54°C.
Other models R134a, R404C, etc.: please see our Refrigeration Catalogue

MA TUBE CUTTING TOOLS



94082

• Short pincer for capillary tube

Part No.	Item	€
01 HF 001	Mod. 94082 Scissors type with adjusted stop	12.30



Hose
cutter

• Hose cutter

Part No.	Item	€
MA 01 031	Hose cutter guillotine type	6.30

• Tube cutting tools for Refrigeration



Part No.	Item	€
01 HF 301 01 HF 010	MINIATURE TUBE CUTTER	
	• In reduced size, ideal for working in areas with a difficult access • For tubes from 1/8" to 5/8" (from 4 to 15 mm.) Mod. RR-127	7.90
	Mod. TC-1050 "Imperial"	24.90
01 HF 002	MINI TUBE CUTTER	
	Mod. RR-174 for tubes from 1/4" to 1-1/8" (from 6 to 28 mm.)	14.50
	SMALL TUBE CUTTER	
01 HF 004	Mod. 227-FA "Imperial" Small tube cutter for tubes from 1/8" to 3/4" (from 4 to 19 mm.)	31.50
01 HF 303 01 HF 304	TUBE CUTTER WITH REAMER	
	Mod. RR-274 For tubes from 1/8" to 1-1/8" (from 4 to 28 mm.) and reamer	16.70
	Mod. RR-312 For tubes from 1/4" to 1-5/8" (from 7 to 41 mm.) and reamer	25.80
01 HF 308 01 HF 008	RESTRICTOR PIPE CUTTER	
	• Restrictor from 1/8" to 1-1/8" (from 3 to 28 mm.) with cutting and boring wheel Mod. RR-374	18.00
	Mod. TC-1020 "Imperial"	65.00
01 HF 005 01 HF 006	HEAVY DUTY TUBE CUTTER	
	Mod. TC-1000 from 1/8" to 1-1/8" (3 to 28 mm.) with spare cutting wheel and reamer "Imperial"	42.20
	Mod. 312-FC from 1/4" to 1-5/8" (from 6 to 41 mm.) with spare cutting wheel and reamer "Imperial"	67.50
01 HF 003	TUBE CUTTER WITH QUICK ADJUSTMENT	
	Mod. 206-FB with retractile reamer from 3/8" to 2-5/8" (from 10 to 66 mm.) "Imperial"	112.50
01 HF 021	COPPER TUBE CUTTER WITH RATCHET SYSTEM	
	Mod. RATCHET from 1/4" to 7/8" (6 to 23 mm)	29.50
	SPARE BLADE FOR TUBE CUTTER "IMPERIAL"	
01 HF 101	For models: 127-FB, 227-FA, TC-1050	3.35
01 HF 102	For models: 174-F, 312-FC, TC-1000 and TC 1020	6.95
01 HF 104	For models: 206-FB	10.55

• Tube cutting tool for Refrigeration



RR 206

Part No.	Item	€
01 HF 310	BIG CAPACITY TUBE CUTTING	32.30
	Mod. RR 206 for tubes from 1/5" to 2-1/2"	

• Ergonomic tube cutting tool "REX"



Part No.	Item	€
01 HF 412	• Tube cutting COPPER- STAINLESS STEEL • Equipped with protection	80.50
	RB 30 model • Cut tube from Ø4.5 to 32 mm (1/4" to 1-1/8") • Weight: 350 gr. • Cutter: Ø31	
01 HF 413	RB 42 model • Cut tube from Ø6 to 43 mm (1/4" to 5/8") • Weight: 440 gr. • Cutter: Ø31	112.00
01 HF 414	RB 67 model • Cut tube from Ø6 to 70 mm (1/4" to 2-5/8") • Weight: 1050 gr. • Cutter: Ø33	182.00
	SPARE PARTS	
01 HF 416	Cutter Ø31	42.00
01 HF 417	Cutter Ø33	49.50



• Circle cutter case

Part No.	Item	€
MA 01 331	BIG CIRCLE CUTTER	182.00
	Casa with multiple cutter from Ø30 a 200 mm. Can be used to cut circles in ceiling, walls, etc.	

• Saw for metals



Part No.	Item	€
MA 01 101	Mod. MT 62003 Arc saw with polyester handle	7.10
MA 01 102	Mod. MT 62128 Multiple saw to cut and enlarge drills.	6.50
MA 01 109	Set of 10 pcs.	3.55



K-42



KS-63

• PVC, PE, PVDF cutting pipe pincer

Part No.	Item	€
MA 01 021	Mod. K-42 PVC cutting pipe pincer up to 1-1/2" (42 mm), by zipper drive	27.20
MA 01 022	Mod. KS-63 PVC cutting pipe pincer Ø 0-63 mm	74.00

MA FLARING TOOLS



Part No.	Item	€
	FLARING TOOL 45°	
02 HF 061	Mod. RR-525 Universal Flaring tool for tubes from 3/16" to 5/8"	51.80
	SOFT FLARING TOOL	
02 HF 081	Mod. RR-886A The special eccentric cone revolution allows the internal opening of pipe without any effort, obtaining an accurate and regular flaring work. Use in pipes from 1/4" to 3/4"	145.20
	FLARING TOOL WITH CONE	
02 HF 021	Mod. RR-500 It guarantees the maintenance of thickness through rotational methods on pipe in any flaring work from 3/16" to 5/8"	58.00
02 HF 063	Mod. RR-N195 It guarantees the thickness maintenance by means of rotational methods on pipe in any flaring work from 3/16" to 3/4"	96.80
	FLARING AND EXPANDER TOOLS	
02 HF 065	Mod. RR-N276 Combination of flaring and expander tool for pipes from 3/16" to 3/4" in plastic shock absorbing case	130.00
	COMBINATION OF FLARING AND EXPANDER TOOLS 45°	
02 HF 068	Mod. RR-275 Flaring and expander tools for tubes from 1/8" to 3/4"	88.00
	FLARING AND CUTTING TUBE TOOL CASE	
02 HF 071	Mod. RR-1226L • Flaring tool for tubes from 3/16" to 5/8" with two pinch off tool • Tube cutter RR-274 (1/8" to 1-1/8")	98.50
	COMPLETE CASE "SUPER"	
02 HF 073	Mod. RR-278L • Flaring and expander tools for tubes from 1/8" to 3/4" with two pinch off tool • Tube cutter RR-274 (1/8" to 1-1/8") • Ratchet wrench RR-122	123.10
	COMPLETE CASE "BASIC"	
02 HF 075	Mod. RR-121 • Flaring tools for tubes from 1/8" to 3/4" of two pinch off tool • Springs kit 1/4", 3/8" and 1/2" • Tube cutter RR-274 (1/8" to 1-1/8") • Ratched wrench RR-122	109.50
	PUNCH TYPE FLARING TOOL	
02 HF 031	Mod. RR-193 Flaring punches. Case with 4 expanders for 1/4", 3/8", 1/2" and 5/8"	19.00
	PUNCH TYPE FLARING TOOL	
02 HF 035	Mod. RR-94 Flaring punch for 1/2", 5/8", 7/8"	18.00

MA FLARING TOOLS



525-F



275-FS



275-FSC

Part No.	Item	€
02 HF 001	FLARING TOOL FOR REFRIGERATION	97.00
	Mod. 525-F for tubes from 3/16" to 5/8"	
	FLARING AND EXPANDER TOOL CASE	
02 HF 011	Mod. 275-FS Flaring and expander tools for tubes from 1/8" to 3/4"	190.00
	FLARING TOOL AND EXPANDER WITH TUBE CUTTER SET	
02 HF 012	Mod. 275-FSC Set equipped with flaring tool and 275-FS expander from 1/8" to 3/4" and TC-1000 tube cutter from 1/8" to 1-1/8"	166.40
	FLARING TOOL WITH TWO PINCH OFF TOOL	
02 HF 013	Mod. 375-FS Set equipped with two pinch off tools and a single bridge, supplied in a case For tubes from 1/8" to 3/4"	137.50

EXPANDING TOOLS



Part No.	Item	€
02 HF 102	EXPANDING TOOL CASE FOR REFRIGERATION	361.50
	Mod. RR-100 • 1 Expanding pincer RR-100H • 7 Expanding heads: 3/8", 1/2", 5/8", 3/4", 7/8", 1 and 1 1/8" • 1 Tube cutter from 1/8" to 1-1/8" RR-274 • 1 Reamer RR-208	
	EXPANDING TOOL CASE FOR HEATING	
MA 02 101	Mod. RR-200 • 1 Expanding pincer RR-200H • 7 Expanding heads: 10, 12, 16, 19, 22, 25 and 28 mm • 1 Tube cutter from 6 to 48 mm RR-274 • 1 Reamer RR-208	361.50

REAMERS



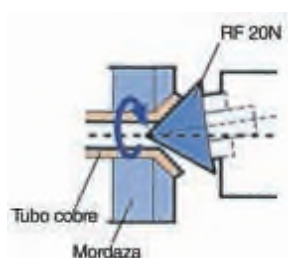
Part No.	Item	€
02 HF 201 02 HF 202	• One single piece wheel for reamers both inside and outside edges of copper tubes from 3 mm. Internal Ø 40 mm. 1/8" to 1-1/2"	9.10 13.70
	Mod. RR-208 Plastic body	
	Mod. RR-209 Metal body	

POCKET REAMERS

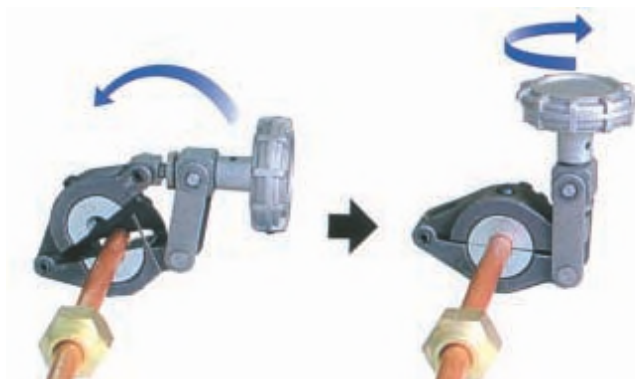


Part No.	Item	€
02 HF 211	Mod. RT 100 Plastic handle and steel reamer	12.50
02 HF 213	Spare steel reamer RT100	3.10
02 HF 212	Mod. RT 300 Plastic handle with pen type subsection and carbon steel reamers, which cannot be replaced	8.60

MA ELECTRIC FLARING TOOL



Part No.	Item	€
02 HF 301	ELECTRIC FLARING TOOL	1125.00
	Mod. RF 20N - Asymmetric electric flaring tool with cone head, for pipes of 1/4", 3/8" and 1/2" of outer diameter - The fixed position of the copper tube is held with a limiter, taking out all the defective parts of the flared pipe - The asymmetric cone makes a rotary movement to extend gradually the inner part of the pipe - Once the force is enough, the clutch stops the rotary movement and avoid flaring the pipe too much - The flared surface become smooth and completely clean	
	Technical features: - Weight with battery: 1.710 Kg - Dimensions with battery: 122 x 67.5 x 274 mm - Battery charge time: 60 min. - Voltage charge: 220 V (50/60 Hz.) - Power: 60 VA. - Minimum wall distance: 45 mm	
	Include: - Battery charger 3 Pinch off tool set: 1/4" - 3/8" - 1/2" - Reamer - Tube-cutting Rex RB30 - Plastic case	
02 HF 302	OPTIONAL ACCESSORIES	77.50
	Pinch off tool 5/8"	
02 HF 303	Pinch off tool 3/4"	77.50
02 HF 307	Spare battery	249.00



MA TUBE BENDING TOOLS



• Refrigeration tube benders ❄️

Part No.	Item	€
03 HF 211	MULTIPLE TUBE BENDER	26.50
	Mod. RR-368 for copper tubes; it allows to make bends of 90° and 180° in tubes of 1/4", 5/16" and 3/8", with a minimum effort	
	TUBE BENDER	
03 HF 201	RR 364-04 1/4"	46.25
03 HF 203	RR 364-06 3/8"	54.80
03 HF 204	RR 364-08 1/2"	70.50
03 HF 205	RR 364-10 5/8"	119.50
03 HF 206	RR 364-12 3/4"	145.00
03 HF 207	RR 364-22 3/4"	158.50

• Spring Type tube bending tools



Part No.	Item	€
03 HF 041	Springs kit for copper tubes of 3/8", 1/2", 5/8"	13.50
	"Single" springs	
03 HF 047	Spring 1/4"	2.40
03 HF 048	Spring 3/8"	3.25
03 HF 049	Spring 1/2"	3.65
03 HF 050	Spring 5/8"	3.90
03 HF 051	Spring 3/4"	5.25



• Tube benders



Part No.	Item	€
03 HF 001	MULTIPLE TUBE BENDER	53.50
	Mod. 368-FH for copper tubes; it allows to make bends of 90° and 180° in tubes of 1/4", 5/16" and 3/8", with a minimum effort	
	TUBE BENDER "SPECIAL SPLITS"	
03 HF 002	Mod. 370-FH for copper tubes special for splits of 1/4", 3/8" and 1/2" 3 in 1	118.50
	TUBE BENDER MOD. 364-FH	
	To bend annealed copper tubes, it allows to make bends of 90° and 180°:	
03 HF 011	Mod. 364-FH 3/8"	107.50
03 HF 012	Mod. 364-FH 1/2"	138.50
03 HF 013	Mod. 364-FH 5/8"	205.50
03 HF 014	Mod. 364-FH 3/4"	224.50

• Tube bender, tube cutter and portable tube reamer



Part No.	Item	€
03 HF 311	Mod. RR-707 I (Refrigeration tube) Complete case of: • Rack type tube bender Forms: 3/8", 1/2", 5/8", 3/4" and 7/8" Counterforms: 3/8" to 1/2" and 5/8", 3/4", 7/8" • Metal reamer • Tube cutter from 1/8" to 1-1/8" (4 to 28 mm)	240.00



• Portable tube bender for multiple diameters

Part No.	Item	€
03 HF 301	Case with tube bending tools, 7 forms and 3 counterforms • Capacity: Annealed copper tube up to Ø22 and 1.5 mm Coated copper tube up to Ø18 and 1 mm Coated aluminium tube up to Ø26 and 3 mm • Total weight: 5 kg	296.50
	P 22 A (REFRIGERATION tube) Forms: 1/4", 5/6", 3/8", 1/2", 5/8", 3/4" and 7/8" Counterforms: 1/4" to 3/8", 3/8" to 5/8" and 3/4" to 7/8"	



• Hydraulic tube bending and flaring tool

Part No.	Item	€
03 HF 305	Case with hydraulic tube bender, 7 forms and 3 counterforms • Capacity: Annealed copper tube up to Ø22 and 1.5 mm Coated copper tube up to Ø18 and 1 mm Coated aluminium tube up to Ø32 and 3 mm • Flaring tool system with 7 flaring punch • Total weight: 11 kg	1002.00
	OB/KIT (REFRIGERATION tube) Forms: 1/4", 5/6", 3/8", 1/2", 5/8", 3/4" and 7/8" Counterforms: 1/4" a 3/8", 3/8" to 5/8" and 3/4" to 7/8" Flaring punch: 1/4", 5/6", 3/8", 1/2", 5/8", 3/4" and 7/8"	

MA SERVICE TOOLS



• Voltage tester

Part No.	Item	€
04 HF 251 04 HF 252	VOLTAGE TESTER	1.65 2.60
	Voltage tester 60 mm long Voltage tester 100 mm long	



• Screwdrivers

Part No.	Item	€
04 HF 221 04 HF 222 04 HF 223 04 HF 224 04 HF 225	FLAT NIB SCREWDRIVER	4.45 5.20 6.92 7.80 9.25
	• Chrome-vanadium rod • DIN 5265 black nib Model 3 - 80	
	Model 4 - 100	
	Model 5.5 - 125	
	Model 6.5 - 150	
	Model 8 - 175	
04 HF 231 04 HF 232 04 HF 233	CROSSED NIB SCREWDRIVER	4.80 5.96 7.91
	• Chrome-vanadium rod • DIN 5265 black nib Model 0 (3.5 x 60)	
	Model 1 (5 x 80) Model 2 (6 x 100)	
04 HF 241	SCREWDRIVER "T"	6.24
	• Includes bits and sockets Ref.: MT-30611	
04 HF 245	REVERSIBLE SCREWDRIVER	12.05
	• Headstock with 12 nibs Ref.: MT-30622	
04 HF 229	SCREWDRIVER SET 7 PARTS • Insulation 1000V 4 screwdrivers flat nib 3-4-5,5 and 6,5 2 screwdrivers crossed nib PH1 and PH2 1 Pole searcher	40.30

MA SERVICE TOOLS

• Spanners

Part No.	Item	€
	RATCHET SPANNER BELZER	
04 HF 101	Mod. R-6950-M Reverser on an end with double square, 1/4" and 5/16" with spring for a change of turn direction of the spanner. Three fixed squares of 5/16", 3/8" and 1/2"	125.90
	RATCHET SPANNER SERVICE VALVES	
04 HF 105	Mod. RR-122 With turn direction reversing device on both extremes, with squares for 3/16" and 1/4", 1/2" and 9/16"	19.60
04 HF 103	Mod. RR-123 L With turn direction reversing device on both extremes with squares for 3/16" and 1/4" and hexagonal for 1/2" and 9/16"	18.50
04 HF 104	Mod. 124C The same as mod. RR-123 L but "Imperial" USA trademark	52.00
04 HF 106	Mod. 127C With turn direction reversing device on both extremes with squares for 3/16", 1/4", 5/16" and 3/8" "Imperial"	27.00
	DOUBLE-ENDED SPANNERS SET	
04 HF 111	• Chrome - vanadium • Chromed head DIN 3110 • 8 pieces 6 - 7 to 20 - 22	20.70
	STAR SPANNERS SET	
04 HF 121	• Chrome - vanadium • Chromed head • Elbowed DIN 838 • 8 pieces 6 - 7 to 20 - 22	18.65
	ALLEN SPANNERS KIT	
04 HF 131	• Forged steel • Chromed head DIN 3110 • 8 pieces 2 - 3 - 4 - 5 - 6 - 7 - 8 - 10	5.60
	TUBE SPANNER SET	
04 HF 141	• Forged steel • DIN 896 • 8 pieces 6 - 7 to 20 - 22	75.00
	SOCKET SPANNER SET AND BITS	
04 HF 152	• 22 Sockets-Bit 1/4" • 13 socket spanners 1/4": 4 - 4.5 - 5.5 - 6 - 7 - 8 - 9 - 10 - 11 - 12 - 13 - 14 mm (5/32" - 9/16") • 2 Extensions 1/4", 50 - 10 mm • 1 Carraca spanner 1/4" • 1 Rotating handle • 1 Universal articulation 1/4" • 1 Sliding bar 1/4" • 3 Hexagonal spanners (ALLEN) • 1 Flexible extension • 1 Case	82.00
	INSTALLER CASE "69 PIECES"	
MA 04 190	• CHROME-VANADIUM quality • Glass spanner set • Fix spanner set • Screwdrivers • Universal pliers • Extra crimper pliers	45.20

• Spanners



Part No.	Item	€
MA 04 191	COMPLETE CASE "100 PIECES"	54.50
	• CHROME-VANADIUM quality • Water pump plier • Glass spanner set • Fix spanner set • Screwdrivers • Universal pliers • Extra crimper pliers • Allen spanners kit • Hammer	
04 HF 161 04 HF 162 04 HF 163 04 HF 164 04 HF 165 04 HF 166	ADJUSTABLE SPANNERS	
	• Forged steel	
	• DIN 3117	
	Size 6"	5.60
	Size 8"	7.30
	Size 10"	9.60
	Size 12"	13.50
MA 04 182 MA 04 183 MA 04 184 MA 04 185 MA 04 186	Size 15"	32.00
	Size 18"	51.30
	STILLSON SPANNER	
	Spanner Stillson of 10"	8.60
	Spanner Stillson of 12"	11.10
	Spanner Stillson of 14"	13.20
	Spanner Stillson of 18"	23.00
	Spanner Stillson of 24"	39.70

• Torque wrenches set



Part No.	Item	€
04 HF 110	COMPLETE CASE R410A	82.50
	Supplied with torque wrench with interchangeable heads for diameters 17-22-24-26-27 and 29 mm	

• Pliers



Part No.	Item	€
04 HF 001 04 HF 002	PLIERS TO PRESS COPPER TUBE	46.00
	Mod. VISEGRIP - RR «ORIGINAL»	
04 HF 005 04 HF 007	Mod. MT00322	12.60
	• With forged pinch off tool • Size 10" GRIP	
04 HF 012	UNIVERSAL PLIERS	4.60 5.20
	• Chrome head • Acetate handle - Size 6" - Size 8"	
04 HF 015	DIAGONAL SIDE CUTTING NIPPERS	9.20
	• Chrome head • Acetate handle - Size 160 mm.	
04 HF 016	CRIMPER PLIERS	6.30
	Pliers for the shutting of crimpers Mod. SUPER	
04 HF 026	STRIPER PLIERS	6.80
	• For cables from 0.5 to 6 mm • With cutter	
04 HF 026	WATER PUMP PLIER WITH RACK	15.45
	• Forged steel • Acetate handle - Size 240 mm.	



• Belt with toolholder bag

Part No.	Item	€
04 HF 415	Simple toolholder bag. Ref. MT 26120 Includes the belt	17.20
04 HF 409	Double toolholder bag. Ref. MT 26240 Includes the belt	24.80
04 HF 410	Measure-tapes-holder bag. Ref.: MT 26400	7.60



• Tool case

Part No.	Item	€
	ALUMINIUM	
04 HF 401	• Dimensions: 457 x 330 x 152 • Includes a banderole for hanging • Compartment with adjustable divisions • Toolholder plate Mod. ALUMINIUM	43.00
04 HF 402	• Weight 3.9 Kg. Mod. PVC/ALUMINIUM	45.50
	PLASTIC	
04 HF 403	• For protection and transport of control elements and tools Mod. 170/30 (320 x 290 x 114 blue)	9.83
04 HF 404	Mod. 170/30 (320 x 290 x 114 red)	9.75
04 HF 405	Mod. 170/38 (390 x 295 x 95 blue)	13.60
04 HF 406	Mod. 170/42 (423 x 315 x 110 blue)	14.60
04 HF 408	Mod. 170/42 (423 x 315 x 110 red)	14.60
04 HF 412	Mod. 170/42 (423 x 315 x 110 yellow) CLIMAVER	13.90
04 HF 407	Mod. 170/51 (510 x 400 x 130 blue)	23.00
04 HF 411	Mod. 170/36 (365 x 255 x 72 black)	12.20
04 HF 413	Mod. 170/36C (370 x 270 x 110 black)	14.89
	VERTICAL CASE	
04 HF 431	• Vertical opening • Dimensions: 420 x 245 x 190 mm • It contains double side trays for tools • Black colour Mod. VGA 6201	99.00



• SUPER case toolholder

Part No.	Item	€
04 HF 434	• Small case of polypropylene • Internal dimensions: 325x460x170 mm Mod. 170/48 H184 with foam	37.05
04 HF 435	Mod. 170/48 H184 PU complete with: • Tray for documents • 2 Toolholder trays • Trays for small materials	195.00



170/48 H184 PU





• Tool Metal Case

Part No.	Item	€
04 HF 438	• Plate painted in blue • Round handle 3 C model (3 compartments) Dimensions: 400 x 200 x 160 mm	28.60
04 HF 439	5 C model (5 compartments) Dimensions: 430 x 200 x 210 mm	37.70



• Fin comb

Part No.	Item	€
04 HF 201	FIN COMB «RR-351»	14.00
	• Steps of 8, 9, 10, 12, 14, 15 fins/inch • Steps of 3.16, 2.82, 2.54, 2.12, 1.81, 1.7 mm. 6 Fin combs	
	UNIVERSAL FIN COMB «RR-352»	
04 HF 211	• Spring-steel threads • Suitable to all the steps	12.30

GF CLEANING EQUIPMENTS FOR REFRIGERATION SYSTEMS

• Description: Solkal 14b1 is a grease removal obtained with highly refined paraffin compounds. It does not contain any aromatic substances, nor chlorine nor HCFC. This product has been specially created to evaporate quickly without leaving any waste. Solkal 14b1 is highly volatile (evaporation rate 20 referred to the ethylic ether 1). The product does not leave any waste as it is a paraffin solvent mixture that has been specially selected.

Applications: to be used to eliminate dirt, oil, grease and resin. Specially used to clean engines, tools, industrial equipment and so on.

Part No.	Item	€
01 GF 006	SOLKAL 14B1	15.50/kg
	SOLKAL 14B1 25 kg drum	

Description: ECOCLEAN. is a technical dissolvent specially developed for the cleaning of refrigeration and air conditioning system cycles. It is also used with success in the cleaning of cycles and accuracy electrical appliances, motors and metal components in general. The ECOCLEAN. IS NOT FLAMMABLE, neither attacks at metals and has a dielectrical rigidity over traditional products. ECOCLEAN. must be used in pure state, as it is supplied, by sweeping, impregnating, rubbing, pulverizing or dipping. To make easier its removal on

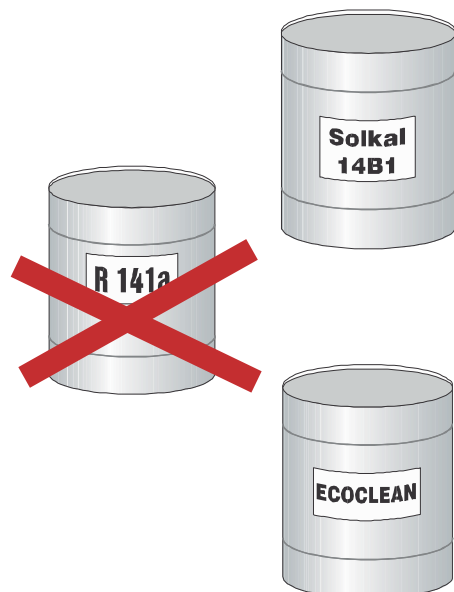
Part No.	Item	€
01 GF 004	ECOCLEAN	21.30kg
	ECOCLEAN 20 Kg drum	

Description: SUPER FLUSH is an internal cleaner for coils, batteries. Ideal for the cleaning of systems where compressor has burnt. Compatible with all type of oils and refrigerants. It eliminates acid.

Part No.	Item	€
18 HF 205 18 HF 206	SUPER FLUSH CLEANER	24.90 84.50
	Can of 0.9 l	
	Can of 3.8 l	

• Cleaning equipment

Part No.	Item	€
05 HF 001	MODEL WKL - 301	712.50
	It has been designed for cleaning of refrigeration systems with R-141b, specially used in case of burnt motor of the compressor, moisture or before the starting of a new installation. Flow: 300 l/h, pressure: up to 12 Kg Weight: 17 kg	



HF CLEANING EQUIPMENTS FOR REFRIGERATION CIRCUITS

• Cleaning equipment with «NITROGEN»



LIM-NO1



Regulator
15 Kg



Regulator
40 Kg



Nitrogen spare part

Part No.	Item	€
	LIM-N01 MODEL	
05 HF 010	Cart with 2 wheels and a handle as a support with: • Nitrogen cylinder 7 Kg (200 bar/1,4 m) • 3 m Hose with adapters • Complete regulator with gauges, inlet 200 Kg and outlet 6 bar	638.00
	N02 TIGHTNESS MODEL	
05 HF 009	Cart with 2 wheels and a handle as a support with: • Nitrogen cylinder 7 Kg (200 bar/1,4 m) • 3 m Hose with reinforced raccords • Complete regulator with gauges, inlet 200 Kg and outlet 45 bar	795.00
	TIGHTNESS TEST KIT FOR STANDARD BOTTLES	
05 HF 050	Includes: • Nitrogen regulator 1/4" SAE - Output accuracy: 0.5 ± 50 bars • Includes installation test kit • Flexible tube 1/4" SAE 2.5 meters • Adapter 5/16" SAE-f x 1/4" SAE-male for installation connections R410A • Plastic case	420.00
	TIGHTNESS TEST KIT INCLUDES DISPOSABLE BOTTLE	
05 HF 051	Includes: • Nitrogen regulator 1/4" SAE • Output pressure: 0.5 ± 45 bars • Manometer Ø80, class 1.0 with defined sectors, position indicator and regulation screw • Flexible tube 1/4" SAE, 900 mm + 220mm • Nitrogen cartridge 950 cc - 110 bar disposable • Adapter 5/16" SAE-f x 1/4" SAE-male for connection in installations of R410A • Case	505.00
	ACCESORIES	
05 HF 015	Complete regulator of 15 bar (cleaning 6 bar)	102.00
05 HF 025	Complete regulator of 50 bar (for tightness)	292.50
05 HF 041	Complete regulator of 55 bar (for tightness)"HARRIS"	282.00
05 HF 019	Hose 5 mts. with coupling adapter	55.50
05 HF 016	Hose 3 mts. with coupling adapter	47.30
05 HF 031	Hose 3 mts. with shielded coupling adapter (tightness) for Harris regulator and cleaning 6 bar	41.50
05 HF 026	Hose 3 mts. reinforced with gate valve for regulator 45 bar	59.50
05 HF 014	Cart with 2 wheels spare part	84.30
	BOTTLES	
05 HF 011	Cylinder of nitrogen of 7 litres (200 bar/1.4 m)	382.50
05 HF 013	Cylinder of nitrogen of 11 litres "Rollerflam" (200 bar/2.1 m)	671.50
	LOADING OF CYLINDERS	
05 HF 021	Loading 7 litres (200 bar/1.4 m)	72.30
05 HF 022	Loading 13.4 litres (150 bar/2 m)	84.30
05 HF 023	Loading 11 litres "Rollerflam" (200 bar/2.1 m)	91.50

Note: The first cylinder must be bought by the user and loadings will be made in exchange for empty cylin.



• Cleaning equipment with air injection

Part No.	Item	€
05 HF 003	MODEL ST-L-2001-T-10	1784.00
	• Cleaning equipment with air injection • Tank for liquid cleaner 10 l. • Metal mesh filter easily removable • Submerged self-protected pump of 55W at 230V-50Hz • Quick coupling for intake of compressed air or dry nitrogen • Tools set for an easy connection of system • Set of 3 hoses of a length of 1.5 metres	

MA CLEANING EQUIPMENT WITH NITROGEN/ FLUSH



K 747 Plus



K 747



SC



Flush 1 lt.



Nitrogen throw-away bottle



Flush 5 lt.



Pressure reducer

Part No.	Item	€
05 HF 111	PORTABLE EQUIPMENT K 747 PLUS	1125.00
	• Allows to clean the air conditioning system in a continuous cycle • It can be used in every installation with the possibility of making flow the flush clean liquid with the same working pressure • Dimensions 290 x 290 x 480 mm • Weight: 12 Kgs.	
05 HF 101	PORTABLE EQUIPMENT K 747	293.00
	• User friendly and practical equipment for air conditioning system cleaning • Working pressure 10 bar. Can remove the impurities deeply, oil, etc. of the refrigeration circuit • Equipped with hose, spray gun and empty tank for flush liquid	
05 HF 125	SPARE PARTS	36.80
	Nitrogen throw-away bottle 1kg. (100 litres / 110 bar)	
05 HF 121	Bottle containing cleaning liquid SC Set includes: • Cleaning throw-away empty bottle • Connection valves • Pressure hose of 600 mm • Spray pistol	138.00
05 HF 126	Flush Cleaning liquid bottle of 1 litre TRFG 1	19.80
05 HF 127	Flush Cleaning liquid bottle of 5 litres TRFG 5	82.50
18 HF 205	SuperFlush Cleaning liquid bottle of 0.9 litres "Highside"	24.90
18 HF 206	SuperFlush Cleaning liquid bottle of 3.8 litres "Highside"	84.50
05 HF 128	Pressure reducer 10 bar with manometer for Nitrogen throw-away bottle	113.50

HF AUTOMATIC CHARGING AND VACUUM STATION



EPS



ESC-AB5



ESC-A2

Part No.	Model	€
06 HF 080	Mod. EPS. AUTOMATIC ALL REFRIGERANT GAS	1938.00
	Mod. EPS • Includes digital scale. • Can be used with ALL THE REFRIGERANTS • The gas connector can be changed easily according of the gas • Electric valve to avoid the vacuum pump oil going to the intallation circuit • Vacuumeter • PLD Pump. Capacity 42 l/min. • Weight: 15 Kgs. • Last vacuum: 1 x 10-2 • Dimensions: 540 x 470 x 200 mm	
06 HF 081	Mod. ESC-AB5. WITH SCALE 5 KG GAS R22, R134a - R404a - R407C and R600a	1170.00
	• 5 Kgr. scale • Vacuum gauge • Electrovalves • Manifold 4 ways "Pulse-free" • 2 flexible hoses with ball valve • Connections 1/4" SAE	
06 HF 082	Mod. ESC-A2 GAS R22, R134a - R404a - R407C	1187.00
	• Sizes: 600 x 200 x 570 mm • Flow: 42 l/min. • Final vacuum: 6x10-2 • Weight: 12.70 Kgs.	

VALID
R600a

VACUUM PUMPS



Part No.	Model	Power CV	Flow m /h	€
06 HF 105	SIMPLE EFFECT			270.00
	BE-1 N pump	1/4	2.2	
06 HF 106	DOUBLE EFFECT			400.00
	BE-2 N pump	1/4	2.4	
06 HF 126 06 HF 128 06 HF 127	DOUBLE EFFECT FOR R410A			630.00
	BE-2-VV with vacuum gauge and solenoid valve			130.00
	Solenoid valve and vacuum gauge kit			5.10
	Reduction H 1/4" SAE x M 5/16"			

CASE FOR VACUUM PUMPS AND TOOLS



Part No.	Item	€
04 HF 428	Mod. 159 BLU • Case of 338 x 287 x 515 in polypropylene with mobile tray • Blue colour with handles and closing	48.00

OILS FOR VACUUM PUMPS



Part No.	Item	€
06 HF 131	MINERAL OIL	12.10
	• Specially indicated for all kinds of vacuum pumps "Robinair", "Telstar", "Wigam", "ST", etc. Bottle 1 lt.	
06 HF 133 06 HF 132	SYNTHETIC OIL	23.50 49.00
	• Special for vacuum pumps used with R134a, R404, R407c, etc. 1 lt. bottle Bottle "CHEMOIL-500"	

HF RECOVERY AND REFILL EQUIPMENTS "OIL FREE"



Part No.	Model	€
06 HF 574	Mod. MINIMAX-E	
For ALL kind of refrigerants (also R410A)	• Compatible with all the refrigerants CFC, HCFC or HFC, included R404A, R407C or R410A mixtures. • Recovery 17 Kg/h steam phase 50 Kg/h liquid phase 240 Kg/h Push-Pull phase • Max using temper.: 38.5 bar • Power: 380 W • Weight: 10.5 Kg.	1425.00

MANIFOLDS



RR 130



RR 140

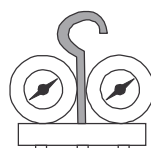


RR 110



Part No.	Item	€
06 HF 200	Mod. RR 130 (without hoses) • Manometer HIGH and LOW Ø 80 with scales R22, R134a, R404A and R407C • 2 Valves	45.00
06 HF 204	Mod. RR 140 (without hoses) • Manometer HIGH and LOW Ø 80 with scales R22, R134a, R404A and R407C • 4 Valves. Vacuum plug 3/8"	99.99
06 HF 209	Mod. ST-2005 (without hoses) • Manometer HIGH and LOW of Ø63 R22 • Vacuum gauges in Mbar of Ø 100 • 5 Valves	183.50
06 HF 223	Mod. RR 110 (without hoses) • Manometers Ø80 R22 with scales R22, R134a, R404A and R407C • 1 Valve	24.60
06 HF 224	Manometer HIGH Manometer LOW	24.60
06 HF 225	MANIFOLD FOR R-410A Mod. RR 130/410A (without hoses) • Manometers HIGH and LOW with scales R410A, R404A and R407C • 2 Valves	63.75
04 HF 403	Manifold case (320x290x114, blue)	10.60
06 HF 210	SPARE VALVES FOR MANIFOLDS Valve control ST/RR of HIGH red	12.20
06 HF 221	Valve control ST/RR of LOW blue	12.20
06 HF 291	Manifold valve joint ST/RR Joint PTFE Ø16.85 x 22.3 x 1	1.60
06 HF 292	Brass joint Ø20.3 x 23.85 x 1	1.60
06 HF 293	Joint PTFE Ø23.85 x 1 blind	1.60
06 HF 294	Transparent joint Ø23.85 x 0.3 blind	1.60
06 HF 297	Valve control W of HIGH red	14.00
06 HF 298	Valve control W of LOW blue	14.00
06 HF 299	Valve control W of VACUUM yellow	14.00
06 HF 266	Valve control RR of LOW blue	9.75
06 HF 267	Valve control RR of HIGH red	9.75

CHARGING CYLINDER WITH TRANSPORT HANDLE



Instalación en lado de BAJA

Part No.	Item	€
06 HF 078	PARA R22, R134a, R407C, R404A • Cylinder with protection and handle • Includes safety valve to avoid overpressure and ball valves 1/4" SAE Mod. K2M/A6 2 kilos	318.00

LIQUID STATE REFRIGERANT CHARGER

Part No.	Item	€
06 HF 226	Quick charger to be connected in the low pressure side of the manifold in liquid state. • Avoid to heat the gas bottle in winter • Eight times quicker than the conventional charge Mod. KWIK CHARGE 535-C	108.00

HF MANIFOLD CASES



Part No.	Item	€
	MANIFOLD CASES	
06 HF 255	Mod. ESC 2000/3 The case consists in: • Manifold 2 valves R22, R134a, R404A and R407C • A set of hoses 1,500 mm. • Manometers HIGH and LOW Ø 63	120.00
06 HF 215	Mod. ESC 2000/4 The same as the former one but • Manifold 4 valves • Vacuum valve 3/8"	230.00
06 HF 257	Mod. ESC 2000/3-410 Set composed of: • Two valve analyser for R410a • Three hose set 1,500 mm, 5/16" connection • H 1/4" SAE x M 5/16" reduction	150.00

MANOMETERS FOR R-12, R-22 AND R-502



Part No.	Item	€
	• Low (blue): Measuring range -30 to 250 Lbs./in. • High (red): Measuring range 0 to 500 Lbs./in	
	1/8 NPT VERTICAL OUTLET	
06 HF 401	High pressure Ø 63	14.60
06 HF 402	Low pressure Ø 63	14.60
06 HF 404	High pressure Ø 100	22.00
06 HF 405	Low pressure Ø 100	22.00
	• With GLYCERIN	
06 HF 409	High pressure Ø 63	19.10
06 HF 410	Low pressure Ø 63	19.10

MANOMETERS FOR R-134a AND R-404a



Part No.	Item	€
	• High (red): Measuring range 0 to 31 Bar • Low (blue): Measuring range 0 to 8 Bar	
	VERTICAL OUTLET	
06 HF 471	High pressure Ø 63 1/8" NPT	14.95
06 HF 472	Low pressure Ø 63 1/8" NPT	14.95
06 HF 475	High pressure Ø 63 1/8" NPT metallic frame	7.00
06 HF 476	Low pressure Ø 63 1/8" NPT metallic frame	7.00
06 HF 461	High pressure Ø80 1/8" NPT	23.00
	• With GLYCERIN	
06 HF 463	High pressure Ø 63 1/8" NPT	40.00
06 HF 464	Low pressure Ø 63 1/8" NPT	40.00

VACUUM GAUGE



Part No.	Item	€
	• Measuring range - 1000 to 0 mbar • Thread 1/8" NPT and Ø 80 mm	
06 HF 451	Vertical entry	37.40
06 HF 452	Rear entry	66.80

HF MANOMETERS FOR R22, R134a, R404A, R407C and R410A



Double protector



Part No.	Item	€
PARA R134a, R404A y R407C - VERTICAL OUTLET		
06 HF 487	• High (red): Measuring range 0 to 31 Bar	22.60
06 HF 488	• Low (blue): Measuring range 0 to 8 Bar	22.60
	High pressure Ø 63 1/8" NPT "Pulse Free"	
	Low pressure Ø 63 1/8" NPT "Pulse Free"	
FOR R134a, R404A and R407C VERTICAL OUTLET		
06 HF 489	• High (red): Measuring range -1 to 55 bar	19.50
06 HF 490	• Low (blue): Measuring range -1 to 35 bar	19.50
06 HF 479	High pressure Ø 80 1/8" NPT	24.20
06 HF 480	Low pressure Ø 80 1/8" NPT	24.20
	High pressure Ø 63 NPT glycerin	
	Low pressure Ø 63 NPT glycerin	
FOR R22, R134a, R404A and R407C REAR INTAKE		
06 HF 433	• With rear flange	24.80
06 HF 434	Low pressure Ø 63 1/8" NPT glycerin	24.80
	High pressure Ø 63 1/8" NPT glycerin	
FOR R410A - VERTICAL OUTLET		
06 HF 483	• High (red): Measuring range -1 to 55 bar	22.60
06 HF 484	• Low (blue): Measuring range -1 to 35 bar	22.60
	High pressure Ø 63 1/8" NPT	
	Low pressure Ø 63 1/8" NPT	

RUBBER PROTECTOR

Part No.	Item	€
06 HF 491	Blue Ø 63	5.00
06 HF 492	Red Ø 63	5.00
06 HF 493	Blue Ø 80	7.50
06 HF 494	Red Ø 80	7.50
06 HF 222	Double protector Ø 63	10.50

CHARGING HOSES



fig. 1 fig. 2 fig. 3 fig. 4

Part No.	Item	€
HOSE R-22, R404A AND R-407C		
06 HF 322	• RED (HIGH pressure)	33.00
06 HF 323	• BLUE (LOW pressure)	38.00
06 HF 324	• YELLOW (Charge or Vacuum)	66.00
06 HF 326	Set of 3 hoses 900 mm. (TEFLON joint)	73.80
06 HF 305	Set of 3 hoses 1,500 mm. (TEFLON joint)	35.00
	Set of 3 hoses 2,000 mm. (TEFLON joint)	
	Set of 3 hoses 2,500 mm. (TEFLON joint)	
	Hose for vacuum 1,500 mm. 3/8"	
06 HF 353	• With closing valve	45.00
06 HF 354	Set of 3 hoses 900 mm	50.00
	Set of 3 hoses 1,500 mm	
HOSE R-410A		
06 HF 325	Set of 3 hoses 1,500 mm. connection 5/16"	79.10
06 HF 327	Set of 3 hoses 1,500 mm. connection 5/16"	121.00
06 HF 127	with intermediate valve	5.10
	H 1/4" SAE x M 5/16" reduction	
SPECIAL HOSE R-134a		
06 HF 341	Set of 3 hoses 900 mm.	47.00
06 HF 342	Set of 3 hoses 1,500 mm.	51.00
SPECIAL HOSE FOR ALL KIND OF REFRIGERANTS WITH BALL VALVE		
06 HF 372	• Joint of 1/4" SAE 45° x 1/4" SAE	125.80
06 HF 374	Set of 3 hoses 900 mm.	150.50
	Set of 3 hoses 1,500 mm.	
SPARE PARTS		
06 HF 317	Joint for charging hose 1/4" TEFLON	1.22
06 HF 318	Joint for hose 1/4"	0.66
06 HF 319	Joint for hose 3/8"	0.80
06 HF 331	Depressor for 1/4" charging hoses, threaded (fig. 1)	0.90
06 HF 332	Depressor for 1/4" copper tube (fig. 3)	2.60
06 HF 333	Depressor for 1/4" charging hose by pressure (fig. 2)	1.40
06 HF 336	Kit of spare hoses (includes 3 TEFLON joints and 1 depressor)(fig. 4)	4.50

HF GLICERINE MANOMETER TYPE 1

BLONDELLE



Radial Model



Back Model

Part No.	Item	€
FOR R22 - R134a - R404A - R407C		
	• Thread 1/8" NPT • Diameter 60 mm	
06 HF 420	High pressure 1 to 30 bar radial	54.00
06 HF 421	Low pressure 1 to 10 bar radial	54.00
06 HF 422	High pressure 1 to 30 bar rear entry	54.00
06 HF 423	Low pressure 1 to 10 bar rear entry	54.00
FOR R410A		
06 HF 425	High pressure 1 a 40 bar radial	79.50
06 HF 426	Low pressure 1 a 20 bar radial	74.80
06 HF 427	High pressure 1 a 40 bar rear entry	79.50
06 HF 428	Low pressure 1 a 20 bar rear entry	74.80



ELECTRONIC ANALYSER



Probe with velcro



Case with accessories

Part No.	Item	€
	• Designed for the maintenance and repair of refrigerating, air conditioning and heat pump systems. • Medium values printing (optional printer) • Real time calculation (optional temperature probe) • Light display • Pressure measurements: HCFC, CFC, HFC, N, H₂O, CO₂ • Protection: IP54 • Pressures: - High - 50 bar - Low- 25 bar • Overpressures: - High- 100 bar - Low - 40 bar • Connections: 3 x 7/16" - UNF • Temperature: -50/+200°C (optional probe) • Refrigerants in the instrument: 30 • Dimensions: 260 x 130 x 70 mm • Weight 1250 gr. • Battery: 4 AA 1,5V batteries	
06 HF 244	TESTO 523 (Includes transport bag)	539.00
06 HF 252	Contact temperature probe with surrounding velcro for tubes from Ø6 to 120 mm Wire long.2.9 mts. -50/+120°C	144.00
IM 11 447	Infrared printer IRDA	342.00
06 HF 254	Case	85.00

HF TOOL CASES FOR REFRIGERATION ENGINEERS

FOR GASES
R-22, R-134A,
R-404A, R-407C



Part No.	Item	€
06 HF 232	COMPLETE «STE»	475.00
	Equipped with: • 1 DIGITAL clamp-on metre (scale 600 Amp., voltage supply 200-600V c.a., resistance 20M -2000M) • 1 Digital thermometer with sounding (scale -50 to 260°C) • 1 Electronic leak detector RD99 with progressive luminous and acoustic alarm of concentration (all gases HFC, HCFC, CFC) • 1 Portable welding kit • 1 Set of charging hoses 900 mm • 1 Two-valve manifold with Ø80 gauges R22, R-134A, R-404A and R-407C for HIGH and LOW pressure and a hook • 1 Mini tube cutter RR-127 (1/8" to 5/8") • 1 Tube cutter RR-274 (1/8" to 1-1/8") • 1 Flaring and swanning tools RR-275 from 1/8" to 3/4" • 1 Aluminium case of 457 x 330 x 162 mm • 1 Compartment for tools	
06 HF 233	TOOLS FOR REFRIGERATION	320,00
	Equipped with: • 1 DIGITAL clamp-on metre (scale 600 Amp., voltage supply 200-600V c.a., resistance 20M -2000M) • 1 Set of charging hoses 900 mm • 1 Two-valve manifold with Ø80 gauges R22, R-134A, R-404A and R-407C for HIGH and LOW pressure and a hook • 1 Electronic leak detector RD99 with progressive luminous and acoustic alarm of concentration (all gases HFC, HCFC, CFC) • 1 PVC case of 423 x 315 x 110 mm	
06 HF 231	BASIC «SE-2B»	165.00
	SE-2B , equipped with: • Two-valve manifold with Ø80 gauges R22, R-134A, R-404A and R-407C for HIGH and LOW pressure • Set of 3 hoses 900 mm • Metal reamer • Service mirror Ø40 • Tube cutter 1/8" to 5/8" RR 127 • Tube cutter 1/8" to 1-1/8" RR 274 • Flaring tool RR 525 • Ratched wrench service valves • Adjustable wrench of 10"	
06 HF 230	MINI «SE-2A»	125.00
	SE-2A , equipped with: • Manifold with gauge R22, R-134A, R-404A and R-407C • Mini tube cutter (1/8" to 5/8") RR 127 • Tube cutter with reamers (1/8" to 1-1/8") RR 374 • Flaring tool RR 525 • Ratched wrench service valves • Wrench with valve-core handle E-6200 • Digital thermometer (-40 to 150°C) HV ACR • Fin comb • Set of hoses 900 mm • Pincers for capillary hose	

HF TOOL CASES FOR REFRIGERATION ENGINEERS

R410A



Part No.	Item	€
06 HF 235	COMPLETE «STE»	500.00
	Equipped with: • 1 DIGITAL clamp-on metre (scale 600 Amp., voltage supply 200-600V c.a., resistance 20M -2000M) • 1 Digital thermometer with sounding (scale -50 to 260°C) • 1 Electronic leak detector RD99 with progressive luminous and acoustic alarm of concentration (all gases HFC, HCFC, CFC) • 1 Portable welding kit • 1 Set of charging hoses 900 mm with a teflon joint • 1 Two-valve manifold with Ø80 gauges R410A, reduction H 1/4" SAE x M 5/16" for HIGH and LOW pressure and a hook • 1 Mini tube cutter RR-127 (1/8" to 5/8") • 1 Tube cutter RR-274 (1/8" to 1-1/8") • 1 Flaring and swanning tools RR-275 from 1/8" to 3/4" • 1 Aluminium case of 457 x 330 x 162 mm • 1 Compartment for tools	
06 HF 236	TOOLS FOR REFRIGERATION	345.00
	Equipped with: • 1 DIGITAL clamp-on metre (scale 600 Amp., voltage supply 200-600V c.a., resistance 20M -2000M) • 1 Set of charging hoses 900 mm with a teflon joint • 1 Two-valve manifold with Ø80 gauges R410A, reduction H 1/4" SAE x M 5/16" for HIGH and LOW pressure and a hook • 1 Electronic leak detector RD99 with progressive luminous and acoustic alarm of concentration (all gases HFC, HCFC, CFC) • 1 PVC case of 423 x 315 x 110 mm	
06 HF 234	BASIC «SE-2B»	190.00
	SE-2B , equipped with: • Two-valve manifold with Ø80 gauges R410A, reduction H 1/4" SAE x M 5/16" for HIGH and LOW pressure • Set of 3 hoses 900 mm with a teflon joint • Metal reamer • Service mirror Ø40 • Tube cutter 1/8" to 5/8" RR 127 • Tube cutter 1/8" to 1-1/8" RR 274 • Flaring tool RR 525 • Ratched wrench service valves • Adjustable wrench of 10"	

DIGITAL MANIFOLD



Part No.	Item	€
06 HF 261	MANIFOLD CASE	340.00
	Plastic case 435x310x110 mm, equipped with: • 2 Valves manifold • Digital manometer LOW of -1 to 35 bar • Digital manometer HIGH of 0 to 50 bar • Set of 3 hoses with charge valve, 1500 mm • Set of 2 adapters 90° of 1/4 M to 5/16 H SAE	
	SINGLE DIGITAL MANIFOLD	
06 HF 455	• Connection 1/8" NPT • Measuring range in bar/Psi/Kpa/Kg.	50.00
06 HF 456	Digital manometer HIGH of 0 to 50 bar	50.00
	Digital manometer LOW of -1 to 35 bar	50.00

HF ELECTRONIC VACUUM GAUGE



Part No.	Item	€
06 HF 601	VACUUM GAUGE VG100A	285.00
	• Range from 1 atm to 25 microns • Reading through 9 leds light • Includes hook and connection 1/4" • Operation during 25 hours with battery of 9V	
06 HF 602	DIGITAL VACUUM GAUGE VG200	355.00
	• Selection measures: inches, mbar or micron • LCD Screen of 5 digits • Operation during 30 hours with battery of 9V	

DIGITAL CHARGING SCALES



Part No.	Item	€
06 HF 498	PROGRAMABLE DIGITAL SCALE	640.00
	CC 700 / CC 800A • Allows to predetermine the quantity for automatic charge • Outlet for accessories • Capacity: 100 Kg • Resolution: 10 gr. • Weight: 3.9 Kg • Charge memory functions, in case the cylinder empties before the charge is completed • Solenoid compatible with all gases	
06 HF 495	DIGITAL SCALE	285.00
	CC 220 • Allows to measure accurately the passing of the tank refrigerant • Capacity: 100 Kg • Resolution: ± 10 gr. • Weight: 2.55 Kg • Accuracy: $\pm 0.15\%$ from the value • 9 volt alkaline battery	
06 HF 500	SCALE FOR SMALL BOTTLES	50.00
	CC-2 • Electronic scale with battery • Capacity: 2 Kg. • Resolution: 1 gr. up to 1 Kg 2 gr. > 1 Kg	

HF OIL TRANSFER



Part No.	Item	€
09 HF 001	OIL RECHARGE PUMP	153.00
	Allows to pump refrigerating oil to a pressurized system. Includes adaptor to fit to the SUNISO tank Mod. 21702 for compressors.	
	OIL INJECTORS	
09 HF 031	• To install in the low line of the analyser. Doses the oil Mod. DS/0-12 Injector connection 1/4" SAE	25.00
09 HF 032	Mod. DS/0-134 Injector connection 3/8" SAE	25.00

LEAK DETECTOR OF REFRIGERANT GAS

• Manual



16840

Part No.	Item	€
08 HF 011 08 HF 013	BUTANE GAS DETECTOR	87.00 10.00
	• The leak causes visible change of colour from blue into green of the flame 16840 model complete with charge Propane charge	
	"CONTROL-GAS" LEAK DETECTOR	
MA 10 211	• If there is a leak, bubbles will form up • Not flammable Spray of 400 ml Box with 24 "CONTROL-GAS" sprays	6.20 4.80/ut



CONTROL GAS

TRAX

• Bubble-type liquid leak detector



Part No.	Item	€
18 HF 071 18 HF 072	TRAX "Liquid Leak Detector"	3.70 7.00
	• Long life bubble-type liquid leak detector with tray • It detect losses up to 1 micron • It evaporates without residues	
	38 ml bottle 380 ml bottle with extensible pick	

HIGH SENSIBILITY LEAK DETECTOR

• With hot platinum diodes



Part No.	Item	€
08 HF 141	TEK-MATE MODEL	410.00
	• Sensitivity 11 gram/year for all types of gases CFC, HCFC and HFC • Automatic adjustment on polluting ambient • Audible signal with variable intensity and lighting led • 430 mm flexible metal sound	
	SPARE PARTS	
08 HF 142	Filters kit	40.50
08 HF 143	Spare sensor	120.50

VALID
R410a

HF REFRIGERANT GAS LEAK DETECTORS



L 790 B

L 780 A

• Electronic

Part No.	Item	€
08 HF 115	L 780 A Ionic pump without mobile parts For R-134a, R-12, R-22 and R-502	286.50
08 HF 116	L 790 B The same as L 780 A but with adjustable and visual sensibility	385.00
08 HF 118	Maintenance kit S-135 (for L 780 A and L 790 B)	38.50
08 HF 129	Maintenance kit TIF	70.50

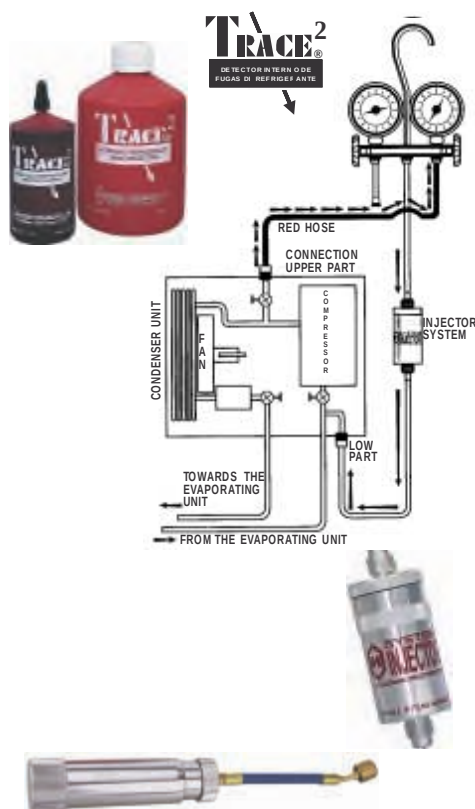
• Electronic with progressive signs of concentration

Part No.	Item	€
08 HF 131	RD 99 Ionic pump without mobile parts. For all types of HFC, HCFC, CFC, SF6, R134a and R123. Acoustic and luminous signal with LEDs of concentration. Sensitive sensor with adapter of 400 mm Battery gauge (9 V)	255.00

• Universal gas leak detector

Part No.	Item	€
08 HF 145	DF-01 • 7 Detection levels • Regulable beeper and light signal • Sensibility of 3 g/ for all the refrigerants in gas state (R410A, R407C, R22, R404A, R507, R134A, ...) • Metallic sensor • Includes: Aluminum case and shapes, 1 filter of spare parts and batteries.	158.00
08 HF 146	Filter Spare part (Maximum operation time 20 working hours)	26.00

VALID FOR
ALL THE
REFRIGERANTS



• Internal refrigerant leak detector

Part No.	Item	€
18 HF 221	Bright red dye, stain type leak detector for refrigeration and air conditioning systems Flourescent with any ultraviolet light source TRACE (mineral oils) 116 ml plastic bottle	10.80
18 HF 222	460 ml plastic bottle	18.90
18 HF 224	TRACE 2 (polyol ester base) Universal for all type of refrigerant gases, CFC's, HFC's and HCFC's included 116 ml plastic bottle	11.50
18 HF 225	460 ml plastic bottle	36.50

• Injector in line

Code No	Item	€
18 HF 211	INJECTOR IN LINE	69.00
	• Allows to introduce any kind of liquid in a charged and hermetic system • Completely re-usable • Leak proof	
	CHARGED INJECTOR	
18 HF 212 18 HF 213	• Allows to add some oil or leakage detector inside the refrigeration system. • Thread 1/4" Female	78.20 115.00
	Charge from 7.5 ml. to 15 ml. Charge from 15 ml. to 60 ml.	

HF AUTOGENOUS-WELDING EQUIPMENTS

Bottles provided with
TULIPA protection



Part No.	Item	€
COMPLETE EQUIPMENTS		
07 HF 001 2850°C	MINI OXI-BUTANE EQUIPMENT • Pressure reducer with gauges • Camping key • Camping cylinder GLP 0.5 Kg. • Cylinder O₂ 400 l. (small) • Complete torch S-194-C • Check valves O₂ • Bichromate cart • Double hose 3 m • Total weight 10 Kg.	335.00
07 HF 003 2850°C	PORTABLE OXI-BUTANE EQUIPMENT (2.8) • Camping key • Camping cylinder 2.8 Kg. • Cylinder O₂ 700 l. (medium) • Complete torch S-194-C • Check valves O₂ • Pressure reducer with gauges • Bichromate cart with wheels • Double hose of 3 m • Total weight 20 Kg.	440.00
07 HF 004	PORTABLE OXI-BUTANE EQUIPMENT (2.8) • Identical to the previous one but with hose of 5 m.	450.00
07 HF 005 3500°C	PORTABLE OXYACETYLENE EQUIPMENT • Acetylene cylinder 0.7 Kg. • Oxygen cylinder 940 l. • Complete torch S-194-C • Check valves • Oxygen and acetylene regulator with gauges • Bichromate cart with wheels • Double hoses of 3 m • Total weight 29 Kg.	750.00
SEMI PORTABLE		
07 HF 008 3500°C	OXI-ACETYLENE EQUIPMENT • Oxygen cylinder 1.8 Kg. • Acetylene cylinder 2,680 litres • Complete torch S-194-C • Check valves • Oxygen and acetylene regulator with gauges • Bichromate cart with wheels • Double hose of 3 metres • Total weight 70 Kg.	1,435.00
OXYGEN CYLINDERS AND CHARGES		
07 HF 101	Camping cylinder 0.5 Kg.	52.80
07 HF 102	Camping cylinder 2.8 Kg.	68.00
07 HF 100	Mini-Oxygen cylinder 300 l. (2 lt.x150 bar) with plane base and tulip	194.00
07 HF 121	Mini-Oxygen cylinder charge 300 l. (2 lt.x150 bar)	25.90
07 HF 125	Industrial portable Oxygen cylinder 1 m ³ (6.7 lt.x150 bar)	56.20
07 HF 128	Semi-portable Oxygen cyl. charge 2 m ³ (13.4 lt.x150 bar)	64.70
07 HF 151	Oxygen cylinder 400 lt. (2 lt.x200 bar) flat base	194.00
07 HF 152	Oxygen cylinder charge 400 lt. 0,4 m ³ (2 lt.x200 bar)	25.90
07 HF 153	Oxyflam Oxygen cylinder 1.1 m ³ (5 lt.x200 bar) flat base	235.00
07 HF 154	Oxyflam Oxygen cylinder charge 1,1 m ³ (5 lt.x200 bar)	44.50
07 HF 155	Aluminium Oxygen cylinder 1.5 m ³ (7 lt.x200 bar) flat base	408.60
07 HF 156	Aluminium Oxygen cylinder charge 1.5 m ³ (7 lt.x 200 bar)	62.50
07 HF 157	Rollerflam Oxygen cylinder 2.3 m ³ (11 lt.x200 bar) flat base	645.00
07 HF 158	Rollerflam Oxygen cylinder charge 2.3 m ³ (11 lt.x200 bar)	68.30

HF AUTOGENOUS-WELDING EQUIPMENTS



S-88-A



S-88-O



Part No.	Item	€
ACETYLENE CYLINDERS AND CHARGES		
07 HF 123	Portable Acetylene cyl. charge 0.5 Kg (3.2 lt.x15 bar)	78.50
07 HF 129	Semi-Portable Acetylene c. charge 2 Kg. (13.4 lt.x15 bar)	128.50
07 HF 161	Oxyflam Acetylene cylinder 0.8 Kg. (5 lt.x17 bar) flat base	485.00
07 HF 124	Oxyflam Acetylene cylinder charge 0.8 Kg. (5 lt.x17 bar)	105.00
ACCESSORIES AND TORCH		
07 HF 201	Complete torch S-194-C	54.50
07 HF 202	Handle Mod. S-194	37.75
07 HF 203	Mixer Mod. SH-194	16.50
07 HF 204	Burner-holder handle Mod. SD-50	12.50
07 HF 205	Cutter accessory Mod. S-362	103,70
07 HF 208	Sparker SA-265	3.30
07 HF 209	6 Stones case SA-26L	2.60
BURNER-HOLDERS		
07 HF 216	Solding burner-holder GLP No. 2 N (1 mm) HS2P	3.90
07 HF 217	Solding burner-holder GLP No. 4 N (2 mm) HS4P	3.90
07 HF 218	Solding burner-holder GLP No. 6 N (4 mm) HS6P	4.95
07 HF 219	Acetylene solding burner-holder No. 1 N (1 mm) HS1A	3.90
07 HF 220	Acetylene solding burner-holder No. 3 N (2 mm) HS3A	3.90
07 HF 221	Acetylene solding burner-holder No. 5 N (4 mm) HS5A	4.95
07 HF 213	Heating burner-holder GLP HSHP	20.80
07 HF 210	Acetylene heating burner-holder HSHA	20.80
07 HF 211	Cutting burner-holder GLP (6 mm)	19.80
07 HF 212	Acetylene cutting burner-holder (6 mm)	19.80
CHECK VALVE		
07 HF 241	Check valve Oxygen Mod. S-88-O	8.90
07 HF 242	Check valve Acetylene Mod. S-88-A	8.90

• Accessories for autogenous-welding equipment



Part No.	Item	€
ACCESSORIES		
07 HF 111	Cart for Mini Oxi-Butane equipment	48.50
07 HF 112	Cart for Portable Oxi-Butane equipment	78.50
07 HF 199	Welding protection glasses	5.20
07 HF 222	Set of double Oxi-Butane hose of 3 m	26.90
07 HF 223	Set of double Oxi-Butane hose of 5 m	37.50
07 HF 224	Set of double Oxi-Butane hose of 10 m	60.00
07 HF 225	Set of Oxi-Acetylene hose of 3 m	26.80
07 HF 226	Set of Oxi-Acetylene hose of 5 m	37.50
07 HF 227	Set of Oxi-Acetylene hose of 10 m	63.00
07 HF 231	Oxygen pressure regulator S-101-O	56.80
07 HF 232	Acetylene pressure regulator S-101-A	57.50
07 HF 234	Regulator spare membrane	12.90
07 HF 251	Set of burner rubber coupling Oxygen	3.30
07 HF 252	Set of burner rubber coupling Acetylene	3.30
07 HF 253	Set of burner 21.8 left of Ø 5 mm.	5.40
07 HF 261	Valve blue camping butane	13.80
07 HF 265	Oxygen gauge 0 to 16 bar/psi	8.30
07 HF 264	Oxygen gauge 0 to 315 bar/psi	8.30
07 HF 266	Oxygen/Acetylene gauge 0 to 2.5 bar/psi	8.30
07 HF 267	Oxygen gauge 0 to 40 bar/psi	8.30
IM 29 151	Black rubber gauges protector Ø63mm.	3.90

• Manual welding equipments



Part No.	Item	€
AUTOGENOUS WELDING EQUIPMENT		
07 HF 268	Mod. TURBO SET 90 With bottle not refillable ...110 cylinders, ... cartridge, ... oxygen pressure reducer, gas tap with a check valve, grip with regulation taps and burner.	179.50
07 HF 269	Spare oxygen charge 110 bar	30.20
07 HF 270	Cartridge of gas ...400	7.80
07 HF 280	Spare welding nozzle	8.40

• Welding equipments with throw-away bottle



Part No.	Item	€
WELDING EQUIPMENT		
07 HF 274	Mod. RE Torch with flame adjustment control and with trigger start igniter	75.80
SPARE BOTTLES		
07 HF 277	Metil acetylene-propane benzomatic disposable charge according to EC Standards	26.90

• Bernzomatic welding case

Part No.	Item	€
07 HF 275	Case with: Torch TS 700 2 bottles of Mapp gas Features:: All directions torch Flame control Trigger of start igniter Protection button	160.00



"T" PASTE

THERMAL BLOCK

• Protection against heat transmission

Part No.	Item	€
	ANTI-CALORIC PASTE	
07 HF 361	Avoids the transmission of heat or flame during the soldering, protecting the valves or parts sensitive to heat	
07 HF 362	THERMAL BLOCK - Tube of 312 gr. PASTE "T" - Can of 1 Kg - It can be used several times if it is maintained damp	17.00 26.80

• Soft welding equipments



THERMIC SHIELD



THERMIC BLANKET

Part No.	Item	€
	THERMOPROTECTING BLANKET	
07 HF 278	THERMIC SHIELD - Dimensions: 200 x 270 mm. - Material: Aluminium-ceramic cardboard without asbestos. - Flexible. Supplied in 3 units pack	10.40 8.95/ut
	THERMIC BLANKET	
07 HF 279	- Dimensions: 330 x 200 mm - It supports direct fire without burning only on one side (do not heat the aluminium side) - It stands temperatures up to 1,000°C	28.00

HF STICKS FOR WELDING



Part No.	Model	Metting interval	% Silver	Stick Ø	Content	€ Packing
07 HF 301	MRP 8	710-780°C	-	2 mm.	500 gr.	11.90
07 HF 303	MRA 2	650-810°C	2%	2 mm.	500 gr.	23.70
07 HF 305	MRA 5	650-810°C	5%	2 mm.	500 gr.	38.60
07 HF 307	MRA 15	650-810°C	15%	2 mm.	500 gr.	90.00
07 HF 309	MR 123	660-770°C	21%	2 mm.	500 gr.	130.90
07 HF 311	MR 134	610-760°C	34%	2 mm.	500 gr.	192.50
07 HF 312	MF 140	600-650°C	40%	2 mm.	500 gr.	222.70

APPLICATIONS:

Types MRP 8, MRA 2,
MRA 5 and MRA 15:

Type MR 123:

Type MR 134:

COPPER - COPPER without dioxidizing
COPPER - BRASS with dioxidizing
COPPER - COPPER tube BUNDY
COPPER - COPPER tube BUNDY
STAINLESS STEEL

*Aproximated prices because of the daily LME quotation (ask for a current price)

RUST-REMOVING



Part No.	Item	Content	€
	- Suitable for copper, ironing and not ironing metallic alloyages - Activity temperature: 500 to 800°C		
07 HF 321	MF CS (powder)	250 gr.	6.00
07 HF 322	MF CS (paste)	500 gr.	12.00

MA EXTERNAL CLEANING EQUIPMENTS AND PRODUCTS

• High pressure hydrocleaners

Part No.	Item	€
MA 11 031	Characteristics: • 230V II voltage • IP 55 protection • Pressure regulation valve • Gun, lance and high pressure tube • Three axial piston pump	225.00
	HOBBY SERIES	
	• Flow: 375 l/h • Pressure: 100 bar • Power: 1,3 Kw • Weight: 7 Kg. Mod. CLEAN-100	
MA 11 032	PORTABLE SERIES	420.60
	• Flow: 210 l/h • Adjustable pressure: from 5 to 35 bar • Power: 400 W • Weight: 9,5 Kg. • Includes case for transport Mod. AC-Cleaner TSS-B	
MA 11 034	Accessory: Kit for hydraulic tests with valves and manometer	62.00

• Atomizers for cleaning

Part No.	Item	€
MA 11 021	MANUAL LEVER	30.90
	• Bandoleer • Jet-propelled nozzle • 1.5 mts. hose MARI - II 5 litres	
	• 5 litres tank MARI - II 10 litres	
MA 11 022	• 10 litres tank	79.00
MA 11 025	PUMP WITH TANK	450.00
	• 20 lts. tank • Mobile with wheels • 850 mm nozzle and 3 mts. tube • Pump: 1/2 CV, 220V • Pressure: 4 Kg/cm² FLUXIC	

• Detergent for air-conditioner

Part No.	Item	€
MA 10 221	ALMET to clean filters, evaporators, batteries, fans, etc. Bottle of 10 Kg.	69.75

• Anti-acari spray for air conditioning

CARAMBA

Part No.	Item	€
MA 11 232	CONCENTRATED CLEAN AIR "Caramba"	24.50
	• Eliminates bacteria and acari from air-conditioner pipes: Acaricide, bactericide and fungicide	
	Orange spray 300 ml / 327 gr	
MA 11 234	Orange spray 600 ml	42.50

• Spray bactericide

Part No.	Item	€
MA 11 236	BACTERIA KILLER SPRAY "Caramba"	14.20
	• Kills fungi, bacteria and many kind of insects Spray of 150 ml.	



AIR
conditioning
Installer





• Air-conditioner disinfectant

Part No.	Item	€
MA 11 231	Can AM-100 (5 Kg) • Disinfectant that eliminates microorganisms and avoid bad smells • Fresh or citric fragrance	31.50
MA 11 230	"Crack" Spray (750 cm³ spray)	7.40



• Cleaner for air conditioners

Part No.	Item	€
MA 11 241	AIRNET Pulveriser Spray 1000 cc. Used for the cleaning process of air conditioning systems and circuits. It is also used for the external cleaning of Splits, internal units, filter cleaning, etc. It can be used for the cleaning of all kind of surfaces not damaged by water.	11.90
MA 11 242	AIRPUR Pulveriser Spray 1000 cc. To pulverize directly on the areas causing the bad odour. In air conditioning equipments, clean the air circuit with our cleaning product AIRNET, once cleaned, apply AIRPUR pulverizing until saturation. Switch the equipment on in order to distribute the product evenly	16.90

• Plunger for trays, toilets,...

Part No.	Item	€
MA 10 645	• Releases all type of cloggings due to organic materials • 90% biodegradable 500 ml bottle FLOW	7.55

• Coil cleaner

Part No.	Item	€
18 HF 241	• Powerful powder cleaner for coils, evaporators and condensers • Soluble in proportion 6 to 1 (0.3 Kg are equivalent to 3.8 litres of concentrate) • Contains a high performance corrosion inhibitor 0.3 Kg container COIL MAX	17.00

ZINC PLATED IN COLD



Part No.	Item	€
MA 10 102	• Resists until 120° C during 15/20 minutes approx. Spray for the zinc plated in cold Box with 24 ZINCOL sprays	7.10 6.25/unit

LEAK DETECTOR IN CHIMNEYS AND AIR CONDUCTS



Part No.	Material	€
	LEAK DETECTOR SMOKE-PRODUCING CARTRIDGES	
MA 10 501	• Allows to detect leaks in chimneys or air conducts 100 m³ jar Emission time: 30 seconds	21.90
MA 10 502	300 m³ jar Emission time: 90 seconds	37.90

INSPECTION CHAMBER DUCTS AND MACHINERY



Part No.	Material	€
16 HF 101	Mod. SEE SNAKE • Check the duct interior through a Ø14mm drill which allows the chamber pass in hardly reachable places. • LCD screen 2.5" • Flexible wire 900 mm • Chamber Ø13mm with light • Includes case and pointers, light mirror and magnets	500.00

HF SEALING FOR THREAD



Part No.	Item	€
 SECURE AND EASY ASSEMBLY	TEFLON IN PASTE «SISEAL»	 19.75 11.90
	• Liquid sealing with a PTFE (teflon) base for metal thread unions. Ideal to substitute hemp or teflon roll • Guarantees a perfect joint in water, gas and compressed air • Resistant to vibrations and thermic changes, keeping its sealing properties in temperatures from -55 to +150°C The joint is instant in low pressure, allowing an easy assembly	
	 100 gr. tube 50 gr. tube	
	UNION SEALER FOR REFRIGERANTS	
18 HF 232 18 HF 233	• Sealing for all the refrigerant (R-22, R-134a, etc), gases, steam, air, water, etc. • Temperature from -93°C to 200°C • Flexible adjusting compound, it sticks on internal surfaces filling in hollows	4.70 11.70
	Jar LEAK LOCK 38 gr Jar LEAK LOCK 118 gr with brush	

LIFTS



Part No.	Item	€
MA 14 115	• Load capacity: 2.000 - 2.500 Kg • Forks long: 1.150 - 1.220 mm • Forks wide: 550 - 685 mm • Maximum elevation: 110 mm • Maximum height 85 - 74 mm Lifts	365.00

FOLDABLE CART



Part No.	Item	€
MA 14 118	FOLDABLE CART	55.00
	• Charging capacity: 90 Kg • Surface of charge: 350 x 240 mm • Wheel Ø150 mm • Minimum height 730 mm • Maximum height: 1,090 mm Foldable cart	
	HANDCART	
MA 14 113	• Charging capacity: 200 Kg • Wheels of Ø24.5 x 8.5 mm • Weight: 10 Kg Handcart	56.00

MA ELECTRIC SPLIT ELEVATOR C-250 Serie

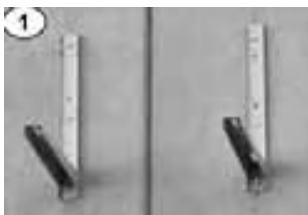


Part No.	Item	€
MA 14 125	Split elevator Serie C-250	437.50

Dismantable elevator to mount on the condenser units support through a low power drill. It can elevate a condenser and a sole man can mount heavy equipments
The condenser unit has to be surrounded by the steeled wire. Hang it in the hook and elevate it with the drill power up to the squares.

Characteristics:

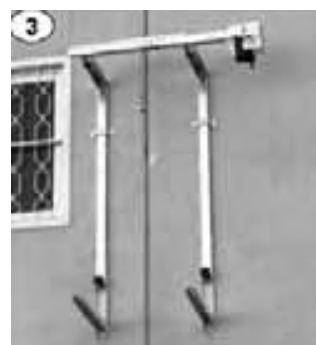
- Elevation up to 138 Kg.
- Elevator weight: 27 Kg
- Maximum elevation: 10 m
- Steel wire meters: 11 m



Step 1: Place the supports on the wall



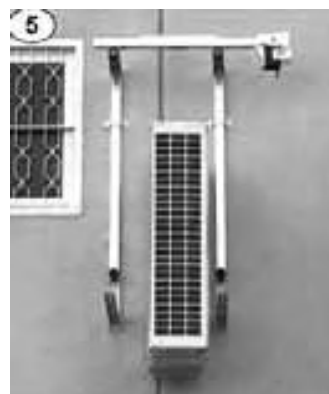
Step 2: Set the inverted squares on the wall supports and turn the handles to adjust them on the upper part.



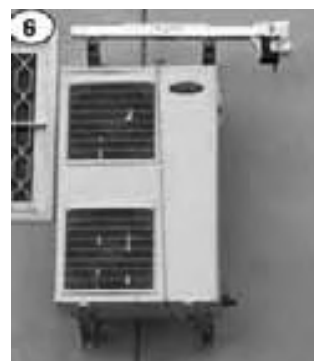
Step 3: Place the crosspiece with the reducer on the squares and slide the steeled cable to tie the machine up.



Step 4: Throw the steel wire down from the crosspiece, pass it under the machine and hang it on the wire. Lift the machine some centimeters to balance it before raising it up.



Step 5: This is the proper way of passing the machine between the crosspieces.



Step 6: Place the machine on the wall squares and screw it. Now you can dismantle the elevator.

MA LIFTS

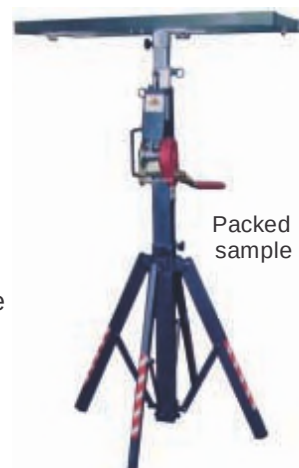


C700 Series

C700 Series

Constituted by:

- Telescopic system of three sections, two of them operated by steel cable, guided by pulleys.
- Manual tractel of 350 Kg of maximum load with automatic curb of load retention. In spite of this, we shouldn't raise loads over 130 Kg.
- Protection to avoid oxide and painted in marteles colour.
- Unslidable brackets..



Packed sample

Part No.	Item	Height (m)		Max. load Kg	Weight Kg	€
		Min.	Max.			
MA 14 151	C-711	1.45	3.65	130	23	710.00
MA 14 152	C-712	1.66	4.72	130	34	1020.00
ACCESSORIES						
MA 14 155	Wheels kit C711/712					77.50

• C800 Series

Composed by:

- Winch of 500 Kg of maximum load with automatic curb of load retention. Minimum load work: 25 Kg.
- Extensible legs to support the tower with wheels. The legs can be placed in parallel to the chassis to their transport.
- Wheels to move the wheelbarrow.
- Handles to take easily the wheelbarrow.
- Coated with Zinc, anti-rust protection and painted in marteles colour.

Features:

- Maximum height: 3330 mm. With forks in normal position.
- Maximum height: 3330 mm. With forks in inverted position.
- Minimum height: 2120 mm.
- Weight: 70 Kg.
- Width: 650 mm.
- Maximum raisable load: 160 Kg.



C800 Series

Part No.	Item	Maximum Height (m)		Max. load Kg	Weight Kg	€
		Normal	Inverted			
MA 14 161	C-800	3.33	4.00	160	70	1,690.00

MA LIFTS 2100 Serie

- For heights of 4.0 - 5.6 and 7.3 m
- Capacity 300 Kg
- Standard security break

- Side stabilizers
- Standard arms
- Compact design

Standard security elements of series 2100

Stabilizing feet

It can be supplied with optional stabilizing feet in order to improve stability. The feet, which can be folded, are mounted on a base, and this helps widely to stabilize the lift on the ground. Each folding foot is provided by a bolt of 12.7 cm long, that makes easier the movement of the lift when it is loaded.

Technical data

Model		2112	2118	2124
Height	cm	213.4	213.4	213.4
Length at rest	cm	86.4	86.4	86.4
Length at working	cm	157.5	184.4	185.4
Width base	cm	79.4	79.4	79.4
Width with unfolding side stabilizers	cm	188	188	188
Space between the feet and the ground	cm	6.4	6.4	6.4
Load (minimum height)	cm	15.2	15.2	15.2
Max. height (forks downwards)	m	3.4	5.1	6.7
Width standard forks	cm	54.6	54.6	54.6
Length standard forks	cm	71.1	71.1	71.1
Net weight	Kg	114.5	146	166
Centred load	Kg	300	300	300
Load with extended forks	Kg	90	90	90
Length arm extended forks	cm	106.7	106.7	106.7

Part No.	Item	Max. load kg	Max. height m	Full weight kg	€
	Mod. SUMNER LIFT				
MA 14 221	LIFT 2112	300	3.4	122.7	2,875.00
MA 14 222	LIFT 2118	300	5.1	157.3	3,450.00
MA 14 223	LIFT 2124	300	6.7	180.9	4,200.00
MA 14 231	Accessories: Stabilize				325.00

REVERSIBLES FORKS



COMPACT FOLDED

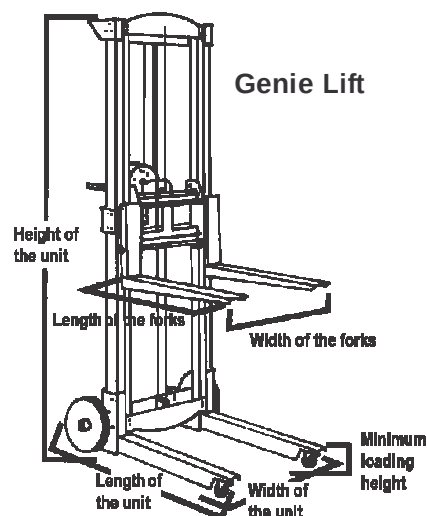


MA LIFTS FOR MACHINES AND AIR PIPES

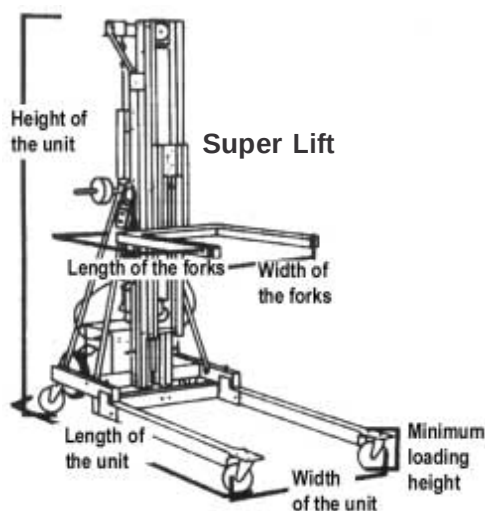
Genie

“Genie Lift” specifications

MODEL	GL - 08	GL - 10	GL - 12
Max. height inverted forks	3.1 mts	3.6 mts	4.2 mts
Min. height low forks	8.9 cm	5.1 cm	5.1 cm
Loading capacity	181 kg	159 kg	159 kg
Folding height	1.7 mts	2 mts	2.3 mts
Free distance to ground	1.9 cm	1.9 cm	1.9 cm



Genie Lift



Super Lift

“Super Lift” specifications

MODEL	SLA-5	SLA-10	SLA-15	SLA - 20	SLA - 25
Folding height cm	199	199	199	199	199
Standard base width cm	80	80	80	80	80
Work pos. length cm	146	146	184	204	204
Ground level cm	50.8	50.8	50.8	50.8	50.8
Loading capacity centred load	454 kg	454 kg	363 kg	363 kg	295 kg



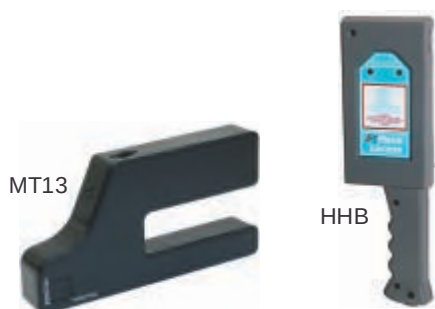
Genie Lift

Super Lift

Compressed Air Model

Part No.	Item	Max. load kg	Max. height m	Weight kg	€
Mod. GENIE LIFT (ADJUSTABLE)					
MA 14 002	GL - 08	181	3.10	66	2,690.00
MA 14 003	GL - 10	159	3.60	68	2,950.00
MA 14 004	GL - 12	159	4.20	70	3,250.00
Mod. SUPER LIFT					
(*) Loading capacity: Up to 3.5 mts: 450 kg Up to 5 mts: 365 kg Up to 7.9 mts: 265 kg					
MA 14 020	SLA - 5		2	98	3,250.00
MA 14 021	SLA - 10		3.50	118	4,250.00
MA 14 022	SLA - 15	(*)	5.00	144	4,690.00
MA 14 023	SLA - 20		6.50	184	5,000.00
MA 14 024	SLA - 25		7.90	204	5,625.00
Accessories:					
MA 14 031	Side stabilizers				500.00
Model with COMPRESSED AIR					
MA 14 041	GH - 3.8	160	3.8	29	2,875.00
MA 14 042	GH - 5.6	160	5.6	31	3,350.00

MA METAL DETECTORS



Part No.	Item	€
MA 15 013	Mod. HHB - Luminous and acoustic indicator (signal increases by approximation) - Detection depth in terms of metal volume (e.g. a 25 ptas. coin to 10 cm) - Automatic adjustment	205.00
MA 15 015	Mod. MT13 - Metal detector and electric wire - Light and sound indicator	23.75

INSPECTION MIRRORS



Part No.	Item	€
16 HF 001	5 articulated positions - Telescopic	5.95
16 HF 009	Mod. MIR - 1 circular shaped Ø 40 mm.	7.50
16 HF 011	Mod. FLM-1 oval Ø 50 mm 45 mm length, with flexible handle and LIGHT - Operates with 2 1.5V batteries (not included)	22.60

TELESCOPIC BAR WITH MAGNET



Part No.	Item	€
16 HF 021	Telescopic Bar with the size of a ballpoint pen magnet pointed and LED Excellent for the recovery of metal elements in difficult access places - Scope: 17 cm to 66 cm - Capacity: pieces up to 1 Kg - Voltage: 3 batteries button type LR41 SEARCH STICK	23.75

OIL I.D.



Part No.	Item	€
18 HF 304	OIL-ID Type - Identifies in few seconds the installation oil type. (POE or another) - Individual monodose pot	20.00

ACIDITY CHECKER



Part No.	Item	€
18 HF 303	- Checks the instalaltion acidity degree - Individual monodose pot	13.50
18 HF 302	ACID DETECTOR Mineral oil ACID DETECTOR ESTER-POE oil	13.50

ACIDITY NEUTRALIZER



Part No.	Item	€
18 HF 300	- Eliminates residual acidity - Preventive acidity maintenance	44.00
18 HF 301	ACID AWAY MINERAL Oil ACID AWAY ESTER Oil	48.00

HF ACID ANALYSER



Part No.	Item	Oil type	€
18 HF 003	• Analyser kit KMP TKO type	Mineral	13.60
18 HF 005	• Analyser kit KMP ETK type	Synthetic	18.60

UNIVERSAL ACID AND MOISTURE ANALYSER



FOR ALL
TYPES OF
OILS

Part No.	Item	€
18 HF 025	CHECKMATE • Suitable for ALL types of oil: mineral, ester, PAG, etc. • Easy removal from the closed circuit • Supply in complete case	310.00
18 HF 026	Set of 3 spare tubes acid	53.20
18 HF 027	Set of 3 spare tubes moisture	53.20
18 HF 028	Set of 3 spare tubes conductivity	53.20

UNIVERSAL ACID TEST FOR REFRIGERATION OILS



FOR ALL
TYPES OF
OILS

Part No.	Item	€
18 HF 006	• Accurate results in few seconds for all refrigeration oils • Simple to understand with colour change indicators 4 Complete tests ACID TEST in each kit	17.80

UNIVERSAL ACID TEST FOR REFRIGERATION OILS



**ACID
NEUTRALIZER**

FOR ALL
TYPES OF
OILS

Part No.	Item	€
18 HF 006	• Accurate results in few seconds for all refrigeration oils • Simple to understand with colour change indicators 4 Complete tests ACID TEST in each kit	29.25

LUBRICANT/FRICTION REDUCER FOR COMPRESSORS



IT GUARANTEES
LONGLIFE OF
COMPRESSOR

Part No.	Item	€
18 HF 105	Lubricant spray LUB&DRY / LUBE IT UP	25.00

MA VACUUM CLEANERS



ASTRO



KOSMOS



SHB-530B

Part No.	Item	€
VACUUM CLEANER FOR DUST		
MA 22 001	ASTRO 100 • Power 1,000 W 220V II • 20 lts. stainless steel tray • Complete Ø 36 accessory kit Bag ASTRO 100	340.00 33.00
MA 22 101		
MA 22 003	ASTRO 110 • Power 1.000 W 220V II • 40 lts. stainless steel tray • Complete Ø 40 accessory kit Bag ASTRO 110	420.00 42.00
MA 22 102		
MA 22 005	ASTRO 220 • Power 2 motors of 1,100 W • 70 lts. stainless steel tray • Ø 40 accessory kit Bag ASTRO 220/330	745.00 57.00
MA 22 103		
MA 22 007	ASTRO 330 • Power 3 motors of 1,100 W • 70 lts. stainless steel tray • Ø 40 accessory kit Bag ASTRO 220/330	840.00 57.00
MA 22 103		
PORTABLE VACUUM CLEANER		
MA 22 021	KOSMOS 8 model • Weight: 3.9 Kg. • Bandolier to hung ACCESSORIES • Ideal to clean wall boilers, heaters, conditioners, etc. • Water flow: 1,680 litres/min • Depression: 1200 mm c.d.a.	143.00
MA 22 020	10 spare paper bags "Kosmos"	16.00
MANUAL VACUUM CLEANER		
MA 22 025	SHB-530B model • Power : 530W to 230V II • Weight: 1,700 gr. • Air flow: 2.7 m³/min • Pressure: 560 mm c.d.a. • Length: 405 mm	130.00
MA 22 026	Spare bags SHB-530B	6.90

LEVELS, MEASURING TAPE CALCULATORS, SQUARES



Part No.	Item	€
LEVEL		
MA 20 001	LIV magnetic base level. Length 225 mm	4.65
SQUARES		
AI 52 140	Dimension 300 mm	3.25
TAPE MEASURES		
AI 52 171	2 metres	3.20
AI 52 172	3 metres	3.60
AI 52 173	5 metres	5.65
AI 52 176	10 metres	10.20
AI 52 177	20 metres	11.50
AI 52 178	50 metres	20.60

DRAWERS FOR PILLING UP "Tidy up your warehouse"



Part No.	Item	€
• GREY colour • Reinforced, for pilling up		
MA 24 112	130 x 150 x 240 mm drawer	3.25
MA 24 114	130 x 150 x 340 mm drawer	4.55
MA 24 115	150 x 210 x 340 mm drawer	6.75
MA 24 118	180 x 300 x 490 mm drawer	13.00

MA ALUMINUM LADDERS



Household

• SMALL household model



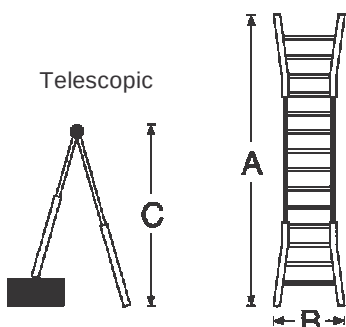
Part No.	Stair	Height (cm)		Nr. steps	Base width (cm)	€
		Top step	Folded			
MA 25 303	DOM-5	110	191	5	47.3	65.50
MA 25 304	DOM-6	133	204	6	49.8	78.50
MA 25 305	DOM-7	156	227	7	52.4	96.00

• TELESCOPIC model (steel and aluminium made)



Part No.	Measures (cm)					Nr. steps	Weight (Kg)	€
	Height in A position		Width of base (B)	Height in C position				
	Min.	Max.		Min.	Max.			
MA 25 331	246	400	58	126	200	4 + 4	11	180.20
MA 25 332	300	440	58	151	229	4 + 5	12.1	208.70

Telescopic



• Simple MULTIPURPOSE model with 2 and 3 flights

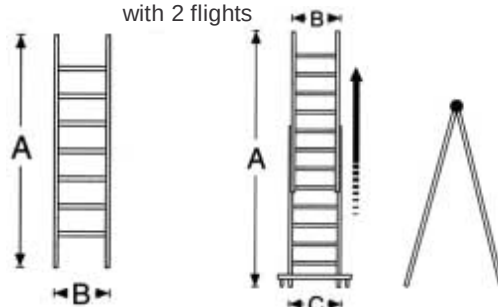


Part No.	Ladder	Measures (cm)			Nr. steps	Weight (Kg)	€
		A	B / C / D	E			
MA 25 311 MA 25 312 MA 25 313 MA 25 321	2 FLIGHTS						190.00 235.00 299.00 395.00
	PI 207	206/312	33.5/40.5	–	7 + 7	9.3	
	PI 209	241/424	33.5/40.5	–	9 + 9	11.5	
	PI 211	310/506	33.5/40.5	–	11 + 11	13	
	3 FLIGHTS						
PI 311	312/617	33/40.5/48	426	11+11+1 1	24		

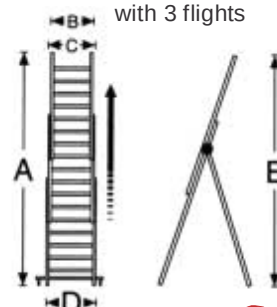
Kalos mini-platform



Multipurpose with 2 flights



Multipurpose with 3 flights



• “KALOS” MINI-PLATFORM ladder



Part No.	Working position	Height (cm)	Height of platform (cm)	Width (cm)	Weight (Kg)	€
MA 25 401	Scaffold Ladder	190 340	140 190	68 68	15 9	520.00

• IRON MINI-PLATFORM



Part No.	Working position	Height (cm)	Height of platform (cm)	Height of stairs (cm)	Weight (Kg)	€
MA 25 405	SP 701	188	145	60	20	205.50



Iron mini-platform

HF WORK SPOTLIGHTS



Part No.	Item	€
20 HF 001	PORTABLE HALOGENOUS SPOTLIGHT	24.50
	• Power 500W • Floor support and carrying handle • 1.5 m wire with socket	
	HALOGENOUS SPOTLIGHT TO FIX	
20 HF 003	• Power 500W • 1.5 m wire with socket	18.50
	FOOT AND HALOGENOUS SPOTLIGHT	
	• Ideal for works. With enlargeable foot and telescopic • Includes 3 m wire with socket	
20 HF 005	1 500W spotlight	57.50
20 HF 006	2 500+500W spotlight	75.00
20 HF 011	SPARE LIGHT: Spare light 500W	2.50

PORTABLE SPOTLIGHT



Part No.	Item	€
20 HF 021	• With bulb protection and hook • 10 m wire with socket	15.00

WIRE ROLLER



Part No.	Item	€
20 HF 101 20 HF 102	INDUSTRIAL ROLLER	76.50 120.00
	• Wire section 3x1.5 mm • Thermal protection • Carrying handle	
	Roller 25 m Roller 50 m	

WORKING BENCH



Part No.	Item	€
MA 23 001	FOLDABLE WORKING BRENCH	51.50
	Mod. MT 13505 • Dimensions: 606 x 640 x 813 mm • Foldable	

IM DIGITAL TEMPERATURE MEASUREMENT



Part No.	Item	€
	THERMOMETER «DIGI-THERMO»	
IM 12 104	- Resolution: 0.1° C - Accuracy: ±1° C - Temperature indication MAX-MIN - Acoustic alarm MAX-MIN - Probe inox. long. 100 mm with 1 mt wire - Includes multiuse clip and table support - Measurement unit selection C/F - Power supply: 1 battery AAA 1.5 V	38.00
IM 12 105	DIGI-THERMO (immersion) -50/+300°C DIGI-THERMO CLIMA (ambient) -50/+120°C	42.00
	POCKET THERMOMETER «PLUMA»	
IM 12 106	HVACR model - Measuring range: -40 to 150° C - With overprobe, magnet and velcro	38.50
	POCKET INFRARED THERMOMETER LASER POINTED	
IM 12 153	Mod. TN 203 L - Measuring range: -33 to +250°C - Accuracy: ±2% - Resolution: 0.1°C, -9.9 to +199.9°C 1°C, -33 to -10°C and +200 to +250°C - Emission: Adjustable 0.01 to 1.0 - Optical relation 3:1 - Switch °C/°F - Self-switching off 15 seg. - Power supply: 1 battery CR2032 - Dimensions: 22.5 x 60 x 104 mm - Weight: 63 gr.	87.50
	INFRARED THERMOMETER WITH LASER POINTER	
IM 12 159	AZ-8886 - Measuring range: -20 to +315° C - Accuracy: ±2% - Resolution: 1°C - Adjustable emission: 0.3-1.0 - Optical relation 6:1 - Register of 9 memories - Indication of: max/min/ t max-min/average - Acoustic alarms (max-min) - Display with light - Self-switching off - Power supply: battery 9V - Dimensions: 156 x 52.6 x 33 mm - Weight: 180 gr. - Includes transport case	242.00



DIGITAL TEMPERATURE MEASUREMENT

Part No.	Item	€
	DIGITAL THERMOMETER «TESTO 925N»	
IM 12 335	- Measuring range: -50 to 1000° C - Accuracy: 0.1°C (-50 to 199.9°C)/ 1°C - Accuracy: ± (0.5°C + 0.3% v.m) (-40 to 900°C) ± (0.7°C + 0.5% v.m) - Sensor: Termocouple type "K" - Conection of the sensor by radio waves with optional module - Printing function optional. - Functions of MIN - MAX - HOLD - Programable beeper - Display with light - Power supply : 1 batery LR-61 9V - Dimensions: 182 x 64 x 40 mm TESTO 925 N without probes	113.50
IM 12 338	PROBES WITH CABLE	
IM 12 339	- Immersion probe: -60 to 400° C (fig. 1)	48.30
IM 12 340	- Air probe: -60 to 400° C (fig. 2)	67.80
	- Surface probe: -60 to 400° C (fig. 3)	67.80
IM 11 447	PRINTER Infrared printer IRDA	273.80
	ACCESSORIES	
IM 12 361	Small Case	32.60
IM 12 362	Big case (units + sensors + accesories)	45.80
IM 12 363	Case Topsafe	34.00

IM DIGITAL TEMPERATURE MEASUREMENT



Part No.	Item	€
IM 12 401	MULTIFUNCTION PROFESSIONAL CLASS THERMOMETER WITH TWO PROBES	
	HBK-16 model - Measuring range: -200 to +1270° C - Resolution: 0.1° C - Accuracy: ±0.05% - Triple display (T1 + T2 + clock) - Differential temperature (T1 - T2) - Incorporated clock to check processes (Hour and minutes / Minutes and seconds) - Max. and min. and average - Max. and Min. alarms - Reading retention and self-switching off - Suitable for thermopairs K and J - Includes: 2 probes with thermopair cable of 1 mt. from -40 to +150°C (environment, contact, etc) - Rubber protection	
	OPTIONAL PROBES	
IM 12 338	– Immersion probe: -60 to 400°C	50.50
IM 12 339	– Air probe: -60 to 400°C	70.60
IM 12 340	– Surface probe: -60 to 400°C	70.60
IM 12 405	– Probe with thermopair cable of 1 mt: -40 to 150°C	28.50
IM 12 406	– Probe with thermopair cable of 1 mt: -40 to 600°C	43.90

ANEMOMETER



Automatic calculation of wind chill equivalent temperature

If the wind blows 12 m/s and the air temperature is 7° C, the thermal feeling is -6° C

7°C + wind 12 m/s = -6°C



Part No.	Item	€
IM 13 010	MICRO-ANEMOMETER «KESTREL»	
	K1000 (Anemometer) - Dimensions: 122 x 42 x 14 mm - Weight with cover: 66 gr - Measuring range: 0.3 to 40 m/sec - Resolution: 0.1 - Accuracy: ± 3% v.m. - Indication of max. and average speed - Self-switching off (30 min.) - Shock proof cover with safety strap - High accuracy replaceable impeller Ø25 mm - Water-proof IP 67 - Measure units: m/s, km/h, Mph, Ft/min, knots	
IM 13 011	K2000 (Thermo-anemometer) The same as K1000 plus: - Temperature indication: - Measuring range: -15/+50° C - Accuracy: ±1°C - Resolution: 0.1°C - Wind chill equivalent temperature - Temperature units: Fahrenheit and centigrade	227.00

IM ANEMOMETERS



KESTREL
3000

Automatic calculation of the temperature equivalent to the humidity degree
A greater humidity degree in the environment causes a bigger thermic feeling:

$$26.3^{\circ}\text{C} + 66\% \text{ HR} = 28.5^{\circ}\text{C}$$



KESTREL 4000



Supplied with cover and security strap

TEMP	°C
max	25.0
avg	18.6
min	12.8

Personalized screensvalues

COMBO 1	
13.2	M/S
72.5	°F
89	%

Minimum, average and maximum valu



OPTIC
INTERFACE

Part No.	Item	€
IM 13 012	K3000 (Anemometer + Thermometer + Hygrometer) The same as K2000 plus: • Relative humidity indication: – Measuring range: 0 - 100% H.R. – Accuracy: ±3% – Resolution: 1% • Indication of the temperature equivalent to humidity degree • Indication of the dew point	348.00
	POCKET WEATHER TRACKER «KESTREL 4000»	
IM 13 014	K4000 (Anemometer + Thermometer + Hygrometer + Barometer + Altimeter) Measuring of : • Speed: – Measuring units: m/s, km/h, Mph, Ft/min, knots, Beaufort. – Measuring range: 0.3 to 40 m/s – Resolution: 0.1 m/s – Accuracy: ±3% • Temperature: – Measuring units: °C, °F – Measuring range: -20 to +60° C – Resolution: 0,° C – Accuracy: ±1° C • Humidity: – Measuring range: 0 to 100% Hr – Resolution: 1% Hr – Accuracy: ±3% Hr (between 15% and 90% Hr) • Barometric pressure: – Measuring units: mbar, hPa – Measuring range: 870 to 1080 mbar – Resolution: 0,1 mbar – Accuracy: ±3 mbar • Altitude: – Measuring units: mt, foot (ft) – Measuring range: -500 to 9000 mt – Resolution: 1 mt Automatic calculation of: • Equivalent temperature to the wind chill • Equivalent temperature to humidity degree • Dew point • Air density (displayed in mt.) Technical characteristics: • Time and date • Minimum and maximum values • Data capture up to 250 readings (programmable 2 seconds to 12 hour interval) or manually • Charts of the registered values indicating date and time • Personalized screens (possibility of choosing and visualizing simultaneously 3 values) • Water-proof • Language selection (Spanish, English, French, German, Italian) Specifications: • Impeller Ø25 mm WITH RIGID PROTECTING LID. • Retroilluminated screen • Self-switching off (optional) • Dimensions: 126 x 45 x 29 mm • Weight: 102 gr • Supplied with cover and security strap • Power supply: 2 batteries AAA 1.5V Rigid case Optical interface for data transmission to PC • Connection by Serial wire	505.80 35.00 140.00
IM 13 017 IM 13 018		

IM ANEMOMETERS



Part No.	Item	€
IM 13 040	POCKET THERMOMETER-ANEMOMETER «TESTO 405-V1»	
	TESTO 405-V1 Mini series - Measuring range: -20 / +50° C 0 - 5 m/seg (-20 to 0° C) 0 - 10 m/seg (0 to 50° C) 0 - 99,990 m³/h - Flow metre in m³/h, introducing the area - Resolution: 0.01 m/seg / 0.1° C - Accuracy: ± 5% v.m. / ± 0.5° C - Probe stem: articulated Ø12-16 mm total length 300 mm - Includes multiuse clip and conduct support	154.00
	ANEMOMETER MULTIFUNCTION «TESTO 435-1 N»	
IM 13 043	- Measuring range: look at probes - Resolution: 0.01 m/seg - 0.1 m/seg - 0.1° C 0.1% HR - 1 ppm / 0.1 hPa - Air speed, air flow, humidity, temperature, CO₂, pressure - Via radio communication with optional module - Optional printer - Function MIN - MAX - HOLD - Average of values by point and time - Automatic switch-off - Display with light - Power supply: 1.5V three AA batteries - Dimensions: 220 x 74 x 46 mm TESTO 435-1 N (without probes)	539.60
	SONDAS CON CABLE - Sensor: 0.6 a 40 m/s diam. 16 mm (fig. 6) - Sensor: 0.25 a 20 m/s diam. 60 mm (fig. 7) - Hot wire sensor: 0 a 20 m/s diam. 7.5 mm (fig. 8) - Combined sensor HR/Temp/Abs Pressure/CO₂ 0-100% HR / 0-50°C / 600-1150 hPa / 0-10000 ppm - Immersed sensor: -60 a 400°C (fig. 1) - Air sensor: -60 a 400°C (fig. 2) - Surface sensor: -60 a 400°C (fig. 3)	
IM 13 047		530.80
IM 13 048		522.60
IM 13 051		323.50
IM 13 056		865.00
IM 12 338		48.25
IM 12 339		67.80
IM 12 340		67.80
IM 11 447	PRINTER IRDA infrared printer	274,00
	ACCESSORIES Maleta	97.80
IM 13 059	Maleta (equipo + sondas + accesorios)	136.50
	IMPORTANT: Add the chosen probe stem to the anemometer	
IM 13 151	DIGITAL MEASURER «DCFM-8901» TEMPERATURE / SPEED / FLOW	
	Digital measurer DCFM-8901 - Measuring range: - Speed: 0 to 20 mts/seg - Temperature: -20 to 70° C - Resolution: 0.01 mts/seg / 0.1° C - Automatic air flow calculation (introducing transmitter area) - Maximum-minimum and averages - Probe stem type Ø 70 mm. - Outlet RS-232 for PC - Includes transport case	371.00

IM AMPERIMETRIC PINCERS AND MULTIMETERS



Part No.	Item	€
	DIGITAL AMPERIMETRIC PINCERS	
IM 14 200	Mod. CIE-266 - Measuring range: 600A c.a. - Tension: 600V c.a./c.c. - Resistance: 20 k - Continuity - Maxilla Ø55 mm. - Power supply: 9 V battery - Dimensions: 230 x 68 x 35 mm - Weight: 300 gr. - Includes proof tips and case	74.10
IM 14 011	Mod. HBK-50 (minipincer - self-range) - Complies with CE & IEC-1010 (security) - Measuring range: 40/400 A c.a. - Tension: 400 V c.a. / 600 V c.c. - Resistance: 400 - Frequency: 4 kHz to 400 kHz - Resolution: 10 mA - Continuity by buzzing - Lecture retention - Autorange and graph bar - Automatic reset - Maxilla Ø 30 mm - Power supply: 1.5 V two batteries - Dimensions: 195 x 64 x 30 mm. Weight: 240 grs. - Includes proof tips and case	112.70
	"TESTER" MULTIMETERS	
IM 14 201	Mod. HBK-80 - Complies with CE & IEC-1010 (security) - Meas. range: 0-600V c.a./c.c., 0-10 A c.c., 0-2 M - Diodes - transistors - continuity (buzzing) - Display with light - Rubber protector and proof tips - Power supply: 9 V battery - Dimensions: 138 x 69 x 31 mm - Weight: 170 gr.	24.50

DIGITAL THERMOMETER-HYGROMETERS



TESTO
605-H1



TESTO
625 N



Part No.	Item	€
	POCKET THERMOMETER-HYGROMETER «TESTO 605-H1»	
IM 16 201	TESTO 605-H1 Mini series - Measuring range: -20 to +70°C / 5 - 95% HR - Dew point (td) - Resolution: 0.1°C / 0.1% HR - Accuracy: ± 0.5°C / ± 3% HR - Probe stem: Ø 12 mm, 125 mm length - Includes: multiuse clip and conduct support	117.00
	TERMO-HIGRÓMETRO «TESTO 625 N»	
	- Measuring range: 0 to 100% HR / -10 a 60°C (NTC) -200 to 1370°C (termopar K) - Resolution: 0.1% Hr / 0.1°C / 0.1°C - Accuracy: (± 2.5% HR) (5 to 95% HR) / ±0.5°C - Compact probe stem - Air speed, air flow, humidity, temperature, dew point and wet bulb temp. - Via radio communication with optional module. - Optional printer - Function MIN - MAX - HOLD - Average of values by point and time - Automatic switch-off - Display with light - Power supply: 9V LR-61 battery - Dimensions: 182 x 64 x 40 mm	
IM 16 231	TESTO-625 N with integrated sensor	294.00
IM 16 235	Handle with wire 1 m	54.80
	ACCESSORIES	
IM 12 361	Case	32.60
IM 13 065	Case Topsafe	32.60

IM DIGITAL HYGROMETER-THERMOMETERS



Part No.	Item	€
IM 16 105	HYGROMETER-THERMOMETER «DELTA TRAK»	37.80
	Wall or table DeltaTrak - Measuring range: 10 to 99% Hr / -10 to 60 °C - Resolution: 1% Hr / 0.1° C - Dimensions: 110 x 70 x 20 mm.	
IM 16 107	HYGROMETER-THERMOMETER «TH-10»	43.75
	- Big display - Temperature: -30/+50°C - Humidity: 20 - 99% HR - Wall or table support - Power supply: 1 battery AAA LR03 (1.5V) FUNCTIONSS: - Indication Máx/Mín. - Clocks (12/24 h) °C/°F	

DIGITAL TACHOMETER



Part No.	Item	€
IM 19 203	Mod. HBK-24 - Optical + Contact + m/min. - Removable head for contact measures - Scales: - Optical: 2.5 at 99.999 RPM - Contact: 0.5 at 19.999 RPM - Speed of surface: 0.05 at 1999 mt/min	270.00

DISTANCE METER AND METAL DETECTOR



Part No.	Item	€
IM 19 306	MULTIDETECTOR 4x1 WK009	100.00
	Professional tool with 4 functions: - Ultrasound distance meter: - Laser pointer guided - Range: 0.61 - 12 mt - Calculation of SQM and volume. - Metal detector (Thickness: 78 mm) - Current detector (Thickness: 78 mm) - Wood detector (Thickness: 78 mm) General features: - LCD indicator and beeper (75 dB) - Maximum error: 1% - Power supply: Battery 9V - Dim.: 150 x 65 x 43 mm. Weight: 180 grs. (w/o batt)	

DIGITAL SONOMETERS



SC-2C

Part No.	Item	€
IM 20 210	«CESVA»	1,008.00
	Supplied with the Calibration Official Certificate (according to Ministerial Order from 16-12-98)	
	Mod. SC-2C with primitive verification - Measuring range 30 to 130 dB - Resolution 0.1 dB HOMOLOGATED	

14 UNIVERSAL REMOTRE CONTROL FOR SPLITS

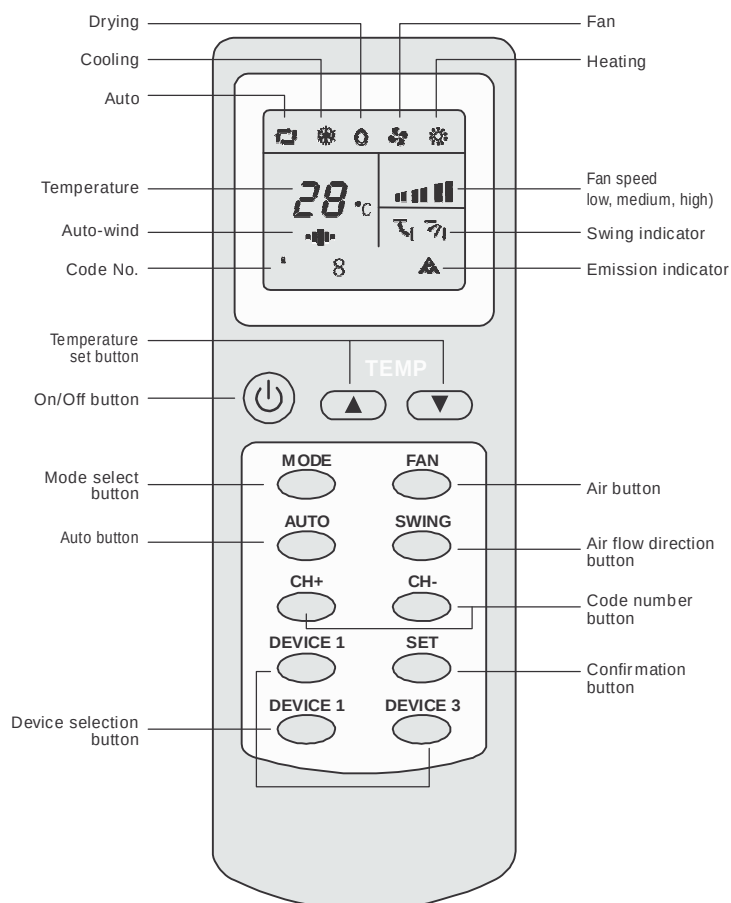
MUNDCLIMA®

It allows to control the majority of the splits. It is required to select the brand code of the equipment.

Codes:

Brand	Code No.					
Ariston	003	019	024	043		
Artel	003	019	024	043		
Chang Hong	010	056	079			
Chang Lin	064	066	097			
Chigo	094					
Chofu	047					
Chunlan	006	021	022			
Conrowa	061					
Daikin	059	060	104	105		
Dong Bao	023	025	064	077	097	100
Fujitsu	052	053				
Gaudiness	048					
Gree	003	019	024	043		
GuQiao	015					
Haier	011	046	047	055	057	093
Hitachi	084	102				
Hua Ling	061	062	063	107	109	
Huoao Bao	054	082	083	101	091	020
HuiFeng	032	088	090			
JS	100	111				
Kangli	044	045				
Kelon	005	020	027	039	086	

Brand	Code No.									
LG	012	013								
Midea	032	038	072	089						
Mitsubishi	000	001	028	029	030	032	033	034	035	036
Mitsubishi	031	049	050	051	069	070	071	074	076	088
Mitsubishi	002	004	042	062	073	085	098			
Mundoclima	003	019	024	043						
Panasonic	014	016	017	058						
Philco	103									
Raybo	008	026								
Roca	003	019	024	043						
Sampo	045	046								
Sanyo	009	040	075	078	099					
Sharp	027	087	095							
Shinco	065	066								
Shuanglu	061	107								
Sova	082	101								
Toshiba	037	067								
Trane	018		078	096						
Whirlpool	007	068								
Xinle	092									
Yangzi	110									
York	003	019	024	043						



Automatic search:

Turn on the remote controller pushing the ON/OFF button. Press the desired DEVICE button (1, 2 or 3) depending on the position that you want to save the configuration. Once you have selected the device, push the SET button and keep pressed the ON/OFF button within two seconds. With this procedure the codes will be changed every two seconds.

As soon as one code is detected, the air conditioner will beep or similar and will be turned on, then push the SET button in order to stop the automatic search.

Please use the buttons CH+ y CH- in case you want to increase or decrease the channel number. Once you get the right channel, press the SET button to save the channel number.

Part No.	Item	€
CO 14 902	Universal remote control for splits	70.00

CA ALUMINIUM SUPERFLEXIBLE TUBE

DESCRIPTION: Superflexible tube with steel helical frame and double steel coating.



ADVANTAGES:

- Very light
- Very flexible
- Supercompressible
- Easy installation
- Finished aesthetic

Part No.	Item	€
	"ESCOFLEX"	
	• Supplied in a length of 10 metres • Folded from 0.5 to 0.7 m • Temperatures from -20 to 110°C • Maximum Speed: 20 m/second. • Pressure: 175 mm c.d.a. • M1 Type	
CA 07 102	Diameter 52 mm	2.00
CA 07 103	Diameter 76 mm	2.16
CA 07 104	Diameter 82 mm	2.16
CA 07 105	Diameter 102 mm	2.40
CA 07 106	Diameter 127 mm	2.82
CA 07 107	Diameter 152 mm	3.52
CA 07 123	Diameter 160 mm	3.64
CA 07 108	Diameter 180 mm	4.10
CA 07 109	Diameter 203 mm	4.60
CA 07 110	Diameter 229 mm	5.80
CA 07 111	Diameter 254 mm	6.10
CA 07 113	Diameter 305 mm	7.24
CA 07 125	Diameter 315 mm	7.50
CA 07 115	Diameter 356 mm	13.55
CA 07 116	Diameter 406 mm	16.40
CA 07 117	Diameter 457 mm	18.00
CA 07 118	Diameter 508 mm	20.00
CA 07 119	Diameter 610 mm	28.24

* Works special offers (consult)

INSULATED ALUMINIUM SUPERFLEXIBLE TUBE

DESCRIPTION: Duct composed of superflexible tube with thermic insulator in 25 mm. of fibre glass, density 16 Kg/cm³ and steam barrier with a reinforced aluminium convoluted.



ADVANTAGES:

- It avoids thermic loss
- Steam barrier
- Very flexible

Part No.	Item	€
	INSULATED "ESCOFLEX"	
	• Supplied in a length of 10 metres • Folded at 1.15 m • Temperatures from -20 to 110°C • Maximum 20 m/second • M1 Type (C.S.T.B.)	
CA 07 205	Diameter 102 mm	8.04
CA 07 206	Diameter 127 mm	8.92
CA 07 207	Diameter 152 mm	9.64
CA 07 223	Diameter 160 mm	10.10
CA 07 208	Diameter 180 mm	11.50
CA 07 209	Diameter 203 mm	11.90
CA 07 210	Diameter 229 mm	14.20
CA 07 211	Diameter 254 mm	15.16
CA 07 213	Diameter 305 mm	17.50
CA 07 225	Diameter 315 mm	18.12
CA 07 215	Diameter 356 mm	21.10
CA 07 216	Diameter 406 mm	28.40
CA 07 217	Diameter 457 mm	37.20
CA 07 218	Diameter 508 mm	40.12
CA 07 219	Diameter 610 mm	64.50

* Works special offers (consult)

Note: another models (acoustical, black, grey, PVC), see Ventilation price list.

CA ALUMINIUM SUPERFLEXIBLE TUBE "KOMBI" PROTECTION BLACK



"KOMBI"

Part No.	Item	€
	"ESCOFLEX KOMBI"	
	• Supplied Long. 10 meters • Made of 3 aluminium layers and 2 polyester film layers outside and covered by a black PVC layer • Working temperature: -30 a 140°C • Maximum air speed: 30 m/sec. • Maximum working accuracy: 300 mm.c.d.a. • Fire reaction class (Giordano Institute)	
CA 07 374	Diameter 102 mm	5.28
CA 07 375	Diameter 127 mm	6.44
CA 07 376	Diameter 152 mm	7.90
CA 07 377	Diameter 160 mm	8.20
CA 07 378	Diameter 180 mm	9.40
CA 07 379	Diameter 203 mm	10.48
CA 07 380	Diameter 229 mm	12.60
CA 07 381	Diameter 254 mm	13.94
CA 07 383	Diameter 305 mm	16.64
CA 07 384	Diameter 315 mm	20.76
CA 07 385	Diameter 356 mm	24.20
CA 07 386	Diameter 406 mm	28.38
CA 07 387	Diameter 457 mm	31.64
CA 07 388	Diameter 508 mm	37.05

ALUMINIUM SUPERFLEXIBLE TUBE WITH GREY PVC EXTERNAL PROTECTION



Part No.	Item	€
	«ESCOFLEX-KOMBIFLEX»	
	• Supplied Long. 10 m • Folded from 0.5 to 0.7 • Exterior grey PVC layer • Working temperature: -20°C to +110°C • Maximum speed 20 m/sec • Maximum pressure: 175 mm cda	
CA 07 355	Diameter 102 mm	4.40
CA 07 356	Diameter 127 mm	5.22
CA 07 357	Diameter 152 mm	6.56
CA 07 358	Diameter 160 mm	7.44
CA 07 359	Diameter 180 mm	8.10
CA 07 360	Diameter 204 mm	8.60
CA 07 362	Diameter 254 mm	11.00
CA 07 363	Diameter 305 mm	13.20
CA 07 364	Diameter 315 mm	13.80
CA 07 365	Diameter 355 mm	15.50
CA 07 366	Diameter 405 mm	18.48

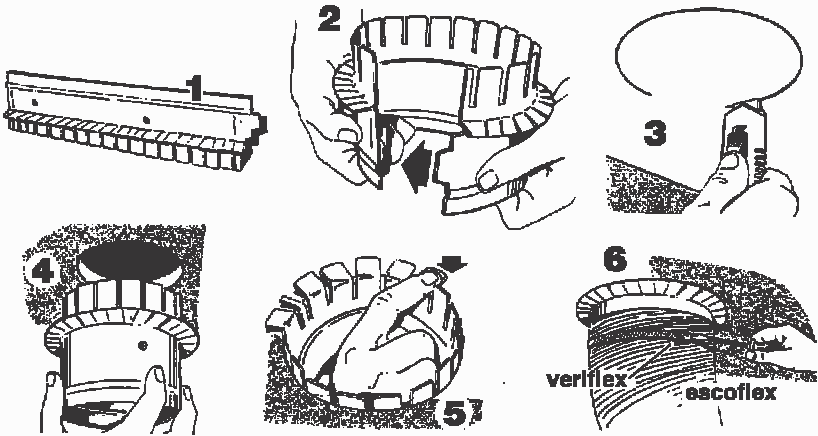
CUTTING SCISSORS WITH WIRE CUTTER



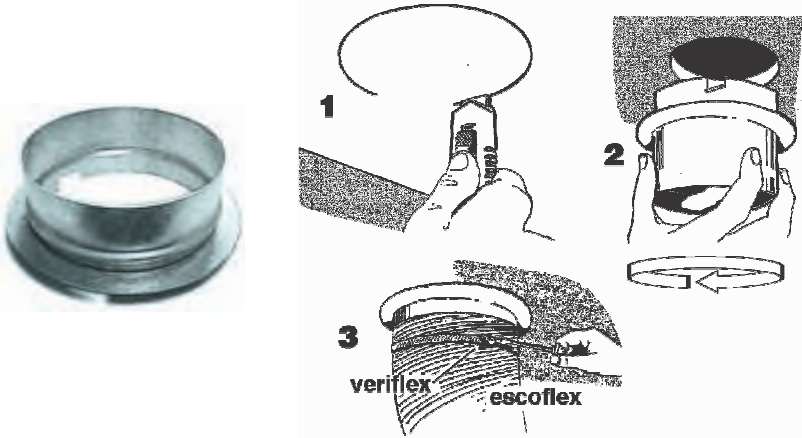
Part No.	Item	€
MA 17 151	Article FDC2 Cutting tubes with wire cutter. Long. 310 mm	87.50

AI FIXING OF FLEXIBLE TUBES TO FIBRE DUCT

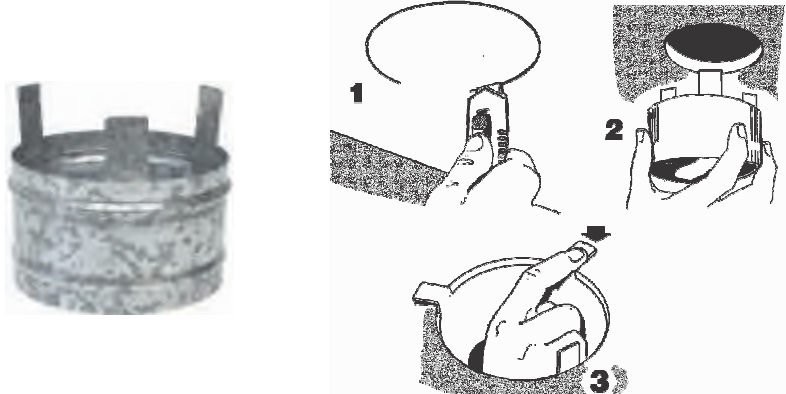
• Sleeve with flange «CONDUC-COLL»

Mounting	Part No.	Diameter	€
	AI 39 003	Ø 100	7.10
	AI 39 004	Ø 125	6.98
	AI 39 005	Ø 150	9.14
	AI 39 015	Ø 160	9.46
	AI 39 006	Ø 175	9.66
	AI 39 007	Ø 200	10.72
	AI 39 008	Ø 225	11.18
	AI 39 009	Ø 250	11.68
	AI 39 010	Ø 300	13.18
	AI 39 016	Ø 315	13.36
	AI 39 011	Ø 350	14.08
	AI 39 012	Ø 400	15.74

• Sleeve for screwing «FIBRA-COLL»

Mounting	Part No.	Diameter	€
	AI 39 101	Ø 100	7.58
	AI 39 102	Ø 125	8.10
	AI 39 103	Ø 150	8.96
	AI 39 104	Ø 160	9.32
	AI 39 105	Ø 175	9.42
	AI 39 106	Ø 200	10.34
	AI 39 112	Ø 225	10.90
	AI 39 107	Ø 250	12.12
	AI 39 108	Ø 300	14.86
	AI 39 109	Ø 315	16.44
	AI 39 110	Ø 350	17.52
	AI 39 111	Ø 400	21.60

• Sleeve with 3 feet «TUB-COLL»

Mounting	Part No.	Diameter	€
	AI 39 121	Ø 100	6.24
	AI 39 122	Ø 125	6.46
	AI 39 123	Ø 150	7.62
	AI 39 124	Ø 160	7.72
	AI 39 125	Ø 175	8.24
	AI 39 126	Ø 200	9.42
	AI 39 127	Ø 225	10.30
	AI 39 128	Ø 250	11.06
	AI 39 129	Ø 300	14.74
	AI 39 130	Ø 355	16.72
	AI 39 131	Ø 400	19.48

• Sleeve with clamp



RIVETS TO
DUCT

Part No.	Item	€
CA 01 202	Ø 100	16.28
CA 01 203	Ø 125	16.82
CA 01 204	Ø 150	16.82
CA 01 205	Ø 175	17.38
CA 01 206	Ø 200	17.38
CA 01 207	Ø 225	21.62
CA 01 208	Ø 250	21.62
CA 01 210	Ø 300	27.44
CA 01 211	Ø 355	30.60
CA 01 212	Ø 400	37.12

• Metal Strip



FORMABLE «STRIP STEEL» CLAMPS

CA 07 911	30 metres coil	44.42
CA 07 916	Loose devices	1.12
	Box of 50 devices by traction	0.92/unit

«VERYFLEX» CLAMPS MADE TO MEASURE

	• Strip inox steel	
	• Adjustable traction device	
CA 07 941	I 110 (50 to 110)	1.44
CA 07 942	I 135 (60 to 135)	1.58
CA 07 943	I 170 (60 to 170)	1.64
CA 07 944	I 215 (60 to 215)	2.16
CA 07 945	I 270 (60 to 270)	2.36
CA 07 946	I 325 (60 to 325)	2.86
CA 07 947	I 380 (60 to 380)	3.04
CA 07 948	I 425 (60 to 425)	3.96
CA 07 949	I 525 (60 to 525)	5.54
CA 07 950	I 660 (60 to 660)	4.88

Mounting sequence Clamps «VERIFLEX»made to measure:



• Polyamide Clamp



Part No.	Dimensions	Ø Max. Duct	Units per bag	€/unit
	• Polyamide 6.6 in BLACK			
CA 07 955	7.8 x 550	up 160	100	0.80
CA 07 959	9 x 780	up 230	100	1.20
CA 07 961	12.5 x 1000	up 305	50	2.40
CA 07 962	9 x 1220	up 355	50	2.30
CA 07 969	ATC 8 Pincers (Tighten width: up to 8 mm)			70.00
CA 07 970	ATC 13 Pincers (Tighten width: up to 13 mm)			145.00

• Sealing strip in aluminium for OUTSIDE



Part No.	Item	€
	Sealing strip in adhesive elastomer with modified butyl, covered by one of their sides with an aluminium sheet in 0.04 mm. It guarantees a good seal to moisture and it represents an excellent barrier to open-air. Ultraviolet rays-resistant. Thickness: 0.95 mm	
CA 01 946	Roll AFT-701-50 50 mm x 15 m	48.00
CA 01 947	Roll AFT-701-75 75 mm x 15 m	72.00

01 VENTILATION BOX

OBRA Series

- Front discharge
- Rear suction



**CLOSED
MOTOR
IP 55**

Air outlet position



Unique

Part No.	Models equivalences		Motor (CV)	R.p.m	€
220V SINGLE-PHASE CLOSED MOTOR - 1 SPEED					
CV 01 265	BD 19/19 M6	7/7	1/10	900	298,65
CV 01 266	BD 19/19 M4	7/7	1/5	1,350	301.50
CV 01 267	BD 25/20 M6	9/7	1/6	900	333.50
CV 01 276	BD 25/20 M6	9/7	1/3	900	343.50
CV 01 268	BD 25/25 M6	9/9	1/6	900	341.00
CV 01 269	BD 25/25 M6	9/9	1/3	900	351.50
CV 01 270	BD 25/25 M4	9/9	1/2	1,350	357.00
CV 01 281	BD 25/25 M4	9/9	3/4	1,350	361.50
CV 01 271	BD 28/21 M6	10/8	1/3	900	364.00
CV 01 279	BD 28/21 M6	10/8	1/2	900	388.00
CV 01 272	BD 28/28 M6	10/10	1/3	900	375.00
CV 01 273	BD 28/28 M6	10/10	1/2	900	395.70
CV 01 274	BD 28/28 M4	10/10	3/4	1,400	395.70
CV 01 275	BD 33/25 M6	12/9	3/4	900	522.00
CV 01 295	BD 33/25 M6	12/9	1	900	579.50
CV 01 278	BD 33/33 M6	12/12	3/4	900	531.00
CV 01 298	BD 33/33 M6	12/12	1	900	588.50
CV 01 290	BD 33/33 M6	12/12	1.5	900	690.00
230-400V TREE-PHASE CLOSED MOTOR - 1 SPEED					
CV 01 277	BD 33/25 T6	12/9	1.5	900	541.00
CV 01 280	BD 33/33 T6	12/12	1.5	900	546,80
CV 01 300	BD 39/39 T6	15/15	3	920	1053.0

Part No.	Models equivalences		Motor (CV)	R.p.m	€
220V SINGLE-PHASE CLOSED MOTOR - 3 SPEEDS					
CV 01 451	BD 19/19 M6	7/7	1/10		335.00
CV 01 452	BD 19/19 M4	7/7	1/5		342.00
CV 01 455	BD 25/25 M6	9/9	1/4		384.00
CV 01 456	BD 25/25 M6	9/9	1/3		397.00
CV 01 457	BD 25/25 M4	9/9	1/2		402.50
CV 01 461	BD 28/28 M6	10/10	1/3		422.50
CV 01 462	BD 28/28 M6	10/10	1/2		445.00
CV 01 463	BD 28/28 M4	10/10	3/4		445.00
CV 01 471	BD 33/33 M6	12/12	3/4		594.50
CV 01 472	BD 33/33 M6	12/12	1		615.00

«CLOSED OBRA» Serie

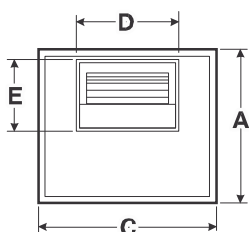
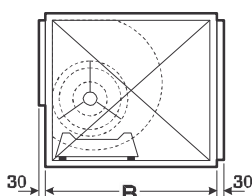
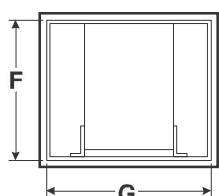
- Front discharge
- All sides closed



Part No.	Models equivalences		Motor (CV)	R.p.m	€
220V SINGLE-PHASE CLOSED MOTOR - 1 SPEED					
CV 01 351	BD 19/19 M6	7/7	1/10	900	315.00
CV 01 352	BD 19/19 M4	7/7	1/5	1,350	317.00
CV 01 353	BD 25/25 M6	9/9	1/6	900	361.00
CV 01 354	BD 25/25 M6	9/9	1/3	900	371.50
CV 01 355	BD 25/25 M4	9/9	1/2	1,350	377.50
CV 01 356	BD 28/28 M6	10/10	1/3	900	398.50
CV 01 357	BD 28/28 M6	10/10	1/2	900	419.50
CV 01 358	BD 28/28 M4	10/10	3/4	1,400	419.50
CV 01 359	BD 33/33 M6	12/12	3/4	900	562.00
CV 01 360	BD 33/33 M6	12/12	1	900	620.50
CV 01 363	BD 33/33 M6	12/12	1.5	900	721.00
230-400V TREE-PHASE CLOSED MOTOR - 1 SPEED					
CV 01 364	BD 33/33 T6	12/12	1.5	900	578.00

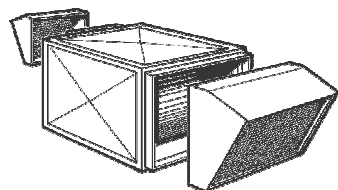
* Available all diameters clamp

Dimensions:

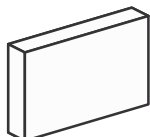


Fan		A	B	C	D	E	F	G
BD 19/19	7/7	379	320	444	257	230	327	324
BD 25/20	9/7	449	381	483	260	283	397	363
BD 25/25	9/9	449	381	549	326	283	397	429
BD 28/21	10/8	507	416	533	292	312	455	413
BD 28/28	10/10	507	416	599	357	312	455	479
BD 33/25	12/9	580	492	643	337	368	528	523
BD 33/33	12/12	580	492	729	416	368	528	609
BD 39/39	15/15	666	595	870	496	425	614	750

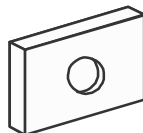
05 ACCESORIES FOR VENTILATION BOXES



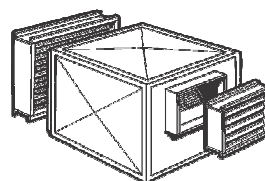
SOLAR
SHADE



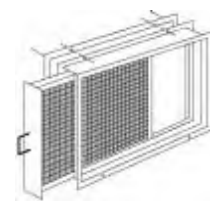
BLIND SIDE



ROUND INLET



PRESSURE
GRIDS



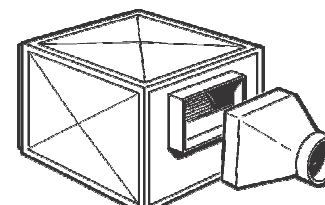
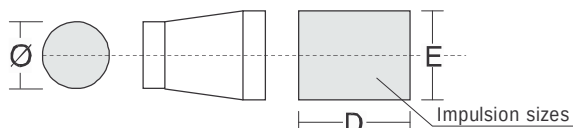
FILTER HOLDER

Fan size		SOLAR SHADE		Blnd side	Round inlet(2)	Pressure grid		Filter Holder
		Discharge	Suction			Discharge	Suction	Obra
Código inicio: CV 05		102 ->	122 ->	602 ->	631 ->	302 ->	402 ->	521 ->
BC25/13	—	42.75	64.25	13.00	29.50	80.90	108.00	83.70
BD19/19	AT 7/7	42.75	64.90	10.80	22.90	80.90	112.75	83.70
BD25/20	AT 9/7	45.00	64.90	16.40	33.70	88.55	128.80	95.40
BD25/25	AT 9/9	45.00	64.90	13.20	25.25	101.25	128.80	95.40
BD28/21	AT 10/8	53.20	70.10	19.50	37.15	—	139.95	103.00
BD28/28	AT10/10	53.20	70.10	14.90	28.80	—	144.90	103.00
BD33/25	AT 12/9	53.50	81.70	17.35	40.70	124.55	198.15	114.00
BD33/33	AT12/12	53.50	81.60	17.70	42.45	134.75	207.80	114.00
BD39/39	AT15/15	64.10	82.80	26.60	43.55	140.45	234.90	162.00

Notes: (1) For other types as Viledón man or foams, see addttional information.
(2) For and small inlet or round inlet for more than one entry, add **18.50 €** (CV 05 186) each entry.

• Section changes

IMPULSION HOPPER:



Circular diameter	BV 19/19 AT 7/7	BD 25/20 AT 9/7	BV 25/25 AT 9/9	BV 28/21 AT 10/8	BV 28/28 AT 10/10	BD 33/25 AT 12/9	BV 33/33 AT 12/12	BV 39/39 AT 15/15
Part Number: CV 05	823 ->	831 ->	841 ->	851 ->	861 ->	871 ->	881 ->	891 ->
150	46.53	71.10	53.50	—	—	—	—	—
200	46.65	80.90	53.50	80.10	58.15	—	—	—
250	48.90	85.50	55.55	92.45	58.15	—	71.10	—
300	57.80	88.95	57.80	97.20	61.10	69.65	71.10	123.95
350	—	94.80	59.70	101.90	63.00	71.50	73.45	128.00
400	—	—	80.50	109.40	67.75	77.70	79.60	132.80
450	—	—	—	—	103.90	109.95	110.85	137.45
500	—	—	—	—	—	135.90	137.50	144.60

Note: In case of special sizes, please use the next price.

• Joint with clamp

Made on sheet metal



Diameter	100	125	150	175	200	250	280	300	355	400
Part No.	CA 01 202	CA 01 203	CA 01 204	CA 01 205	CA 01 206	CA 01 208	CA 01 209	CA 01 210	CA 01 211	CA 01 212
Price	11.75	12.15	12.15	12.55	12.55	15.60	19.80	19.80	22.10	22.10

MUNDCLIMA®



■ ■ ■ ■ ■ air conditioning ■ ■ ■ ■ ■
2007

A comfortable world...

20 WINDOW AIR CONDITIONERS

MUND KLIMA®

• Remote control (R-407C)



Part No.	Model	CAPACITY (W)		€
		Cool	Heat	
CL 20 351 CL 20 353	ONLY COOL			475.00 645.00
	MUV-07CN MUV-12CN	2,000 3,400	— —	
CL 20 361 CL 20 362 CL 20 363 CL 20 364	HEAT PUMP			599.00 619.00 765.00 1088.00
	MUV-07HN	2,000	2,100	
	MUV-09HN	2,500	2,600	
	MUV-12HN	3,400	3,500	
	MUV-18HN	5,100	5,200	

• Manual control (R-407C)



Part No.	Model	CAPACITY (W)		€
		Cool	Heat	
	HEAT PUMP			
CL 20 386	MUV-09HE	2,600	2,600	490.00
CL 20 387	MUV-12HE	3,500	3,500	645.00
CL 20 388	MUV-18HE	5,200	5,200	762.00

(*)R.A.E. marked product (8.5 €)

WALL SPLIT

• Elegant Serie



Part No.	Model	CAPACITY (W)		€
		Cool	Heat	
	HEAT PUMP			
CL 20 562	MUP-09HF*	2,500	2,750	499.00
CL 20 563	MUP-12HF*	3,200	3,520	595.00
CL 20 564	MUP-18HF*	5,200	5,700	899.00
CL 20 565	MUP-24HF*	7,000	7,700	1,201.00
CL 20 572	MUP-09HG*	2,500	2,750	575.00
CL 20 573	MUP-12HG*	3,200	3,520	666.00
CL 20 574	MUP-18HG	5,200	5,700	932.00
CL 20 575	MUP-24HG	7,000	7,700	1,299.00

(*) Available from June 2007

WALL SPLIT "INVERTER" (R-410A)



Part No.	Model	CAPACITY (W)		€
		Cool	Heat	
CL 20 163	HEAT PUMP			996.00
	MUPR-12HE	3,500	4,000	

CL WALL SPLIT AND MULTI SPLIT "INVERTER" (R-410A)

MUND KLIMA®



Part No.	Model	CAPACITY (W)		€
		Cool	Heat	
CL 20 170 CL 20 171 CL 20 172 CL 20 173 CL 20 174 CL 20 175*	INDOOR UNITS			
	MUPR-07HEM	2,000	2,500	241.00
	MUPR-09HEM	2,500	3,200	249.00
	MUPR-12HEM	3,500	4,000	257.00
	OUTDOOR UNITS			
	MUPR-18HE2	1,600-6,600	2,300-7,400	2,035.00
	MUPR-27HE3	2,750-9,300	3,140-10,800	2,215.00
MUPR-27HE4	2,820-9,600	3,240-11,200	2,270.00	

* Available from JUNE 2007

CONFIGURATION EXAMPLES:

2x1



Model	Outdoor	Indoor 1	Indoor 2	PVP
7+7	CL20173	CL20170	CL20170	2,520.00
7+9	CL20173	CL20170	CL20171	2,525.00
7+12	CL20173	CL20170	CL20172	2,533.00
9+9	CL20173	CL20171	CL20171	2,525.00
9+12	CL20173	CL20171	CL20172	2,538.00
12+12	CL20173	CL20172	CL20172	2,549.00

3x1



Model	Outdoor	Indoor 1	Indoor 2	Indoor 3	PVP
7+7+7	CL20174	CL20170	CL20170	CL20170	2,940.00
7+7+9	CL20174	CL20170	CL20170	CL20171	2,920.00
7+7+12	CL20174	CL20170	CL20170	CL20172	2,956.00
7+9+9	CL20174	CL20170	CL20171	CL20171	2,949.00
7+9+12	CL20174	CL20170	CL20171	CL20172	2,959.00
7+12+12	CL20174	CL20170	CL20172	CL20172	2,971.00
9+9+12	CL20174	CL20171	CL20171	CL20172	2,963.00

4x1



Model	Outdoor	Indoor 1	Indoor 2	Indoor 3	Indoor 4	PVP
7+7+7+7	CL20175	CL20170	CL20170	CL20170	CL20170	3,235.00
7+7+7+9	CL20175	CL20170	CL20170	CL20170	CL20171	3,239.00
7+7+7+12	CL20175	CL20170	CL20170	CL20170	CL20172	3,250.00
7+7+9+9	CL20175	CL20170	CL20170	CL20171	CL20171	3,243.00
7+7+9+12	CL20175	CL20170	CL20170	CL20171	CL20172	3,255.00
7+9+9+9	CL20175	CL20170	CL20171	CL20171	CL20171	3,246.00
9+9+9+9	CL20175	CL20171	CL20171	CL20171	CL20171	3,250.00
9+9+9+12	CL20175	CL20171	CL20171	CL20171	CL20172	3,262.00

WALL MOUNTED MULTI-SPLIT 2x1 (R-407C)



Part No.	Model	CAPACITY (W)		€
		Cool	Heat	
CL 20 142 CL 20 143	ONLY COOL			1,182.00 1,375.00
	MUP-09X2CN MUP-12X2CN	2,500 x 2 3,500 x 2	— —	
CL 20 152 CL 20 153 CL 20 154	HEAT PUMP			1,367.00 1,525.00 1,583.00
	MUP-09X2HN	2,500 x 2	2,800 x 2	
	MUP-12X2HN	3,500 x 2	3,800 x 2	
	MUP-12+9HN	3,500+2,500	2,800 + 2,800	

WALL MOUNTED MULTI-SPLIT 3x1 and 4x1 (R-407C)



Part No.	Model	CAPACITY (W)		€
		Cool	Heat	
CL 20 071	ONLY COOL 3x1			1,832.00
	MUP-12+062X2CN	3,500+1,800x2	—	
	ONLY COOL 4x1 (R-407C)			
CL 20 075	MUP-062X4CN	1,800x4	—	2,109.00

SPLIT TYPE CORNER TABLE (R-407C)



Part No.	Model	CAPACITY (W)		€
		Cool	Heat	
CL 20 146	HEAT PUMP			
	MUR-12HN	3,500	4,000	1,135.00

SPLITS TYPE CASSETTE (R-407C)



Part No.	Model		CAPACITY (W)		€
			Cool	Heat	
CL 20 633	MODEL 600 x 600				1,830.00
	MUCS-18HF	(220V II)	5,275	6,008	
	MODEL 900 x 900				
CL 20 634	MUCS-24HF	(220V II)	7,034	8,026	2,315.00
CL 20 635	MUCS-30HF	(220V II)	8,792	9,380	2,880.00
CL 20 639	MUCS-30HFT	(380V III)	8,792	9,380	2,880.00
CL 20 636	MUCS-36HF	(220V II)	10,551	11,723	3,075.00
CL 20 637	MUCS-48HF	(380V III)	14,068	15,533	3,458.00

20 FLOOR STANDING SPLIT

AIR-CONDITIONER (R407C)



Part No.	Model	CAPACITY (W)		€
		Cool	Heat	
CL 20 392	HEAT PUMP (R407C)			2,436.00
	• Single-phase 220V II MUCO-24 HN	7,000	7,300	
	• Three-phase 380V III MUCO-41 HN	12,000	12,000 (*)	
CL 20 396	MUCO-55 HN	16,000	17,000 (*)	3,060.00
CL 20 397				3,575.00
(*) MUCO models include a 3,500 W support resistance				

FLOOR-CEILING AIR-CONDITIONER



Part No.	Model	CAPACITY (W)		€
		Cool	Heat	
	HEAT PUMP (R410A)			
CL 20 623	MU S/T 18HF	5,275	5,569	1,496.00
CL 20 624	MU S/T 24HF	7,034	8,026	1,850.00
CL 20 625	MU S/T 30HF	8,792	9,380	2,280.00
CL 20 626	MU S/T 36HF	10,551	11,723	2,470.00
CL 20 627	MU S/T 48HF	14,068	15,533	3,083.00
CL 20 628	MU S/T 60HF	17,585	19,930	3,347.00

DUC TYPE AIR CONDITIONER



Part No.	Model	CAPACITY (W)		€
		Cool	Heat	
CL 20 613 CL 20 614 CL 20 615 CL 20 619 CL 20 616 CL 20 617 CL 20 618 CL 20 663 CL 20 664 CL 20 665 CL 20 666 CL 20 667 CL 20 668	HEAT PUMP (R-410A)			
	MUC-18HF	5,275	6,155	1,336.00
	MUC-24HF	7,034	8,009	1,872.00
	MUC-30HF	8,792	9,380	2,366.00
	MUC-30HFT	8,792	9,380	2,366.00
	MUC-36HF	10,551	11,723	2,433.00
	MUC-48HF	14,068	15,533	2,988.00
	MUC-60HF	17,585	19,930	3,299.00
	HEAT PUMP (R-410A) INVERTER DC			
	MUCR-18HF	5,275	6,155	2,182.00
	MUCR-24HF	7,034	8,009	2,900.00
	MUCR-30HF*	8,792	9,380	Consult
	MUCR-36HF*	10,551	11,723	Consult
MUCR-48HF	14,068	15,533	4,474.00	
MUCR-60HF	17,585	19,930	4,920.00	
OPTIONAL ACCESORIES				
CL 92 901	Air filter for modelsMUC-18-24-HF			51.00
CL 92 902	Air filter for models MUC-30-36-48-HF			58.00
CL 92 903	Circular pressure adapter MUC-18-24-HF			76.00
CL 92 904	Circular pressure adapter MUC-30-36-48-HF			94.00
CL 92 905	Wall control KJR-12B "Follow Me"			54.00

* Available from JUNE 2007

20 WALL MOUNTED HEATER



Part No.	Model	Flow	Dimensions	€
CF 20 067	RAS 1000	1000 m³/h	660x230x290	1,175.00
CF 20 068	RAS 1500	1500 m³/h	760x264x290	1,355.00

CL VARIABLE DIGITAL SCROL MUND KLIMA®



• Gas: R410A



Outdoor units



Cassette 4 ways



Duct



Floor / Wall



Mural

Part No.	Model	CAPACITY (W)		€	
		Cool	Heat		
	OUTDOOR UNIT				
	CL 23 010	MVD-D252W/CSN1 8HP	25.2		27
	CL 23 011	MVD-D280W/CSN1 10HP	28		31.5
	CL 23 012	MVD-D335W/CSN1 12HP	33.5		35
	CL 23 013	MVD-D400W/CSN1 14HP	40		43
	CL 23 014	MVD-D450W/CSN1 16HP	45		47
	CASSETTE INDOOR UNIT				
	CL 23 021	MVD-D28Q4/N1-A	2.8		2.9
	CL 23 022	MVD-D36Q4/N1-A	3.6		3.9
	CL 23 023	MVD-D45Q4/N1-A	4.5		5.2
CL 23 024	MVD-D56Q4/N1-A	5.6	5.8		
CL 23 025	MVD-D71Q4/N1-A	7.1	7.8		
CL 23 026	MVD-D80Q4/N1-A	8	9		
CL 23 027	MVD-D90Q4/N1-A	9	9.6		
CL 23 028	MVD-D112Q4/N1A	11.2	12.7		
DUCT INDOOR UNIT					
CL 23 030	MVD-D22T3/N1-A3	2.2	2.3		
CL 23 031	MVD-D28T3/N1-A3	2.8	2.9		
CL 23 032	MVD-D36T3/N1-A3	3.6	3.9		
CL 23 033	MVD-D45T2/N1-A3	4.5	5.2		
CL 23 034	MVD-D56T2/N1-A3	5.6	5.8		
CL 23 035	MVD-D71T2/N1-A3	7.1	7.8		
CL 23 036	MVD-D80T2/N1-A3	8	9		
CL 23 037	MVD-D90T2/N1-A3	9	9.6		
CL 23 038	MVD-D112T2/N1-A3	11.2	12.7		
CL 23 039	MVD-D140T2/N1-A3	14	15.1		
WALL FLOOR INDOOR UNIT					
CL 23 041	MVD-D36DL/N1	3.6	3.9		
CL 23 042	MVD-D45DL/N1	4.5	5.2		
CL 23 043	MVD-D56DL/N1	5.6	5.8		
CL 23 044	MVD-D71DL/N1	7.1	7.8		
CL 23 045	MVD-D80DL/N1	8	9		
CL 23 046	MVD-D90DL/N1	9	9.6		
CL 23 047	MVD-D112DL/N1	11.2	12.7		
CL 23 048	MVD-D140DL/N1	14	15.1		
WALL INDOOR UNIT					
CL 23 051	MVD-D22G/N1-E1	2.2	2.3		
CL 23 052	MVD-D28G/N1-E1	2.8	2.9		
CL 23 053	MVD-D36G/N1-E1	3.6	3.9		
CL 23 054	MVD-D45G/N1-E1	4.5	5.2		
CL 23 055	MVD-D56G/N1-E1	5.6	5.8		

FULL RANGE R410 A/C DIGITAL SCROLL

System characteristics R410A

Ecological refrigerant, high energy saving and environment friendly.

Great heating and cooling capacity.

R410A is almost azeotropic which means that has little variations in its components structure, and its capacity does not go down during the charging process.

It does not contain chlorine, which protects the ozone layer.

Wide range of multiple combinations

5 basic modules which can be combined following the customer wishes.

Increment of 2HP of the capacity range satisfies the customer needs with high accuracy.

Maximum capacity 64HP

DEVELOPMENT OF THE DIGITAL SCROLL SYSTEM

From its creation in 2002 and its launch in 2003 the MVD-D has become a leader product thanks to the simplification of the A/C systems, its energy saving and the stable operation.

The system includes a DIGITAL SCROLL compressor which is adjusted and controlled through a pulse wide modulator (PWM). Includes the most advanced technology in the industry.

DIGITAL SCROLL compressor characteristics

Wide range of energetic adjustment, from 10% to 100%

Constant energy adjustment

Long life: The solenoid PWM valve can be used 40 billion times which is the equivalent of 30 years.

High efficiency and refrigerant stability due to the axle sealing technology.

DIGITAL SCROLL compressor working principle

The DIGITAL SCROLL compressor works with and without load. When the external solenoid valve receives a signal of 220V, elevates 1m the superior spiral. The superior spiral movement creates a room between both spirals eliminating the compression between them. It makes the compressor unable of compressing the refrigerant. The load capacity is 100% with charge and 0% without charge. The compressor capacity is the average time between the periods with and without charge. In a cycle of 20 seconds, if the spirals are joined for 10 seconds and separated for 10 seconds, the average capacity is 50%.



Cassette 4 ways (compact)



High pressure duct



Cassette 4 ways



Floor/Ceiling



Cassette 1 way (compact)



Floor



Cassette 1 way



Hidden floor



Duct



Mural (compact)



Low profile duct



Mural

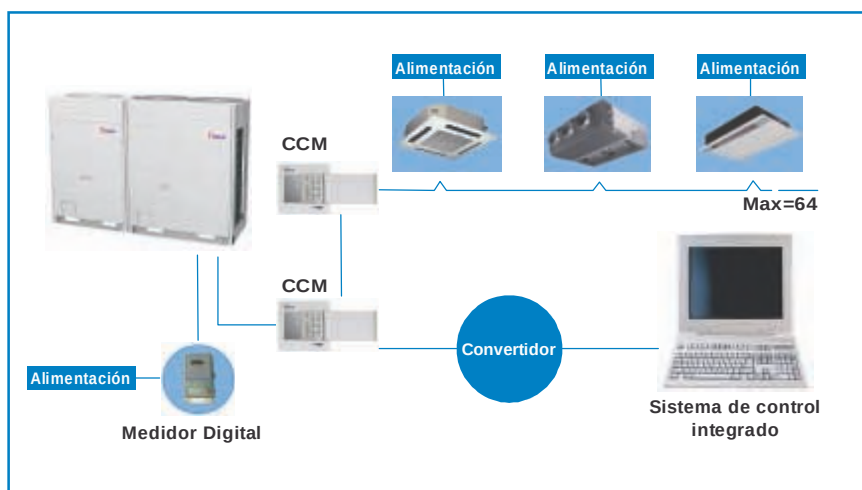
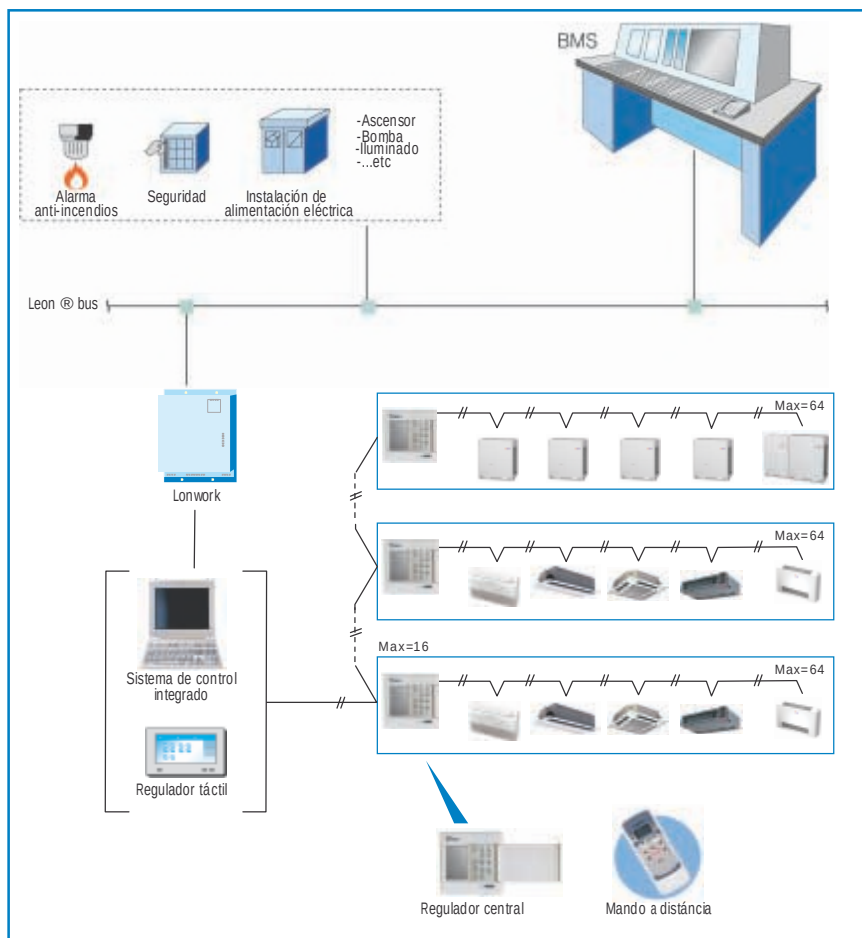
The PWM valve is specially designed as a solenoid valve to modulate the pressure power in the fix spiral and to control the state of load. The PWM gets the connect/disconnect signal and controls the load state. When the valve is connected, the fix spiral separates from the orbitant spiral. This process is repeated to get the exterior unit control automatic depending on the working interior units numbers and its termic demands.

BUILT IN INTELLIGENT CONTROL SYSTEM

The built in intelligent control system (BMS) uses a high speed independent multi transmission method. It has a centralized control function which can regulate the A/C at high speed in entire buildings

The MVD system has different control solutions:

Individual control , group control, network control , etc.
1 PC can control up to 16 central regulators
1 central regulator can control up to 64 interior units..
In total 1024 interior units can be controlled.



INTEGRATED INTELLIGENT CONTROL SYSTEM

Windows version

Design system based on Windows friendly use.

The main functions include: charge calculation, interior units selection, tube calculation, etc .

CAD version

Two compatible versions with AutoCAD 200 / 2002 and AutoCAD 2004 / 2005. This professional software is highly recommended to design projects efficiently.

Independent calculation system with report generation

Independent calculation and report generation to know the A/C charge



Simple and efficient group adjustment

A group consists in an A/C line, with several central regulators, in a maximum of 1024 units. A system of 16 groups may be mounted to control a great A/C system. The group adjustment can control each unit online, join them to activate them or change the parameters.

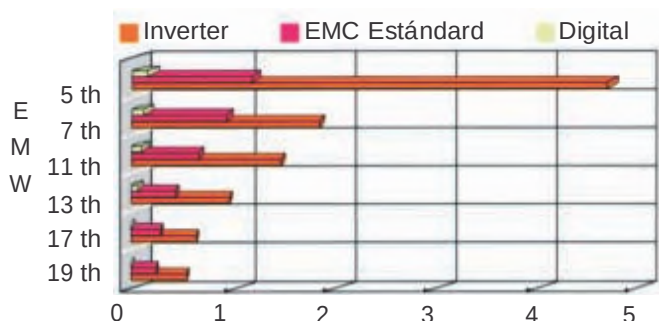
Calendar adjustment.

No need to worry during the A/C operation.

With the calendar adjustment system , the PC can easily adjust the daily operation of the A/C and work automatically. .

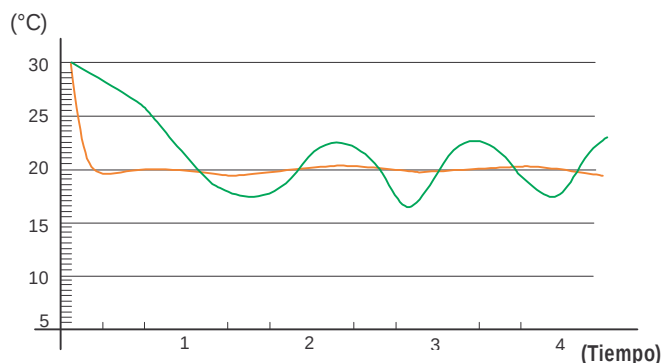
It does not generate electromagnetic alterations

The MVD system does not create electromagnetic alterations because the compressor load and unload are mechanical movements. Those characteristics make the system proper for telecommunications companies and in all kinds of accuracy laboratories.



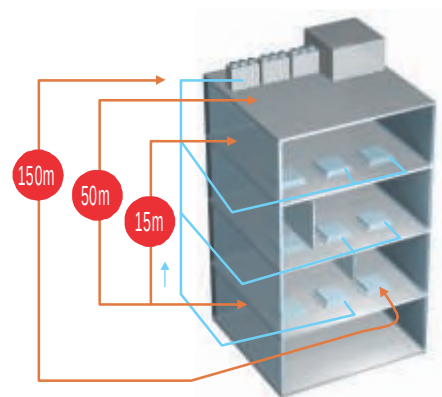
Accurate temperature control

Compared with the traditional centralized air conditioned the MVD can reach a 0.5 degrees accuracy



Longer pipes, wide height difference

The DIGITAL SCROLL system is the only one which doesn't have separation equipment of gas/liquid and oil. In the load stage the refrigerant speed is enough to return the oil to the compressor. During the download phase, there is no refrigerant outlet so there is no oil discharge.



- 150m:** Distancia máxima de tubo entre la unidad interior y exterior.
- 50m:** Diferencia de altura máxima entre la unidad interior y exterior.
- 15m:** Diferencia de altura máxima entre unidades interiores.

Advanced technology

The **DIGITAL SCROLL** compressor when is in a load stage, the motor speed ensures that the refrigerant has enough capacity to recover all the oil back to the compressor. During the download phase there is no oil moving outside the compressor, because there is no refrigerant outlet. The refrigerant may also recover the oil back to the compressor.

TECHNICAL SPECIFICATIONS

Model			D252W	D280W	D335W	D400W	D450W
Code			CL 23 010	CL 23 011	CL 23 012	CL 23 013	CL 23 014
COOLING capacity		kW	25,2	28,0	33,5	40,0	45,0
HEATING capacity		kW	27,0	31,5	35,0	43,0	47,0
Air flow		m³/h	10.000	10.000	10.000	14.000	14.000
Sound level		dB(A)	58	58	58	60	60
Dimensions	Net	mm	980x1630x800	980x1630x800	980x1630x800	1380x1630x830	1380x1630x830
	Packing	mm	1040x1780x840	1040x1780x840	1040x1780x840	1440x1800x860	1440x1800x860
Weight	Net	Kg	245	245	245	396	396
	Gross	Kg	260	260	260	416	416
Pipes maximum lenght		mm	175	175	175	175	175
Max. height difference between interior and exterior units			15	15	15	15	15
Max. height difference between interior units			50	50	50	50	50
Maximum number of interior units			1 x 13	1 x 16	1 x 16	1 x 16	1 x 20

CL WALL CONDITIONER WITHOUT OUTDOOR UNIT

MUND  KLIMA®



Part No.	Model	CAPACITY (W)*		€
		Cool	Heat	
CL 19 741	• Only cooling conditioner. Heating by electrical resistance 1.300 W • Air filter • Automatic condensed water elimination • Night button (quiet) • Gas: R-407C MU-SINGLE	1,870	1,350	1,068.00
CL 19 742	• Hole diameter: 153 mm • Night button (quiet) • Automatic condensed water elimination (only cool) • Infrared remote control • Gas: R-410A MU-UNIC 8,5 C	2,100	—	1,380.00
CL 19 743	MU-UNIC 11,0 C	2,450	—	1,506.00
CL 19 744	MU-UNIC 8,5 H (heat pump)	2,100	1,900	1,548.00
CL 19 745	MU-UNIC 11,0 H (heat pump)	2,450	2,040	1,620.00
ACCESORIES				
CL 19 759	KR 100 accessory for exterior air intake Max. renewal flow 90 m³/h (para MU-SINGLE)			108.00
CL 19 761	B1000 • Temperature and fan speed regulator			217.20

(*)Data measured following the directive pr EN 14511

MONOBLOC PORTABLE CONDITIONER



Part No.	Model	CAPACITY (W)*		€
		Cool	Heat	
CL 20 095	• Exterior outlet tube • Air filter • Automatic condensed water removal • Fan function • Deshumidification MU-PO "Eco"	3,500	2,400	810.00

(*) R.A.E. marked product

PORTABLE AIR CONDITIONED WITH EXTERIOR UNIT



Part No.	Model	CAPACITY (W)*		€
		Cool	Heat	
CL 19 720	• Only cooling • Air filter • Automatic condensed water removal • Ventilation function • Deshumidification POLAR M14	2,936	—	1,125.00
CL 19 707	CLIMA 16 HE	4,260	—	1,957.00
CL 19 708	CLIMA 16 HP HE	4,260	4,220	2,125.00

(*) R.A.E. marked product

CL WALL HEATER

MUNDO KLIMA®



Part No.	Model	CAPACITY (W) Heat	€
CL 20 220	HEATER	2.000	126.50
	• Remote controller • Only fan function • 2 heat stages (1000/2000 W) • Programmable stop 0.5 to 7.5 h • Tension 220V 50Hz • Deflector with air swing • Dimensions 653 x 225 x 117 mm • Temperature selection (18 to 30°C) Mod. MUR		

LOW TEMPERATURE CONTROLLER (LAK)



Part No.	Model	€
CO 32 201	CONDENSED WATER CONTROL	87.10
	• Allows working in cold conditions, even in winter FASEC 33 Speed temperature regulator for condenser units. Power supply: 220V. Mounted in rail DIN. Includes octal base. Dim.: 45x92x80 mm. Escala: 0 a 60°C	
CO 35 005	PTC probe contact/tube Ø12-18 mm wire PVC 1.5 m. Range -20 to +80°C	13.45
CO 02 060 06 RF 215	CONDENSER UNIT SUPPORT RESISTANCE	10.70
	• This system is only recommendable when the ambient temperatures are very low. TR2 Bulb thermostat and 1m capillar. Range: 0 to 40°C RRFI 3 Annealed steel resistance Long: 3000 mm. 1000 Watts	
		42.10

AI ACOUSTIC SCREEN PANEL FOR EXTERIOR UNITS (*)



Part No.	Description	€
AI 08 041	• Light, washable and humidity, hydrocarbon and chemicals resistant. Antibacterium Polythen foam plate TECNO-QUASH 2800x1000 thickness 60 mm. Black color	150.00

(*) Which are not as silent as MUNDOCLIMA units

ADDITIONAL GAS CHARGES TABLE

When the unit length is superior to the standard (*) an additional gas charge per extra meter must be supplied:
Follow the table

Power	Valve measures		Connecting pipe length		Maximum height	Additional gas charge refrigerant per meter
	Liquid	Gas	Standard (*)	Maximum		
2.000 W	1/4"	3/8"	4 m	20 m	10 m	20 gr/m
2.500 W	1/4"	3/8"	4 m	20 m	10 m	20 gr/m
3.500 W	1/4"	1/2"	4 m	20 m	10 m	20 gr/m
4.500 W	1/4"	1/2"	4 m	35 m	20 m	35 gr/m
6.000 W	3/8"	5/8"	5 m	35 m	20 m	40 gr/m
7.000 W	3/8"	5/8"	5 m	45 m	35 m	80 gr/m
12.000 W	1/2"	3/4"	5 m	45 m	35 m	100 gr/m
2.000 W x 2	1/4"	3/8"	4 m	20 m	10 m	20 gr/m
2.500 W x 2	1/4"	3/8"	4 m	20 m	10 m	20 gr/m
3.000 W x 2	1/4"	1/2"	4 m	20 m	10 m	20 gr/m

Note: When the exterior unit is above the interior, a U-bend must be placed.

20 WINDOW AIR CONDITIONER

MUV Series

REMOTE CONTROL

MUND KLIMA®

- Very quiet
- Reduced power requirement
- Aesthetic design
- Rotary compressor
- Centrifugal fan
- Easily washable filter
- 3 operating levels in COOL mode
- FAN function with air renewal
- Heating models with heat pump
- R407C Ecological gas
- Single-phase 220V - 50Hz



TECHNICAL SPECIFICATIONS

Model			MUV-07 CN	MUV-12 CN	MUV-07 HN	MUV-09 HN	MUV-12 HN	MUV-18 HN
Part No.			CL 20 351	CL 20 353	CL 20 361	CL 20 362	CL 20 363	CL 20 364
Gas			R-407C		R-407C			
COOLING capacity	W		2,000	3,400	2,000	2,500	3,400	5,100
	kcal/h		1,764	3,024	1,764	2,268	3,024	4,536
HEATING capacity	W		—	—	2,100	2,600	3,500	5,200
	kcal/h		—	—	1,890	2,394	3,150	4,662
Air flow	m ³ /h		360	500	360	360	500	750
Power supply	V-Hz		220V - 50Hz		220V - 50Hz			
Power consumption	W		780	1,390	780	970	1,390	2,150
Rated Input	A		3.6	6.3	3.6	4.5	6.3	11.5
Noise level	dB(A)		38	54	38	41	42	51
Dimensions	width	mm	452	570	452	452	570	675
	height	mm	348	405	348	348	405	455
	depth	mm	548	650	548	548	650	715
Weigh	kg		33	44	33	33	44	68
Refrigerant gas charge	kg		0.48	0.80	0.48	0.52	0.80	1.35
Infrared remote control			YES	YES	YES	YES	YES	YES

20 WINDOW AIR CONDITIONER MUV "Eco" Series MANUAL CONTROL

- Compact design
- Reduced power requirement
- Very quiet
- Easy installation
- 3 Operating speeds
- Thermostat included
- Rotary compressor
- Centrifugal fan
- R407C "Ecological" gas



control panel



Low noise



Easy installation
panel



Fresh Air
intake



Moving
structure



Double drain
system



Big air flow

TECHNICAL SPECIFICATIONS:

Model		MUV-09 HE	MUV-12 HE	MUV-18 HE
Part No.		CL 20 386	CL 20 387	CL 20 388
Gas		R-407C		
COOLING capacity	BTU/h	9,000	12,000	18,000
HEATING capacity	BTU/h	9,000	12,000	18,000
Power supply	V-Hz-Ph	220-50-1		
Power requirement during COOLING	W	1,000	1,350	2,120
Power requirement during HEATING	W	930	1,250	1,960
EER	W/W	2.63	2.61	2.49
COP	W/W	2.84	2.81	2.69
Indoor air flow	m ³ /h	360	530	730
Noise level	dB(A)	42	48	51
Dimensions	width	mm	450	600
	height	mm	346	380
	depth	mm	535	560
Net weight	Kg	32	38	56
Brute weight	Kg	36	41	62

20 WALL SPLITS

MUP-HF “Elegant” Series

MUND KLIMA®

- Super compact design
- Ergonomic remote controller
- Particular quiet
- Ecological gas
- Treatment against corrosion
- Only 5 connecting wires in models 9 and 12



TECHNICAL ESPECIFICATION:

HEAT PUMP						
Model			MUP-09HF	MUP-12HF	MUP-18HF	MUP-24HF
Part No.			CL 20 562	CL 20 563	CL 20 564	CL 20 565
Cooling capacity		W	2,500	3,200	5,200	7,000
Heating capacity		W	2,750	3,520	5,700	7,700
Air Flow		m ³ /h	420	530	880	1000
Power Supply		V/Hz	220-240~/50	220-240~/50	220-240~/50	220-240~/50
Power	Cooling	W	995	1295	1990	2700
	Heating	W	980	1500	2200	2800
Power requeriment	Cooling	A	4.4	6.5	9.5	13.5
	Heating	A	4,3	7	10	14
Power requeriment		W	1,300	1,720	3,200	3,800
Maximum absorbed draught		A	6.9	8.8	16	19
Gas			R407C	R407C	R407C	R407C
Indoor unit	Dimensions	mm	312x1095x205	312x1095x205	312x1095x205	312x1095x205
	Net weight	Kg	9,5	9,5	15	15
	Noise level	dBA	21	21	29	29
Outdoor unit	Dimensions	mm	320x818x540		800x300x690	800x300x690
	Net weight	Kg	33	38	53.5	53.5
	Noise level	dBA	≤ 50	≤ 52	≤ 56	≤ 55
Pipe diameter	Liquid		Ø 1/4"	Ø 1/4"	Ø 1/4"	Ø 3/8"
	Gas		Ø 3/8"	Ø 3/8"	Ø 1/2"	Ø 5/8"
Power supply		V	198-253	198-253	198-253	198-253
Proper room area		m ²	12 ~ 20	14 ~ 22	26 ~ 36	35 ~ 47

Notes:

1. The technical data are standard valves calculated from the nominal working conditions
2. Technical characteristics may change without previous notice. Consult the unit's characteristics plate.

20 WALL SPLITS

Serie MUP-HG "Elegant"

MUND KLIMA®

- Super compact design
- Ergonomic remote controller
- Particulary quiet
- Treatment against corrosion
- Only 5 connecting wires in models 9 and 12
- A Class



TECHNICAL ESPECIFICATION:

HEAT PUMP						
Model			MUP-09HG	MUP-12HG	MUP-18HG	MUP-24HG
Part No.			CL 20 572	CL 20 573	CL 20 574	CL 20 575
Cooling capacity		W	2,500	3,200	5,200	7,000
Heating capacity		W	2,750	3,520	5,700	7,700
Air Flow		m ³ /h	430	550	850	1,000
Power supply		V/Hz	220-240~/50	220-240~/50	220-240~/50	220-240~/50
Power	Cooling	W	820	1,085	1,750	2,540
	Heating	W	900	1,270	1,750	2,540
Power requirement	Cooling	A	4.0	5.5	9.1	13
	Heating	A	4.3	5.7	9.5	13
Max. power requeriment		W	1,200	1,550	2,100	2,900
Maxiumun absorved draught		A	5.2	6.7	9.1	12.6
Gas			R410A	R410A	R410A	R410A
Indoor unit	Dimensions	mm	210x745x250	210x745x250	312x1095x205	312x1,095x205
	Net Weight	Kg	9.5	9.5	15	15
	Noise level	dBA	19 ~ 38	19 ~ 41	29 ~ 49	29 ~ 49
Outdoor unit	Dimensions	mm	320x818x540	320x818x540	800x300x555	800x300x690
	Net Weight	Kg	33	35	49	54
	Noise level	dBA	≤ 50	≤ 50	≤ 52	≤ 55
Pipe diameter	Liquid		Ø 1/4"	Ø 1/4"	Ø 1/4"	Ø 3/8"
	Gas		Ø 3/8"	Ø 3/8"	Ø 1/2"	Ø 5/8"
Power supply		V	198 ~ 253	198 ~ 253	198 ~ 253	198 ~ 253
Proper room area		m ²	12 ~ 20	14 ~ 22	26 ~ 36	35 ~ 47

Notes:

1. The technical data are standard valves calculated from the nominal working conditions
2. Techincal characteristics may change without previous notice. Consult the unit's characteristics plate.

20 WALL MOUNTED 1x1 INVERTER MUPR Series

MUND KLIMA®

- Inverter Type compressor
- 40% energy saving
- ANION function
- It can operate up -10°C
- Biological filter against odours
- Control of condensed water
- Treatment against corrosion
- Long life hydrophilic aluminium
- Automatic restart
- Infrared remote control



TECHNICAL SPECIFICATIONS

Model		MUPR-12 HE
Part No.		CL 20 163
Gas		R-410A
COOLING capacity	W	3,500 (1,300~4,300)
	Btu/h	12,000 (4,500~15,000)
	kcal/h	3,000 (1,125~3,750)
HEATING capacity	W	4,100 (1,400~5,700)
	Btu/h	14,000 (5,000~19,000)
	kcal/h	4,666 (1,250~4,750)
Power consumption Cooling	W	1,060 (540~1,590)
Power consumption Heating	W	1,110(540~2,090)
Air flow	m ³ /h	700
Power supply		230 V - 50 Hz - 1 Phase
Noise level indoor unit H/M/L(*)	dB(A)	34/ 31 / 26
Noise level outdoor unit (**)	dB(A)	35(47)
Dim. indoor unit (Width x Height x Depth)	mm	815 x 280 x 215
Dim. outdoor unit (Width x Height x Depth)	mm	760 x 590 x 285
Weight indoor/outdoor unit	kg	10 / 38
Gas pipe diameter	inch	1/2"
Liquid pipe diameter	inch	1/4"

(*) Noise level to maximum speed (1 m distance); (**) Noise level at 3 m distance (1 m as per CE)

(***) For other length, please see additional charging gas table.

ENERGY SAVING: the speed of compressor and the refrigerant volume are automatically controlled according to the environment.

20 WALL MULTI SPLITS 2x1, 3x1 y 4x1 INVERTER MUPR-HE Series HEATING PUMP

MUND KLIMA®

- Inverter Type compresor
- 40% energy saving
- ANION function
- Night operation
- Double air
- It can operate up -10°C
- Treatment against corrosion
- Long life hydropholic aluminium
- Automatic restart



COMBINATIONS 2x1:

One Unit	Two Units		
7	7 + 7	9 + 9	12 + 12
9	7 + 9	9 + 12	
12	7 + 12		

COMBINATIONS 3x1:

One Unit	Two Units			Three Units		
7	7 + 7	9 + 9	12 + 12	7 + 7 + 7	7 + 9 + 9	9 + 9 + 12
9	7 + 9	9 + 12		7 + 7 + 9	7 + 9 + 12	
12	7 + 12			7 + 7 + 12	7 + 12 + 12	

COMBINATIONS 4x1:

One Unit	Two Units		Three Units				Four Units		
7	7 + 7	9 + 9	12 + 12	7 + 7 + 7	7 + 9 + 9	9 + 12 + 12	7 + 7 + 7 + 7	7 + 7 + 9 + 9	9 + 9 + 9 + 9
9	7 + 9	9 + 12		7 + 7 + 9	7 + 9 + 12	9 + 9 + 9	7 + 7 + 7 + 9	7 + 7 + 9 + 12	9 + 9 + 9 + 12
12	7 + 12			7 + 7 + 12		9 + 9 + 12	7 + 7 + 7 + 12	7 + 9 + 9 + 9	

TECHNICAL SPECIFICATIONS:

INDOOR UNITS				
Model		MUPR-07-HEM	MUPR-09-HEM	MUPR-12-HEM
Parts No.		CL 20 170	CL 20 171	CL 20 172
Cooling capacity	W	2000	2500	3500
	BTU/h	7000	9000	12000
	Kcal/h	1750	2250	3000
Heating capacity	W	2500	3200	4000
	BTU/h	9000	11000	13500
	Kcal/h	2250	2750	3375
Air Flow	m³/h	500	520	600
Dimensions	mm	750x250x188	750x250x188	815x280x215
Net Weight	Kg	8	8	8
Noise Level	dB (A)	18 - 27	18 - 28	18-31
Pipe diameter liquid/gas	Pulg	1/4 / 3/8	1/4 / 3/8	1/4 / 1/2
OUTDOOR UNITS				
		2x1	3x1	4x1
Model		MUPR-18-HE2	MUPR-27-HE3	MUPR-27-HE4
Parts No.		CL 20 173	CL 20 174	CL 20 175
Cooling Capacity (Min-Nom-Max)	kW	1,6-5,3-6,6	2,75-7,8-9,3	2,82-8,0-9,6
Heating Capacity (Min-Nom-Max)	kW	2,3-6,9-7,4	3,14-9,0-10,8	3,24-9,3-11,2
Power consumption cooling (Min-Nom-Max)	kW	0,44-1,48-2,8	0,77-2,24-3,49	0,81-2,35-3,55
Power consumption heating (Min-Nom-Max)	kW	0,58-1,80-2,47	0,82-2,39-3,66	0,86-2,51-3,86
Power Supply	V-Hz-Ph	220-50-1	220-50-1	220-50-1
Noise Level	dB (A)	46	48	48
Dimensions	mm	845x695x335	845x695x335	845x695x335
Net Weight	Kg	71	72	72

ENERGY SAVING: the speed of compressor and the refrigerant volume are automatically controlled according to the environment

20 WALL MOUNTED SPLITS 2x1 MUP Series

MUNDOKLIMA®

- High energetic efficiency
- Biological filter against odours (optional)
- Equipped with a low temperature kit
- Control of condensed water
- Treatment against corrosion
- Long life hydrophilic aluminium
- Automatic restart
- Particularly quiet
- Programmable operation
- Infrared remote control
- Independent operation: one unit cools while the other heats
- R-407C "Ecological gas"



TECHNICAL SPECIFICATIONS

Model		MUP-09x2CN	MUP-12x2CN	MUP-09x2HN	MUP-12x2HN	MUP-12+9HN
Part. No. (R-407C)		CL 20 142	CL 20 143	CL 20 152	CL 20 153	CL 20 154
Gas		R-407C		R-407C		
COOLING capacity	W	2,500 x 2	3,500 x 2	2,500 x 2	3,500 x 2	3,500+2,500
	Btu/h	9,000 x 2	12,000 x 2	9,000 x 2	12,000 x 2	12,000+9,000
	kcal/h	2,250 x 2	3,000 x 2	2,250 x 2	3,000 x 2	3,000+2,250
HEATING capacity	W	—	—	2,800 x 2	3,800 x 2	3,800+2,800
	Btu/h	—	—	9,800 x 2	13,200 x 2	13,200+9,800
	kcal/h	—	—	2,400 x 2	3,300 x 2	3,300+2,400
Power consumption Cooling	W	1,150 x 2	1,650 x 2	1,150 x 2	1,650 x 2	1,350+950
Power consumption Heating	W	—	—	1,200 x 2	1,500 x 2	1,400+1,050
Dehumidification capacity	l/h	1.2 x 2	1.6 x 2	1.2 x 2	1.6 x 2	0.8+1.2
Air flow	m³/h	420 x 2	520 x 2	420 x 2	520 x 2	520+420
Power supply	V-Hz-Ph	230 - 50 - 1		230 - 50 - 1		
Noise level indoor unit*	dB(A)	18-28	19-31	18-28	19-31	28-31
Noise level outdoor unit**	dB(A)	45-48	45-48	45-48	45-48	45-48
Indoor unit Ø (Width x Height x Depth)	mm	830 x 285 x 189		830 x 285 x 189		
Outdoor unit Ø(Width x Height x Depth)	mm	950 x 710 x 410	950 x 840 x 412	950 x 710 x 410	950 x 840 x 412	
Weight indoor/outdoor unit	kg	11 / 64	11 / 71	11 / 64	11 / 71	11 / 71
Gas pipe diameter	inch	3/8" x 2	1/2" x 2	3/8" x 2	1/2" x 2	1/2" + 3/8"
Liquid pipe diameter	inch	1/4"		1/4"		
Cooling line max. length***	m	10		10		20
Maximum distance	m	5		5		10

(*) Noise level to maximum speed (1 m distance); (**) Noise level at 3 m distance (1 m as per CE)

(***) For other length, please see additional charging gas table.

20 WALL MOUNTED SPLITS 3x1 and 4x1 MUP Series

MUNDOKLIMA®

- Energetic high efficiency
- Biological filter against odours (optional)
- Equipped with a low temperature kit
- Control of condensed water
- Treatment against corrosion
- Long life hydrophilic aluminium
- Automatic restart
- Particularly quiet
- Infrared remote control
- R-407C "Ecological gas"



TECHNICAL SPECIFICATIONS		3x1 	4x1 
Model		MUP-12+062X2CN	MUP-062X4CN
Part No. (R-407C)		CL 20 071	CL 20 075
Gas		R-407C	
COOLING capacity	W	3,500 + 1,800 x 2	1,800 x 4
	Btu/h	12,000 + 6,200 x 2	6,200 x 4
	kcal/h	3,000 + 1,550 x 2	1,550 x 4
Power consumption Cooling	W	1,380 + 660 x 2	670 x 4
Dehumidification capacity	l/h	1.5 + 0.8 x 2	0.8 x 4
Air flow	m³/h	500 + 420 x 2	420 x 4
Power supply	V-Hz-Ph	230 - 50 - 1	
Noise level indoor unit*	dB(A)	18-31	18-28
Noise level outdoor unit**	dB(A)	42 (48)	42 (48)
Indoor unit Ø (Width x Height x Depth)	mm	830 x 285 x 189	
Outdoor unit Ø (Width x Height x Depth)	mm	950 x 840 x 412	
Weight indoor/outdoor unit	kg	11 / 71	
Gas-liquid pipe diameter	inch	3/8" - 1/4"	
Cooling line max. length / max. distance	m	10 / 5	

(*) Noise level to maximum speed (1 m distance); (**) Noise level at 3 m distance (1 m as per CE)

20 SPLIT TYPE CORNER MUR Series

- Particularly quiet
- Maximum comfort the whole year
- Minimum power requirement
- Programmable operation
- Reduced dimensions
- Infrared remote control
- Rotary compressor
- Tangential fans
- Easily washable filters
- External defrost control



TECHNICAL SPECIFICATIONS

Model		MUR-12HN
Part No.		CL 20 146
Gas		R-407C
COOLING capacity	W	3,500
	Btu/h	12,000
	kcal/h	3,000
HEATING capacity	W	4,000
	Btu/h	13,200
	kcal/h	3,500
Cooling power consumption	W	1,380
	W	1,430
Heating power consumption		1,430
Dehumidification capacity		l/h 1.2
Air flow		m ³ /h 450
Power supply		V-Hz-Ph 230 - 50 - 1
Noise level indoor unit*		dB(A) 24-33
Noise level outdoor unit**		dB(A) 35 (47)
Indoor unit Ø (Width x Height x Depth)		mm 716 x 215
Outdoor unit Ø (Width x Height x Depth)		mm 848 x 540 x 320
Weight indoor/outdoor unit		kg 15 / 32
Gas pipe diameter		inch 1/2"
Liquid pipe diameter		inch 1/4"
Cooling line max. length***		m 10
Maximum distance		m 5

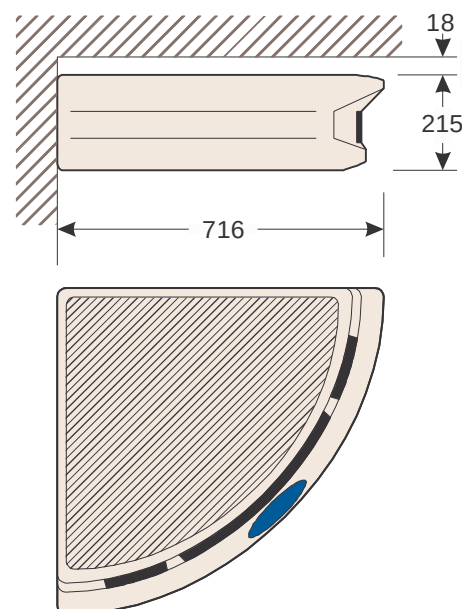
(*) Noise level to maximum speed (1 m distance);

(**) Noise level at 3 m distance (1 m as per CE)

(***) For other length, please see on additional charging gas diagram.



INDOOR UNIT DIMENSIONS:



20 CASSETTE AIR CONDITIONER MUCS HF Series

MUND KLIMA®

- Air rental inlet
- Water elevator included
- Pressure control system
- Included low temperature kit
- Particularly quiet
- Programmable Operation
- Infrared Remote Control
- Easy cleaning filter
- Exterior antifrost control
- Air Flow direction



TECHNICAL SPECIFICATIONS:

Model		MUCS 18HF	MUCS 24HF	MUCS 30HF	MUCS 30HFT	MUCS 36HF	MUCS 48HF
Part No.		CL 20 633	CL 20 634	CL 20 635	CL 20 639	CL 20 636	CL 20 637
Gas		R410A	R410A	R410A	R410A	R410A	R410A
Cooling capacity	W	5,275	7,034	8,792	8,792	10,551	14,068
	BTU/h	18,000	24,000	30,000	30,000	36,000	48,000
	Kcal/h	4,536	6,049	7,561	7,561	9,074	12,098
Heating capacity	W	6,008	8,026	9,380	9,380	11,723	15,533
	BTU/h	20,500	27,300	32,000	32,000	38,000	52,000
	Kcal/h	5,166	6,902	8,067	8,067	10,082	13,358
Power req. during cooling	W	1,900	2,510	3,270	3,270	3,750	4,700
Power req. during heating	W	1,900	2,500	3,232	3,232	3,720	4,900
Dehumidifying capacity	Lts/h	119	2.4	3	3	3.6	4.8
Air Flow	m³/h	860	1050	1,600	1,600	1,600	1,750
Volt-Fases-Frequency	V-Hz-Ph	230-50-1	230-50-1	230-50-1	400-50-3	230-50-1	400-50-3
Noise Level indoor unit	dB(A)	24-34	26-34	26-34	26-34	26-34	26-34
Noise Level outdoor unit	dB(A)	42	44	45	55	46	46
Dimension panel	mm	650x650x30	950x950x40				
Dimension indoor unit	mm	580x580x254	840x840x240	840x840x310			
Dimensión outdoor unit	mm	845x695x335	895x860x330	990x960x360			940x1245x340
Weight indoor/panel	Kg	21/3	27/6	33/6	33/6	33/6	33/6
Weight outdoor unit	Kg	52	75	103	103	103	110
Gas Pipe Diameter	pulg	1/2	5/8	3/4	3/4	3/4	3/4
Liquid Pipe Diameter	pulg	1/4	3/8	1/2	1/2	1/2	1/2
Maximum lenght	m	25	30	30	30	30	50
Maximum distance	m	15	15	20	20	20	30

20 FLOOR STANDING SPLIT AIR-CONDITIONER

MUCO series

- Particularly quiet
- Maximum comfort the whole year
- Programmable operation
- 3 Speed fan
- Infrared remote control
- Easy cleanable filters
- Directable wings
- R407C "ecological gas"



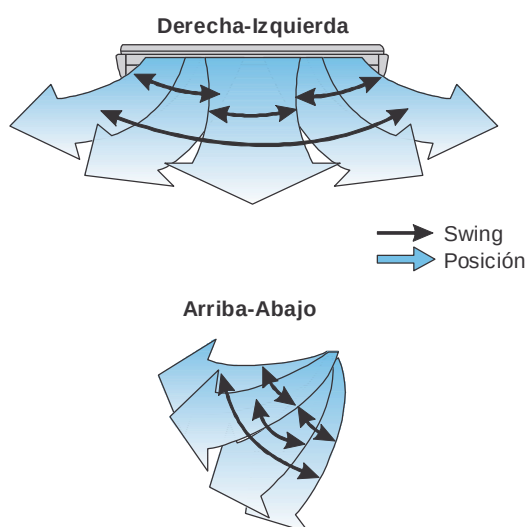
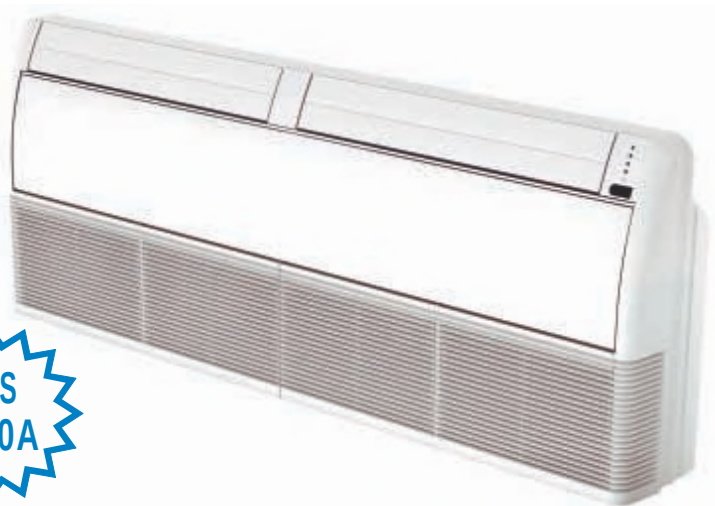
Model			MUCO-24HN	MUCO-41HN	MUCO-55HN
Part No.			CL 20 392	CL 20 396	CL 20 397
Gas			R407C	R407C	R407C
COOLING capacity	W		7,000	12,000	16,000
	BTU/h		24,000	41,000	55,000
	kcal/h		6,000	10,350	13,760
HEATING capacity (*)	W		7,300	13,000 (16,500)*	17,000 (20,500)*
	BTU/h		24,900	44,000 (56,000)*	58,500 (70,550)*
	kcal/h		6,300	11,180 (14,190)*	14,600 (17,600)*
Power consumption	Cooling	W	3,250	5,300	6,150
	Heating	W	5,500	4,700 (8,200)	5,800 (9,300)*
Drying capacity	l/h		4.2	4.5	4.5
Air flow	m³/h		1,000	1,600	2,050
Voltage-Frequency-Phases	V-Hz-Ph		220-50-2	400-50-3	400-50-3
Noise level	Indoor unit	dB(A)	52	53	53
	Outdoor unit	dB(A)	58	61	64
Dimensions (Width x Height x Depth)	Indoor unit	mm	540 x 1,750 x 290	540 x 1,750 x 380	580 x 1,850 x 390
	Outdoor unit	mm	950 x 840 x 412	950 x 1,250 x 412	950 x 1,250 x 412
Weight indoor/outdoor unit	kg		50/75	58/112	60/112
Gas pipe diameter	inch		5/8"	3/4"	3/4"
Liquid pipe diameter	inch		3/8"	1/2"	1/2"
Cooling line max. length	m		20	20	20
Unevenness max.	m		10	10	10

(*) Includes 3,500 W support resistance

20 FLOOR-CEILING AIR CONDITIONER MU S/T HF Series

MUND  KLIMA®

- High efficiency
- Low noise
- Easily changeable air filter
- Treatment against corrosion
- Hidrophilic aluminum



Big air flow dispersion:

The air distribution is made as big as possible, thank to the air swing design.

Low profile: Only 198 mm

The indoor unit has been designed with a double drainage system which reduces the inside gap.

Technical specifications:

Model		MU S/T 18 HF	MU S/T 24 HF	MU S/T 30 HF	MU S/T 36 HF	MU S/T 48 HF	MU S/T 60 HF
Part No.		CL 20 623	CL 20 624	CL 20 625	CL 20 626	CL 20 627	CL 20 628
Gas		R410A	R410A	R410A	R410A	R410A	R410A
Cooling Capacity	BTU/h	18,000	24,000	30,000	36,000	48,000	60,000
	W	5,275	7,034	8,792	10,551	14,068	17,585
	Kcal/h	4,537	6,049	7,561	9,074	12,098	15,123
Heating Capacity	BTU/h	19,000	27,300	32,000	38,000	52,000	68,000
	W	5,569	8,026	9,380	11,723	15,533	19,930
	Kcal/h	4,789	6,902	8,067	10,082	13,358	17,140
Power consumption cooling	W	1,900	2,510	3,270	3,750	4,700	6,000
Power consumption heating	W	1,900	2,500	3,232	3,720	4,900	6,000
Voltage	V-Hz-Ph	230-50-1	230-50-1	230-50-1	230-50-1	400-50-3	400-50-3
Air flow (H/M/L)	m³/h	800	1,000	1,200	1,400	2,000	2,000
Drying capacity	l/h	1.8	2.4	3	3.6	4.8	6
Noise level Indoor unit	dB(A)	38	40	41	41	42	42
Noise level Outdoor unit	dB(A)	48	52	55	55	57	57
Dimensions Indoor unit	mm	995x660x198		1,285x660x198		1670x680x240	
Dimensions Outdoor unit	mm	845x695x335	895x860x330	990x960x360		940x1,245x340	
Weight Indoor unit	Kg	29	29	35	35	50	50
Weight Outdoor unit	Kg	52	75	103	103	110	110
Gas pipe diameter	po	1/2"	5/8"	3/4"	3/4"	3/4"	3/4"
Liquid pipe diameter	po	1/4"	3/8"	1/2"	1/2"	1/2"	1/2"
Pipe length max.	m	25	30	30	30	50	50
Unevenness max.	m	15	15	20	20	30	30

20 DUCT CONDITIONERS MUCR HF Series

SLIM LINE



MUND KLIMA®



- Silent operation
- Low duct
- Includes infrared remote control
- 3 operating speeds
- For rooms, hotels, office, etc.
- Easy installation
- Energy saving
- Optional cable control
- Optional filters

OPTIONAL



TECHNICAL SPECIFICATIONS:

Model		MUCR 18 HF	MUCR 24 HF	MUCR 30 HF	MUCR 36 HF	MUCR 48 HF	MUCR 60 HF
Part No.		CL 20 613	CL 20 614	CL 20 615	CL 20 616	CL 20 617	CL 20 618
Gas		R410A	R410A	R410A	R410A	R410A	R410A
Cooling capacity	W	5.275	7.034	8.792	10.551	14.068	17.585
	BTU/h	18.000	24.000	30.000	36.000	48.000	60.000
	Kcal/h	4.537	6.049	7.561	9.074	12.098	15.123
Heating capacity	W	6.155	8.009	9.380	11.723	15.533	19.930
	BTU/h	19.000	27.300	32.000	38.000	52.000	68.000
	Kcal/h	5.293	6.888	8.067	10.082	13.358	17.140
Power req. cooling	W	1.900	2.560	3.250	3.750	4.700	6.000
Power req. heating	W	1.900	2.500	3.250	3.720	4.900	6.000
Dehumidification	Lts/h	1.9	2.4	3	3.6	4.6	6
Air Flow	m³/h	1,160	1,460	2,070	2,070	2,400	2,800
Static pressure	Pa	40	40	70	70	70	100
Power Supply	V-Hz-Ph	230-50-1	230-50-1	230-50-1	230-50-1	400-50-3	400-50-3
Noise level in. unit	dB(A)	38	42	44	44	44	46
Noise level out. unit	dB(A)	48	52	55	57	57	57
Dimension in. unit	mm	1.000 x 298 x 800		1350x298x800	1350x298x800	1350x298x800	1350x320x800
Dimension out. unit	mm	845x695x335	895x860x330	990x960x360	990x960x360	940x1245x340	940x1245x340
Weight indoor unit	Kg	29	29	35	35	50	50
Weight outdoor unit	Kg	52	75	103	103	110	110
Gas pipe diameter	pulg	1/2	5/8	3/4	3/4	3/4	3/4
Liquid pipe diameter	pulg	1/4	3/8	1/2	1/2	1/2	1/2
Maximum length	m	25	30	30	30	50	50
Maximum distance	m	15	15	20	20	30	30

20 DUCT CONDITIONERS MUCR HF Series

INVERTER DC



- Silent operation
- Low duct
- Includes infrared remote control
- 3 operating speeds
- For rooms, hotels, office, etc.
- Easy installation
- Energy saving
- Optional cable control
- Optional filters



OPTIONAL



TECHNICAL SPECIFICATIONS:

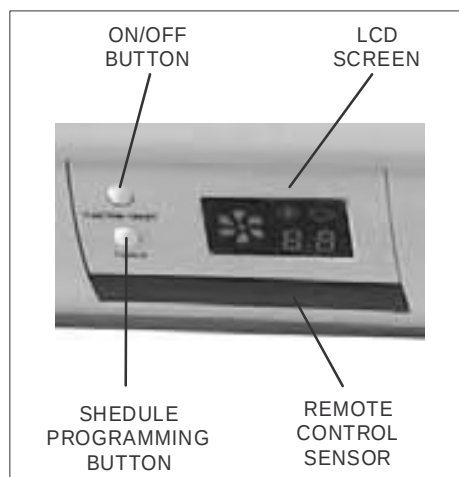
Model		MUCR 18 HF	MUCR 24 HF	MUCR 30 HF	MUCR 36 HF	MUCR 48 HF	MUCR 60 HF
Part No.		CL 20 663	CL 20 664	CL 20 665	CL 20 666	CL 20 667	CL 20 668
Gas		R410A	R410A	R410A	R410A	R410A	R410A
Cooling capacity	W	817-1.780	1.090-2.374	1.363-2.968	1.635-3.561	2.180-4.748	2.724-5.935
	BTU/h	18.000	24.000	30.000	36.000	48.000	60.000
	Kcal/h	4.537	6.049	7.561	9.074	12.098	15.123
Heating capacity	W	764-1.676	1.018-2.434	1.273-3.043	1.527-3.351	2.036-4.469	2.545-5.586
	BTU/h	19.000	27.300	32.000	38.000	52.000	68.000
	Kcal/h	5.293	6.888	8.067	10.082	13.358	17.140
Power req. cooling	W	1.507	2.118	2.511	3.014	3.996	5.124
Power req. heating	W	1.418	1.988	2.281	2.852	3.799	4.812
Dehumidification	Lts/h	1.9	2.4	3	3.6	4.6	6
Air Flow	m³/h	1,160	1,460	2,070	2,070	2,400	2.800
Static pressure	Pa	40	40	70	70	70	100
Power Supply	V-Hz-Ph	230-50-1	230-50-1	230-50-1	230-50-1	400-50-3	400-50-3
Noise level in. unit	dB(A)	38	42	44	44	44	46
Noise level out. unit	dB(A)	48	52	55	57	57	57
Dimension in. unit	mm	1000x298x800	1000x298x800	1350x298x800	1350x298x800	1350x298x800	1350x320x800
Dimension out. unit	mm	845x695x335	895x860x330	990x960x360	990x960x360	940x1245x340	940x1245x340
Weight indoor unit	Kg	29	29	35	35	50	50
Weight outdoor unit	Kg	52	75	103	103	110	110
Gas pipe diameter	pulg	1/2	5/8	3/4	5/8	5/8	5/8
Liquid pipe diameter	pulg	1/4	3/8	1/2	3/8	3/8	3/8
Maximum length	m	25	30	30	30	50	50
Maximum distance	m	15	15	20	20	30	30

20 WALL HEATER MUR Series

MUNDOKLIMA®



- Infrared remote control
- Digital temperature signal
- Power supply 220V 50Hz
- 2 heating modes of 1000 and 2000W
- Set temperature from 18 to 30°C
- Auto-swing function
- Dimensions 653 x 225 x 117 mm
- Extremely silent tangential fan
- Turn-off timer from 0.5 to 7.5 hours



Directions for use:

- 1.- The heater has two powers.
- 2.- First of all, press the ON/OFF button to switch the heater on.
Secondly, press the HEATING button and the appliance will switch on. At the same time, the "Sun" icon will enlighten on panel, what it means that power of the heater is 1000W. Now press the HEATING button again and the "Sun" icon will be enlightened with more intensity, what will mean the heater is working at 2000W. You will notice the air from the heater flowing with more intensity.
Press the SWING button, the "Swing" icon on panel will enlighten and blades will begin to swing in an automatic way.
Press the ON/OFF button to switch off the heater. If the heater is hot, the switching off will be delayed 30 seconds to eliminate the remaining heat and let blades close automatically. To switch the heater back on, please follow the same stages previously detailed.
- 3.- Press the TIMER button to settle the time in the programmer (till 7.5 h in 30 minutes intervals).

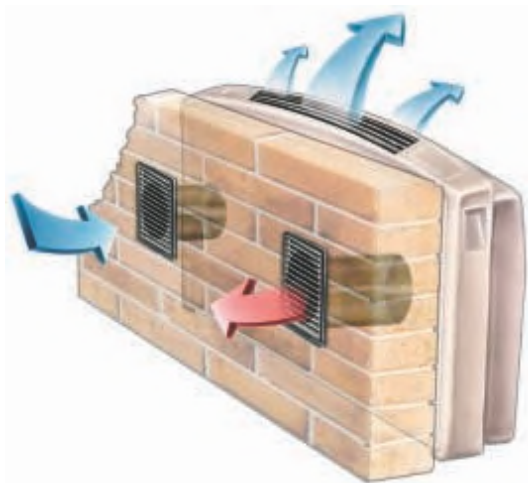
*Perfect for
small rooms:*

- Bathrooms
- Kitchens
- Offices
- Etc



19 AIR-CONDITIONER WITHOUT OUTDOOR UNIT MU-SINGLE model

- Electrical heating installed. This function can be cancelled pressing an internal button.
- Automatic removal of condensed water.
- Tangential fan.
- Rotary compressor.
- Night operation mode (silence).
- Ambient thermostat.
- Ambient air filter.
- Immediate air conditioning after receiving the power supply signal. Automatic switch off on the opposite case.



TECHNICAL DATA

Cooling capacity*	W	1,870
Heating capacity*	W	1,350
Power supply	V - Hz	230 - 50
Power requirement during cooling W/h		846
Power requirement during heating W/h		1,400
Air volume	m³/h	320
Dehumidification capacity	l/h	0.9
Fan speed	n°	2
Dimensions (height x width x depth)	mm	600 x 700 x 275
Weight	kg	40
Heating resistance	W/h	1,500
Ecological gas		R-407C

MUND KLIMA®



INSTALLATION

You only need to drill two holes on the wall for the removal of condensed air.

No need of an external unit.

Mu-Single is perfect for the installation of air conditioning in historical buildings, hotels and homes.

INCLUDED ACCESSORIES

- 1 drilling template for the installation.
- 2 telescopic tubes Ø 100 mm, L = 80 mm.
- 2 bearing necks for internal wall (abutment of holes)
- 2 covers for the bearing necks.
- 2 round grills for outdoor.
- 1 base for floor.
- 2 water bars to be placed on external grills.

QUIET

Tangential fan as in Wall Splits Air Conditioners.
Last generation rotary compressor.
High efficiency soundproofing.
Night-time low noise operation selector key.
Ideal for bedrooms, rooms of hotels, homes, hospitals, etc.

DIMENSIONS

Its depth (only 27.5 cm) allows to place the unit leaned against wall in any environment.

19 AIR CONDITIONER WITHOUT OUTDOOR UNIT MU-UNIC

MUND KLIMA®

It is the single wall air conditioner without an outdoor unit!

- Powerful and versatile.
- Can be easily installed at high or low level on an external wall.
- Allows an easy installation: two holes drilled with a core bit are all that is required.
- It is supplied with all installation accessories. Both external grills can be fixed from inside room eliminating possible external access problems.



ELECTRONIC CONTROL



Filter led: indicates when the filter needs cleaning.



Infrared remote control: a liquid crystal display shows operating mode and settings. Main controls are shown on the display, secondary controls under a sliding cover.



Automatic operation: enables pre-set comfort levels to be achieved automatically.



Night function: reduction in fan speed and increase in night time comfort.



Dehumidification: reduction in the humidity without altering the temperature.



Time setting: automatic control of "ON" and "OFF" times.



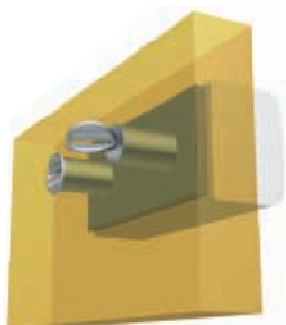
Display of the working alarms: it executes the diagnosis and it signals the maintenance need.

EASY AND FAST ASSEMBLY



The outdoor connection is made by drilling two holes (Ø153 mm) through a suitable drill.

The external folding grills which cover these holes (patented) can be installed from inside room.



TECHNICAL DATA

Model		MU-UNIC 8.5	MU-UNIC 11.0	MU-UNIC 8.5 HP	MU-UNIC 11.0 HP
Cooling capacity	kw	2.10	2.45	2.10	2.45
Heating capacity	kw	–	–	1.9	2.04
Power requirement during cooling	W	790	1,100	790	1,100
Power requirement during heating	W	–	–	720	1,080
E.E.R.* in cooling		2.66	2.23	2.66	2.23
COP in heating		–	–	2.64	1.88
Room Air volume	m³/h	350	390	350	390
Outside air volume	m³/h	480	550	480	580
Dehumidification capacity	l/h	1	1.2	1	1.2
Fan speeds	nº	3	3	3	3
Noise level (minimum)	dbA	37	39	37	39
Refrigerant	type	R410A	R410A	R410A	R410A
Power supply	V/Hz	230/50	230/50	230/50	230/50
Dimensions (width x high x depth)	mm	870x400x280	870x400x280	870x400x280	870x400x280
Weight	kg	43	46	43	46
Wall holes diameter (minimum)	mm	153	153	153	153

(*) Data obtained according pr EN 14511 standards

EASY INSTALLATION

MU-UNIC has eliminated the need of an external unit. The complete system is contained in just one indoor unit –no more complicated installation procedures–.



ENVIRONMENTAL PROTECTION

The small grills of MU-UNIC maintain the aesthetic of the building. The absence of an external unit also minimises any acoustic problems.



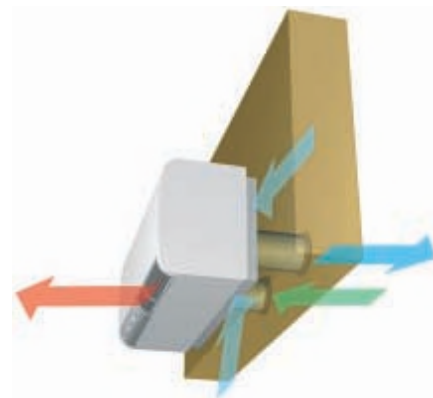
All included:

MU-UNIC is supplied with all the required accessories for its installation

AUTOMATIC CONDENSATE REMOVAL

When MU-UNIC works in Cooling mode, the condensate is removed through water evaporation on the condenser, therefore a drainage pipe is unnecessary.

When working in Heating Pump mode, condensate removal is through a drainpipe.



QUIET OPERATION

Rotary compressor: high energy efficiency with low noise level operation.

Fans: dual fans to increase efficiency and ensure quiet running.
Three fan speeds: fan speeds can be selected automatically either "Night" for super quiet operation, "Medium" for normal daytime use, and "Turbo" for fast cooling.

AIR FLOW

The airflow is automatically adjusted according to room temperature. Using the remote control it is possible to change the position of the grill or make it oscillate. MU-UNIC has an optional fresh air kit that introduces a flow of fresh air from outside into the room.



20 PORTABLE AIR-CONDITIONER MONOBLOC MU-PO "Eco" series

MUND KLIMA®

With outdoor discharge tube



AIR FILTER
Retains dust and air impurities.
Easy to remove for cleaning and maintenance



REMOVAL OF CONDENSED WATER
Removes the condensed water assuring the best humidity level in the room. Possibility of removal of condensed water through a water tank (with full tank alarm) or continuous discharge tube.



VENTILATION FUNCTION
Allows working only in fan mode



ROTARY COMPRESSOR
Optimizes performance. Low consumption



THERMOSTAT
Keeps the selected temperature automatically



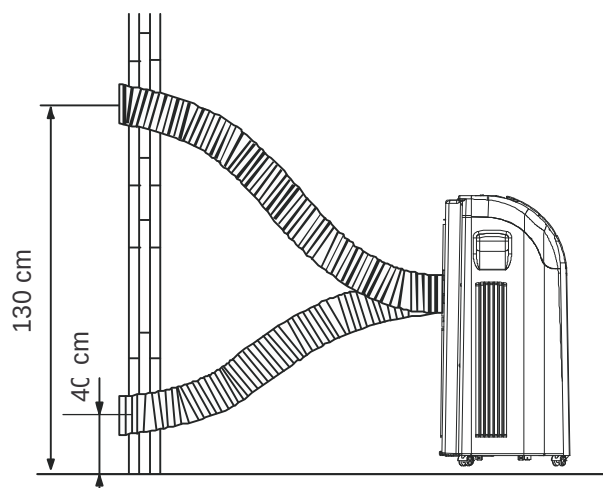
HOT AIR DISCHARGE TUBE
Easy and fast installation. Allows the use of the air conditioner immediately: pull down the back cover for coupling.



DEHUMIDIFYING
Reduces humidity restoring temperature

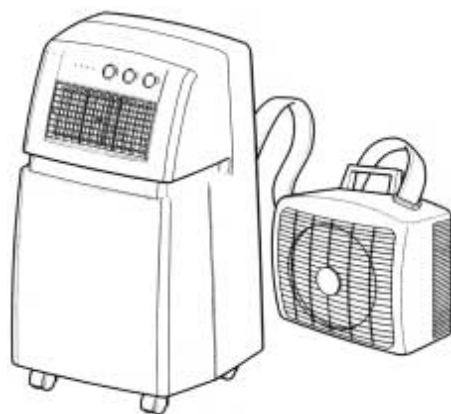


Model		MU-PO 11RE
Part No.		CL 20 095
Cooling capacity	W	3,500
	BTU/h	12,000
	Kcal/h	3,010
Heating capacity	W	2,400
	BTU/h	8,000
	Kcal/h	2,064
Cooling power consumption	W	1,610
Heating power consumption	W	2,450
Dehumidification capacity	l/h	1.55
Air volume (M/M/L)	m³/h	570/510/430
Voltage-frequency	V-Hz	230-50
Noise level	dB(A)	59
Unit Width	mm	546
Unit Height	mm	840
Unit Depth	mm	405
Unit weight	Kg	47

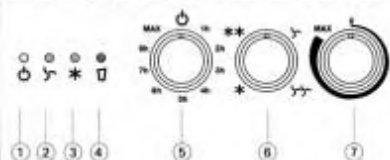


Mounting example

19 MOBILE AIR-CONDITIONER WITH OUTDOOR UNIT



CONTROL DETAIL



- ① ON/OFF light signal
- ② "Only Fan" signal
- ③ "Fan+Cool" signal
- ④ "Full water tank" signal
- ⑤ "ON/OFF/Timer" selector key

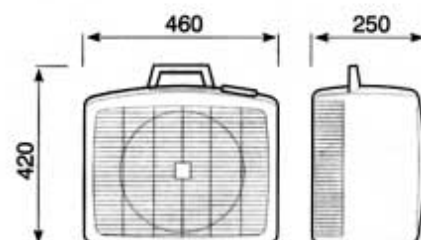
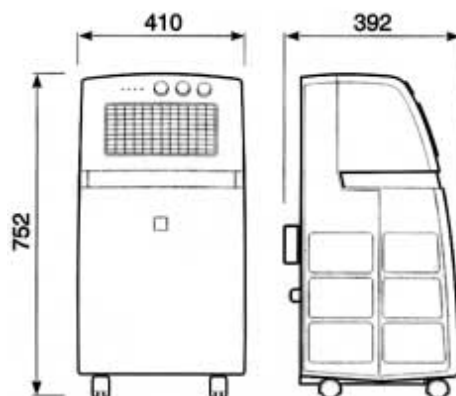
Model		POLAR M14
Part No.		CL 19 720
Cooling capacity	Frig/h	2,524
	BTU/h	12,000
	W	2,936
Operation temperature: outdoor unit	°C	21÷43
	indoor unit °C	18÷32
Dehumidification capacity	l/h	1.25
Power consumption (1)	W	1,215
Voltage - Frequency - Phases		230V - 50 Hz - 1 Ph
Cooling electrical consumption (1)	A	5.64
Air volume indoor unit (max. speed)	m³/h	428
Weight indoor / outdoor unit	kg	31 / 11
Standard Refrigerant charge (1)	g	670
Compressor type		Rotary
Fan Speed	Nº	2
Diameter of flexible tubes	mm	3,000
Dimensions indoor unit	mm	752 x 410 x 392
Dimensions outdoor unit	mm	420 x 460 x 250
Suggested surface	m³	90

(1) These data are subject to changes due to technical reasons: for more accuracy, please see manufacturing plate placed on product.

REMOVAL OF CONDENSATES:



By means of a tube outlet in Ø14,5 mm



19 PORTABLE AIR-CONDITIONER Clima16 series

MUND  KLIMA®

- Automatic removal of condensed water
- Heat Pump (Clima 16 HP)
- Multifunctional Electronics
- Remote control
- Connection flexible tubes of outdoor unit (Central 16 HE: 6.5 m)
- Electronic protection device for compressor
- Comfort functions (automatic and night mode)
- Connections by quick coupling.
- Refrigerant: Ecological gas R410A



Model		Clima 16 HE	Clima 16 HP HE
Part No.		CL 19 707	CL 19 708
Cooling capacity*	W	4,260	4,260
Heating capacity*	W	–	4,220
Voltage	V-Hz	230-50	230-50
Cooling power requirement*	W	1,510	1,510
Heating power requirement*	W	–	1,500
Air volume	m ³ /h	700	700
Dehumidification capacity	l/h	1.8	1.8
Indoor Fan Speeds	n°	3	3
Outdoor Fan Speeds	n°	2	2
Dimensions indoor unit (height x width x depth)	mm	900 x 475 x 410	900 x 475 x 410
Dimensions outdoor unit (height x width x depth)	mm	500 x 570 x 210	500 x 570 x 210
Dimensions connection tube	mm	3,500 x 40 x 20	3,500 x 40 x 20
Weight	Kg	55	56

(*) According to pr EN 14511 standards

CL PORTABLE AIR COOLER



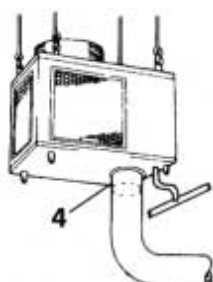
Part No.	Model	Cooling Frig/h	€
PORTABLE AIR COOLER			
CL 21 001	Model 10 SFE*	1,800	2,866.00
CL 21 002	Model 15 SFE-1*	3,800	3,867.00
CL 21 005	Model 30 HE*	8,170	9,083.00
CL 21 006	Model 50 HE*	13,800	13,383.00

* Accesories cooler

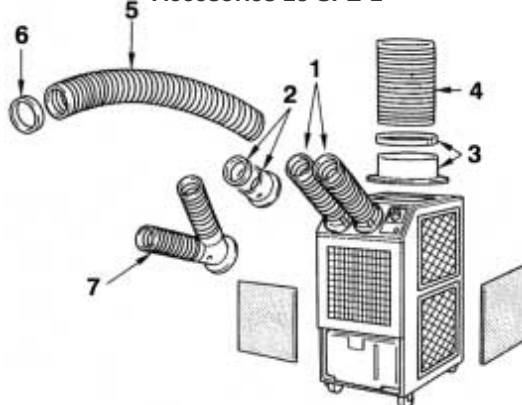
• Accesories

Part No.	Model	Nº	€
10 SFE			
CL 21 011	Cool air outlet Ø125 mm, lenth. 650 mm	1	78.40
CL 21 024	Cool air tube enlarger Ø125 mm x 3 m	2	113,60
CL 21 025	Tube terminal Ø125 mm	3	8.15
CL 21 027	Hot air tube outlet Ø250 mm x 3 m	4	202.75
15 SFE-1			
CL 21 012	Cool air Ø125 mm, lenth. 550 mm (2 required)	1	70.30
CL 21 021	Flanged antivibrator Ø135 mm for cold air	2	51.40
CL 21 022	Flanged antivibrator Ø300 mm for hot air	3	73.00
CL 21 023	Hot air outlet pipe Ø300 mm x 3 m	4	246.00
CL 21 024	Cool air tube enlarger Ø125 mm x 3 m	5	113,55
CL 21 025	Tube terminal Ø125 mm	6	8.12
CL 21 026	2 ways derivation	7	151.40
30 HE			
CL 21 030	Cool air duct Ø150 mm x 3 m	1	121.70
CL 21 031	Flanged antivibrator for hot air Ø550 mm	2	427.15
CL 21 032	Plenum 2 ways for cold air	3	224.40
CL 21 033	Plenum 3 ways for cold air	3	289.25
CL 21 037	Flanged antivibrator for cool air Ø300 mm	4	73.00
CL 21 036	Wheelbarrow	5	729.90
CL 21 038	Support (without wheels)	5	508.25
CL 21 039	Wheel set	6	210.60
50 HE			
CL 21 030	Conducto aire frío Ø150 mm x 3 m	1	212.65
CL 21 023	Tubo aire caliente Ø300 mm x 3 m	2	246.00
CL 21 032	Plenum 2 ways for cold air	3	224.40
CL 21 033	Plenum 3 ways for cold air	3	289.25
CL 21 037	Flanged antivibrator Ø300 mm cold air	4	73.00
CL 21 040	Flanged antivibrator Ø300-281 mm mobile	4	94.65
CL 21 039	Wheel set	6	209.00
CL 21 041	Tube terminal Ø 150	7	10.85

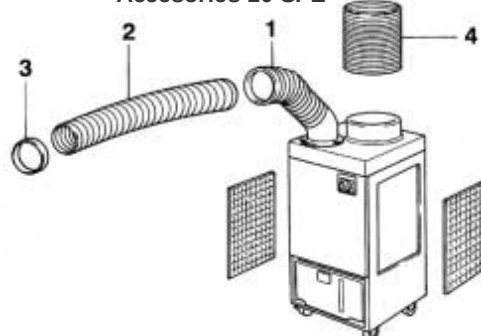
Accesories 30 HE y 50 HE



Accesories 15 SFE-1



Accesories 10 SFE



21 PORTABLE AIR-CONDITIONER model 10SFE

MOVINCOOL®

The most reliable and economic portable air-conditioned

The small MOVINCOOL 10SFE has a capacity of 2.000 Frig/h, enough to refrigerate a room up to 50 m³.

The 10SFE weigh 46 kilos aprox. and it is easily carried due to the wheels. With an external temperature of 35°C and a relative humidity of the 60%, the unit takes air out at 9,5°C and at 8 m/seg. In few minutes you will get the room refrigerated.

The 10SFE is ideal for small working areas, small production chains and in facilities with machines.

Technical information:

Working conditions	Dry bulb temperature	35°C
	Wet bulb temepature	28.2°C
	Relative humidity	50%
Characteristics	Voltage (50Hz)	240 V (single phase)
	Nominal consumption	0.84 kW
	Nominal intensity	3.9 A
	Power factor	94%
	Starting intensity	14 A
	Electric connection section	1.5 mm ²
Cooling unit	Cooling power	2,000 Frig/h
	Cooling system	direct expansion
Turbine	Fan type	Siroco
	Air flow (cool)	360 m ³ /h
	Air flow (heat)	750 m ³ /h
	Motor power	0.04 kW
Compressor	Type	Rotative hermetic
	Compressor power	0.6 kW
	Refrigerant	R-407C
	Refrigerant load	0.42 Kg
Security devices	Relay for compresor overload included	
	Fan motor protector included	
	Condensed water level switch included	
	Antifrost thermostat	
Dimensions and weight	Wide x Deep x High	400x400x1010
	Weight	46 Kg
Sound level	At 1 meter	57dB (A)
Operation conditions	Air intake temperature	20°C minimum
	(Relative humidity 50%)	38°C maximum
Pipes	Supplied as accessories	



21 PORTABLE AIR CONDITIONED model 15SFE

MOVINCOOL®

Flexible and powerful air conditioned equipment

The air conditioned MOVINCOOL 15SFE has a capacity of 3.700 Frig/h, being ideal for room refrigeration up to 100 m³.

It has two air outlet which makes it ideal for small production chains which need cool air in two different points. Temperatures between 20°C and 40°C may be reduced to the desired point.

It is ideal as a reinforce in emergency situations, like additional refrigeration in high temperatures situation or in working places near to machinery.

Technical information:

Working conditions	Dry bulb temperature	35°C
	Wet bulb temperature	28.2°C
	Relative humidity	50%
Characteristics	Voltage (50Hz)	240 V (single phase)
	Nominal consumption	1.7 kW
	Nominal intensity	8.2 A
	Power factor	90%
	Starting intensity	32 A
	Electric connection section	1.5 mm ²
Cooling unit	Cooling power	3,700 Frig/h
	Refrigerant system	direct expansion
Turbine	Fan type	Siroco
	Air flow (cool)	800 m ³ /h
	Air flow (heat)	1,500 m ³ /h
	Motor power	0.35 kW
Compressor	Type	Hermetic rotative
	Compressor power	1.1 kW
	Refrigerant	R-407C
	Refrigerant load	0.68 Kg
Security devices	Relay for compressor overload included	
	Fan motor protector included	
	Condensed water level switch included	
	Antifrost thermostat	
Weight dimensions	Wide x Deep x High	490x650x1045
	Weight	76 Kg
Sound level	At 1 meter	64dB (A)
Working conditions	Air intake temperature (Relative humidity 50%)	de 20°C minimum a 38°C maximum
Pipes	Supplied as accessories	
Optional accessories	Auto starting relay	
	Thermostat (17°C - 27°C)	



21 PORTABLE AIR CONDITIONED modelos 30HE y 50HE

MOVINCOOL®

The air conditioned for high temperatures

The conditioners MOVINCOOL 30HE and 50HE are mainly used in the industrial sector. Its high capacity makes them absolutely efficient at high temperatures.

The possibility of joining up to 6 outlet ducts allows the air fresh to reach the desired points. Due to its compact design, both equipments may be transported in vertical position.

They offer multiple applications, for refrigerant and dehumidification, p.e. in offices or factories..

Security devices 30HE and 50HE:

- Relay for compressor overload included
- Fan motor protector included
- High pressure switch
- Antifrost thermostat

INDUSTRIAL
aplication



Technical information:

Model			30HE	50HE
Cooling unit	Cooling capacity	Frig/h	8,170	13,800
		Btu/h	32,400	54,600
		kW	9.5	16
Working conditions	Dry bulb temperature	°C	35	35
	Humid bulb temperature	°C	28.5	28.5
	Relative humidity	%	60%	60%
Characteristics	Voltage (50Hz)	V	380/415 V (three phase)	380/415 V (three phase)
	Nominal consumption	kW	3.4	5.5
	Nominal intensity	A	6	11
	Starting intensity	A	42	65
Turbine	Fan type		Centrifugal	Centrifugal
	Air flow (cool))	m³/h	1,500	2,300
	Air flow (hot)	m³/h	4,000	5,500
Compressor	Type		Reciprocal	Reciprocal
	Compressor power	kW	2.2	3.75
	Refrigerant		R407C	R407C
	Refrigerant load	Kg	2.1	2.15
Dimensions and weight	Wide x Deep x High	mm	1100x650x985	120x800x1040
	Weight	Kg	157	200
Sound level	At 1 meter	dB(A)	70	71
Working conditions	Intake temperature (Relative humidity 50%)		from 20°C minimum to 45°C maximum	from 20°C mínimo to 45°C máximo

19 DECORATIVE AIR CONDITIONER

Air-Fi
COOL SURROUND

The air conditioning of the future

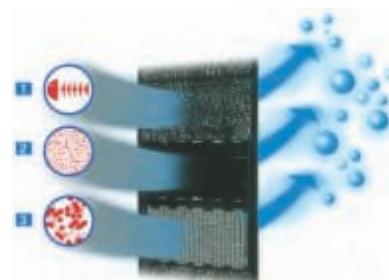
AIR-FI is the new appliance which combines the best technology inside a compact structure that, thanks to its simple and elegant style, can be easily transformed into an interesting element of interior desing.

With its peculiar shap, AIR-FI can be cleverly installed in the corner areas: it will improve the quality of your living environments by creating the ideal comfort conditions for all seasons.

Your smart choice

Thanks to its unique installation system, it is now possible to exploit areas that are already occupied by furniture, curtains, doors and windows, etc. In addition, the direction of the aire flow can be selected as per your choice, so that the ideal temperature can be easily reached avoiding the people are directly struck by the cold flow.

Air exit on the left
or on the right side.
Internal adjustable
deflectors.



- 1 CATALYTIC FILTER**
No more unpleasant smell thanks to a high efficiency active filtration system.
- 2 ELECTROSTATIC FILTER**
The electrostatic induction system captures the dust particles up to 0.01 µm
- 3 ANTIBACTERIAL FILTER**
To prevent the proliferation of bacterias and mold.
Replaceables filters.

Model		AFT 7	AFT 9	AFT 77 D	AFT 99 D	AF 999 T
Type		Monosplit	Monosplit	2x1	2x1	3x1
Part No.		CL 19 800	CL 19 801	CL 19 802	CL 19 803	CL 19 804
Technical specifications						
Voltage	V-Hz	220-240/50	220-240/50	220-240/50	220-240/50	220-240/50
Cooling capacity	W	2,230	2,420	2,230x2	2,420x2420	2,639x3
Cooling power consumption	W	686	752	690x2	754x2	819x3
Heating capacity	W	2,363	2,430	2,363x2	2,430x2	2,785x3
Heating power consumption	W	647	662	647x2	666x2	815x3
Air flow	m³/h	350	350	350	350	400
Dehumidification	l/24h	19	24	21/21	24/24	24/24/24
Noise level indoor unit (min/max)	dB(A)	31-38	32-40	31-38	32-40	32-40
Noise level outdoor unit	dB(A)	51	52	53	55	57
Liquid connexion	pulg.	1/4"	1/4"	1/4"	1/4"	1/4"
Gas connexion	pulg.	3/8"	3/8"	3/8"	3/8"	3/8"
Ecological refrigerant gas		R410A	R410A	R410A	R410A	R407C
Energy efficiency class (cooling)*		A	A	A	A	A
Energy efficiency class (heating)*		A	A	A	A	B
Weight and dimensions: indoor/outdoor unit						
Heigh	mm	545/530	545/530	545/605	545/605	545/870
Width	mm	350/870	350/870	350/910	350/910	350/1000
Depth	mm	250/320	250/320	250/345	250/345	250/415
Weight	Kg	7.1/37	7.1/39	7.1/52.0	7.1/53.5	7.1/80.0
PRICE		950.90 €	984.11 €	1,825.00 €	1,896.14 €	2,635.00 €

2006 models availables until end of stock

20 WALL SPLIT 1x1 "ECO Serie"

MUND  KLIMA®



Part No.	Model	CAPACITY (W)		€
		Cool	Heat	
	HEAT PUMP			
CL 20 531	MUP-07HE	2,300	2,650	426.00
CL 20 532	MUP-09HE	2,500	2,750	431.00
CL 20 533	MUP-12HE	3,200	3,520	468.00
CL 20 551	MUP-07HA	2,300	2,650	473.00
CL 20 553	MUP-12HA	3,200	3,520	604.00
CL 20 555	MUP-24HA	7,000	7,700	1,238.00

WALL SPLIT 1x1 "Serie Lujo" (R-407C)



MUP-07CN al 16CN
MUP-07HN al 16HN



MUP-18CN al 24CN
MUP-18HN al 24HN

Part No.	Model	CAPACITY (W)		€
		Cool	Heat	
CL 20 121 CL 20 122 CL 20 123 CL 20 124 CL 20 126 CL 20 127 CL 20 131 CL 20 132 CL 20 133 CL 20 136 CL 20 137	COOL			562.00 569.00 644.00 944.00 1,118.00 1,269.00 617.00 627.00 658.00 1,218.00 1,376.00
	MUP-07CN	2,000	—	
	MUP-09CN	2,500	—	
	MUP-12CN	3,500	—	
	MUP-16CN	4,500	—	
	MUP-18CN	5,000	—	
	MUP-21CN	6,000	—	
	HEAT PUMP			
	MUP-07HN	2,000	2,300	
	MUP-09HN	2,500	2,800	
	MUP-12HN	3,500	3,800	
	MUP-18HN	5,000	6,000	
MUP-21HN	6,000	7,000		

WALL MULTI SPLIT "INVERTER" (R-407C)



TECNOLOGIA
INVERTER
¡GRAN AHORRO ENERGÉTICO!

Part No.	Model	CAPACITY (W)		€
		Cool	Heat	
CL 20 088	HEAT PUMP 3x1			3,238.00
	MUPR-09X3HN	2,500x3	3,000x3	
CL 20 089	HEAT PUMP 4x1			3,002.00
	MUPR-07X4HN	2,000x4	2,500x4	

2006 models availables until end of stock

20 CASSETTE SPLIT (R-407C)

MUND KLIMA®



Part No.	Model		CAPACITY (W)		€
			Cool	Heat	
CL 20 181 CL 20 191	MODEL 600 x 600				1,518.00 1,559.00
	MUCS-18C MUCS-18H	(220V II) (220V II)	5,000 5,000	— 5,400	
	MODEL 900 x 900				
CL 20 182	MUCS-24C	(220V II)	7,000	—	1,780.00
CL 20 183	MUCS-41C	(380V III)	12,000	—	2,406.00
CL 20 192	MUCS-24H	(220V II)	7,000	7,500	1,922.00

WALL-FLOOR CONDITIONERS



Part No.	Model	CAPACITY (W)		€
		Cool	Heat	
	HEAT PUMP (R407C)			
CL 20 371	MU S/T 14HE	4,100	5,000	1,468.00
CL 20 372	MU S/T 18HE	5,200	5,800	1,559.00
CL 20 375	MU S/T 36HE	10,500	12,000	2,952.00
CL 20 376	MU S/T 42HE	12,300	14,000	3,064.00

DUCT CONDITIONERS



Part No.	Model	CAPACITY (W)		€
		Cool	Heat	
CL 20 283 CL 20 284 CL 20 290 CL 20 291 CL 20 292 CL 20 293 CL 96 457 CL 96 458 CL 96 459 CL 96 460 CL 96 463 CL 96 464 CL 96 465 CL 96 466	COOLING (R-407C)			1,732.00 2,222.00
	MUC-24CNC	7,000	–	
	MUC-34CNC	10,000	–	
	HEAT PUMP (R-407C)			888.00 1,004.00 1,637.00 1,905.00
	MUC-8HNC	2,600	2,900	
	MUC-12HNC	3,500	3,700	
	MUC-18HNC	5,000	5,800	
	MUC-24HNC	7,000	8,200	
	ROUND FLANGE OUTLET			90.00 90.00 99.00 125.00
		Dimensions	Outlets	
	for MUC-8 and 12 HNC	515 x 172	2 x 150	
	for MUC-18 HNC	738 x 207	2 x 200	
	for MUC-24 HNC	918 x 207	3 x 200	
	for MUC-34 and 41 HNC	1155 x 207	4 x 200	
	ROUND FLANGE INLET			84.15 86.67 90.40 97.95
	for MUC-8 and 12 HNC	750 x 172	2 x 150	
	for MUC-18 HNC	904 x 207	2 x 200	
	for MUC-24 HNC	1010 x 250	3 x 200	
	for MUC-34 and 41 HNC	1278 x 250	4 x 200	

Check the technical characteristics in our website:
<http://www.salvadorescoda.com/tecnico/mundoclima/mundoclima.htm>

www.klimaimport.de[®]



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