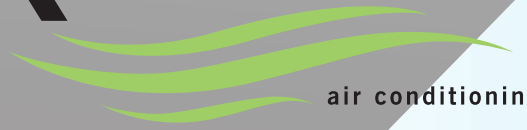


AERMEC



air conditioning



Split System
and VRF systems



Year 2014

The Aermec philosophy

A complete range, capable of resolving every air conditioning problem: this is Aermec for room conditioners.

Completeness not only for models but with options and possibilities: **cooling only and heat pump versions; environmentally friendly refrigerants; advanced technology**, such as inverters which allow optimisation of performance in relation to temperature setpoints at all times and to obtain significant energy savings; installation versatility, to solve every space problem in the best way.

Aermec is a business leader in the Italian and European air conditioning market.

Created in 1961 it has carried out a primary role in the distribution and in creative ideas in air conditioning, building its development with a vast range of efficient and reliable products and a large number of services, in support of every requirement of designers, installers, architects and independent users.

Aermec: the ideal climate always and everywhere

In cooling only or heat pump versions the Aermec air conditioners, dedicated to the residential and light commercial sector, ensure the ideal climate all year round.

Floor, wall, or ceiling mounted, they resolve every problem of space and installation.

Mono or Multi-split, and available in variable refrigerant flow systems (VRF), they allow the solution of every problem and the satisfaction of every requirement in all types of dwelling, in historical and valuable buildings, and in offices.

The success numbers

600 employees

12,900 m² of factories

56 exclusive distributors in Europe and the Mediterranean

6 distributors in France, Germany, England, Poland, Spain and the Netherlands

78 technical assistance service centres in Italy

Split System and VRF system Guide

This document offers an overall view of the Aermec range for residential and commercial applications.

It contains a large variety of internal unit types with wall, floor, ceiling and ducted units, available in heat pump versions both with on/off and inverter technology.

This split system and VRF system guide replaces all previous editions.

For more detailed information please refer to the individual product technical and commercial documentation available on our website www.aermec.com.





Summary

Green Line

Monosplit Inverter

Wall mounted: SI, HWI	pag. 9, 10
Ducted: LCI	pag. 11
Cassette: LCI	pag. 11
Floor/Ceiling mounted: LCI	pag. 11

Monosplit On/Off

Ducted: DXE	pag. 14
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Multisplit Inverter

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Green Line - VRF Systems

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Blue Line

Monosplit Inverter

Wall mounted: EWIH	pag. 31
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Green Line

- SI
- HWI
- LCI
- DXE
- MKM

VRF System:

- MDW
- MVF/MDS

Inverter, greater comfort, lower consumption

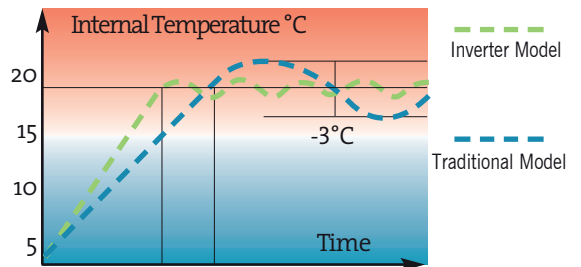
Today offers electronic technology applied to air conditioning.

It is system controlled by “Fuzzy” logic, capable of maintaining the ideal comfort conditions in the space by operating the air conditioner at variable “speed” and capacity, without the continuous stops and starts from traditional units: maximum speed and power when required, gradual and automatic reduction to constantly adapt to the ambient conditions without fluctuations. This means improved comfort obtained by the absence of temperature fluctuations and a significant seasonal energy saving – up to 30% less – by an improvement in the refrigeration cycle efficiency.

In the heat pump operating mode these advantages are augmented by a further efficiency gain in the

reversing phases of the defrost cycle for the external heat exchanger.

In addition, the microprocessor system constantly monitors the unit’s operating parameters and acts on the supply frequency of the compressor in order to prevent faults or malfunctions.



Energy efficiency

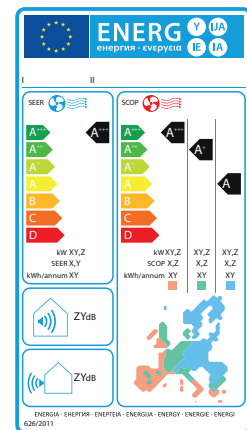
To reach the 20/20/20 objectives (20% reduction of CO2 emissions, 20% increase in renewable energy, 20% reduction of primary energy consumption by 2020), the European Union has issued the ErP Directive (Energy related Products) which specifies the minimum efficiency requirements for various equipment including air conditioning units.

In particular, for air conditioning units with capacities below 12 kW from 1st January 2013 the energy efficiency is evaluated based on a new seasonal efficiency index (SEER in cooling operation and SCOP in heating operation).

The new energy label is based on these new seasonal efficiency parameters (also in force from 1st January 2013).

The new energy label details the Seasonal Efficiency Class of the product (in conformance with EN14825) as well as the sound levels for the internal and external units.

Below is an example of the new energy label and the limiting values of the different efficiency Classes



Energy efficiency class	Split and multi-split: summer cooling
A+++	SEER ³ 8,50
A++	6.10 ≤ SEER < 8.50
A+	5.60 ≤ SEER < 6.10
A	5.10 ≤ SEER < 5.60
B	4.60 ≤ SEER < 5.10
C	4.10 ≤ SEER < 4.60
D	3.60 ≤ SEER < 4.10
E	3.10 ≤ SEER < 3.60
F	2.60 ≤ SEER < 3.10
G	SEER < 2.60

Energy efficiency class	Split and multi-split: class winter heating
A+++	SCOP ³ 5.10
A++	4.60 ≤ SCOP < 5.10
A+	4.00 ≤ SCOP < 4.60
A	3.40 ≤ SCOP < 4.00
B	3.10 ≤ SCOP < 3.40
C	2.80 ≤ SCOP < 3.10
D	2.50 ≤ SCOP < 2.80
E	2.20 ≤ SCOP < 2.50
F	1.90 ≤ SCOP < 2.20
G	SCOP < 1.90



SI Split system air conditioner and heat pump

Wall mounted monosplit

DC Inverter Technology and air ioniser standard



Regulation (EU) N. 206/2012
Delegated Regulation (EU) N. 626/2011



Features

- Available in 4 different capacity sizes.
- Refrigerant R410A
- Heat pump operation with reversible refrigerant cycle and defrost control
- Tangential type fan with 4 speeds:
 - 3 speeds directly selected (Minimum, Medium, Maximum)
 - One Super High speed when the Rapid Cooling/Heating (TURBO) function is activated, to achieve the required temperature as quickly as possible
- DC Inverter rotary compressor
- Extremely low noise operation
- Microprocessor control
- Infrared remote controller with liquid crystal display to control all functions
- Emergency control possibility if the remote controller batteries are flat (Button AUTO on internal unit)
- Front panel display showing operating modes and temperature. The display can be activated or deactivated from the remote controller

(LIGHT)

- Timer to programme clock functions (switch on or off)
- Operating modes: Cooling, Heating, Dehumidification, Automatic or Ventilation Only
- Air ioniser standard
- Night-time Health function (SLEEP)
- Energy Saving function
- Rapid Cooling/Heating function (TURBO)
- Extended Ventilation (X-FAN) function prevents the growth of mould in the internal unit during Cooling and Dehumidification Modes
- Intelligent pre-heat function to prevent jets of cold air (Heating Mode)
- Auto-diagnostic function
- Auto-Restart function after a power cut
- External unit defrost function
- External unit with condensate connection
- Cleanable air filter
- Horizontally adjustable air discharge louvres
- Motorised deflector louvres controlled by the

- remote controller to vertically adjust the discharge air, with 5 fixed positions or floating (SWING)
- Flare type refrigerant connections
- Simple installation and maintenance

Technical data

Indoor unit			SI090E	SI120E	SI180E	SI240E
Outdoor unit			SI090C	SI120C	SI180C	SI240C
Cooling capacity	nominal	W	2600	3500	5275	6450
Total power input	nominal	W	870	1150	1600	2180
SEER			5,6	5,1	5,4	5,1
Energy efficiency class in cooling*			A+	A	A	A
Condensate rate		l/h	0,8	1,4	1,8	2,0
Heating capacity	nominal	W	3000	3800	5570	7000
Total power input	nominal	W	900	1100	1750	2220
SCOP			3,8	3,8	3,8	3,8
Energy efficiency class in heating*			A	A	A	A
Refrigerant connections	liquid	Ø	1/4"	1/4"	1/4"	1/4"
	gas	Ø	3/8"	3/8"	1/2"	5/8"
Refrigerant lines	liquid	mm(inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
	gas	mm(inch)	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")	15,9 (5/8")

*Seasonal Energy Efficiency. See technical data

Dimensional Data (Indoor Unit)

Dimensional Data (Indoor Unit)		SI090E	SI120E	SI180E	SI240E
Height	mm	283	283	305	315
Width	mm	770	770	865	1007
Depth	mm	201	201	215	219
Weight	kg	8	9	12	14,5

Dimensional Data (Outdoor Unit)

Dimensional Data (Outdoor Unit)		SI090C	SI120C	SI180C	SI240C
Height	mm	540	540	700	790
Width	mm	776	848	955	980
Depth	mm	320	320	396	427
Weight	kg	28	30	46	55,5

HWI

Split system air conditioner and heat pump Wall mounted monosplit with DC Inverter Technology and air ioniser standard



Regulation (EU) N. 206/2012
Delegated Regulation (EU) N. 626/2011

Features

- Available in 4 different capacity sizes
- Refrigerant R410A
- Heat pump operation with reversible refrigerant cycle and defrost control
- Tangential type fan with 4 speeds:
 - 3 speeds directly selected (Minimum, Medium, Maximum)
 - One Super High speed when the Rapid Cooling/Heating (TURBO) function is activated, to achieve the required temperature as quickly as possible
- DC Inverter rotary compressor
- Extremely low noise operation
- Microprocessor control
- Infrared remote controller with backlit liquid crystal display to control all functions
- Emergency control possibility if the remote controller batteries are flat (Button AUTO on internal unit)

- Front panel display showing operating modes and temperature. The display can be activated or deactivated from the remote controller (LIGHT)
- Clock on remote controller
- Timer to programme clock functions (switch on and/or off)
- Operating modes: Cooling, Heating, Dehumidification, Automatic or Ventilation Only
- Air ioniser standard
- Night-time Health function (SLEEP)
- Energy Saving function
- Rapid Cooling/Heating function (TURBO)
- Personal Climate (I FEEL) function allows the user to have around him the desired climate through the internal sensor of the remote controller
- Extended Ventilation (X-FAN) function prevents the growth of mould in the internal unit

- during Cooling and Dehumidification Modes
- Antifreeze function prevents the internal space temperature dropping below 8°C during the winter period
- Intelligent pre-heat function to prevent jets of cold air (Heating Mode)
- Auto-diagnostic function
- Auto-Restart function after a power cut
- External unit defrost function
- External unit with condensate connection
- Cleanable air filter
- Horizontally adjustable air discharge louvres
- Motorised deflector louvres controlled by the remote controller to vertically adjust the discharge air, with 8 fixed positions or floating (SWING)
- Flare type refrigerant connections
- Simple installation and maintenance

Technical data

Indoor unit			HWI091E	HWI121E	HWI181E	HWI241E
Outdoor unit			HWI091C	HWI121C	HWI181C	HWI241C
Cooling capacity	nominal	W	2600	3500	5275	6450
Total power input	nominal	W	720	1100	1620	1940
SEER			6,4	6,4	5,6	5,8
Energy efficiency class in cooling*			A++	A++	A+	A+
Condensate rate		l/h	0,8	1,4	1,8	2,0
Heating capacity	nominal	W	2750	3650	5275	6450
Total power input	nominal	W	720	1100	1600	1910
SCOP			4,0	3,8	3,8	3,8
Energy efficiency class in heating*			A+	A	A	A
Refrigerant connections	liquid	Ø	1/4"	1/4"	1/4"	1/4"
	gas	Ø	3/8"	3/8"	1/2"	5/8"
Refrigerant lines	liquid	mm(inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
	gas	mm(inch)	9,52 (3/8")	9,52 (3/8")	12,7 (1/2")	15,9(5/8")

*Seasonal Energy Efficiency. See technical data

Dimensional Data (Indoor Unit)

Dimensional Data (Indoor Unit)		HWI091E	HWI121E	HWI181E	HWI241E
Height	mm	275	275	298	315
Width	mm	845	845	945	1018
Depth	mm	189	189	208	223
Weight	kg	10	10	13	15,5

Dimensional Data (Outdoor Unit)

Dimensional Data (Outdoor Unit)		HWI091C	HWI121C	HWI181C	HWI241C
Height	mm	540	540	700	790
Width	mm	776	848	955	1000
Depth	mm	320	320	396	427
Weight	kg	30	33	46	62,5

LCI

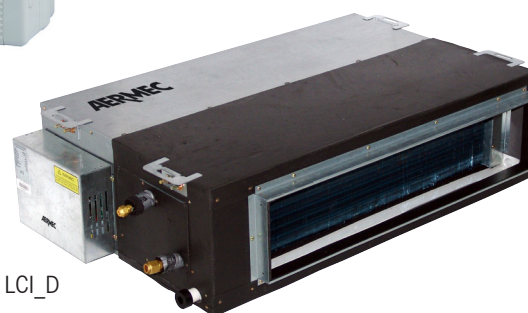
Monosplit air conditioner and heat pump split system DC Inverter Technology



LCI_F



LCI_C



LCI_D

Regulation (EU) N. 206/2012
Delegated Regulation (EU) N. 626/2011

Features

The LCI series consist of an external Inverter unit connected to 3 types of internal units

External unit:

- LCI: 8 sizes of different capacity with single phase power
- LCI_T: 4 sizes of different capacity with three phase power

Internal unit:

- Cassette (False ceiling mounted) (600x600):
LCI036CS - 051CS
(It is required to connect with accessory LCIGL40S)
- Cassette (False ceiling mounted) (840x840):
LCI071C - 086C - 101C - 121C
(It is required to connect with accessory LCIGL40)
- Cassette (False ceiling mounted) (910x910):
LCI141CB - 161CB
(It is required to connect with accessory LCIGL40B)
- Floor Ceiling (Wall or ceiling mounted):
LCI026F - 036F - 051F - 071F - 086C - 101F - 121F - 161F

- Ducted (Horizontal installation):
LCI026D - 036D - 051D - 071D - 086D - 101D - 121D - 141D - 161D
- Refrigerant R410A
- Heat pump operation with reversible refrigerant cycle and defrost control
- The DC Inverter compressors are selected to maximise efficiency, reduce consumption and minimise starting current
- External unit fitted with one or two fans with DC Inverter motor with continuous speed control
- Internal unit with 3 speed fan assembly
- Wired panel and remote controller standard on all internal units
- Infrared remote controller with liquid crystal display to control all functions
- Wired panel with liquid crystal display to control all functions
- Microprocessor control
- Possibility to set the ambient temperature sensor in the intake of the internal unit or in the wired panel
- Timer for programming switch on or off
- Operating modes: Cooling, Heating, Dehumidification, Automatic or

Ventilation Only

- Extremely low noise operation
- Auto-Restart function: restart as default, can be deactivated
- Condensate discharge pump in version LCI_C - CS - CB
- Simple installation and maintenance
- Air filter easily removed and cleaned
- Flare type refrigerant connections
- Maximum refrigerant line lengths:
 - up to 20m for units LCI026, LCI036 and LCI051
 - up to 30m for units LCI071, LCI086, LCI101, LCI101T
 - up to 50m for units LCI121, LCI121T, LCI141, LCI141T and LCI161T

• **Condensation control device standard; allows operation in Cooling with external temperatures down to -15°C**



Dimensional Data - Outdoor Unit

Outdoor Unit

Mod.	LCI	036	051	071	086	101	121	141	101T	121T	141T	161T
Width	mm	540	700	790	790	1100	1349	1349	1100	1349	1349	1365
Height	mm	848	955	980	980	1107	958	958	1107	958	958	1085
Depth	mm	320	396	427	427	440	412	412	440	412	412	427
Weight	kg	34	47	67	71	92	95	105	88	88	116	118

Dimensional Data - Indoor Unit

Cassette

Mod.	LCI	036CS	051CS	071C	086C	101C	121C	141CB	161CB
Width	mm	600	600	840	840	840	840	910	910
Height	mm	600	600	840	840	840	840	910	910
Depth	mm	240	240	240	320	320	320	290	290
Weight	kg	20	20	26	31	31	31	43	43

Duct

Mod.	LCI	026D	036D	051D	071D	086D	101D	121D	141D	161D
Height	mm	250	266	266	268	268	290	290	350	350
Width	mm	925	1037	1037	1279	1279	1226	1226	1340	1340
Depth	mm	665	721	721	558	558	775	775	750	750
Weight	kg	27	33	33	34	34	46	46	56	57

Floor Ceiling

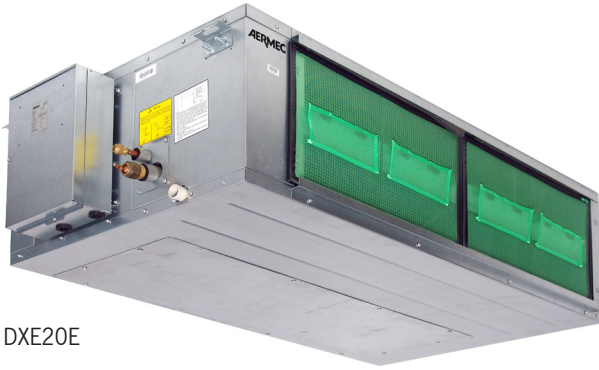
Mod.	LCI	026F	036F	051F	071F	086F	101F	121F	141F	161F
Height	mm	700	700	700	700	700	700	700	700	700
Width	mm	1220	1220	1220	1220	1420	1420	1420	1700	1700
Depth	mm	225	225	225	225	245	245	245	245	245
Weight	kg	38	39	39	40	48	48	50	59	59

Compatibility Mandatory Accessories for Indoor Unit Cassette - Grid

Mod. Grid	Dimensions grid (mm)	Weight grid (Kg)	Cassette Indoor units	Dimensions Cassette Indoor units (mm)
LCIGL40S	670 x 670 x 50	3,5	LCI036CS LCI051CS	600 x 600
LCIGL40	950 X 950 x 60	7	LCI071C LCI086C LCI101C LCI121C	840 x 840
LCIGL40B	1040 X 1040 x 60	8	LCI141CB LCI161CB	910 X 910

DXE

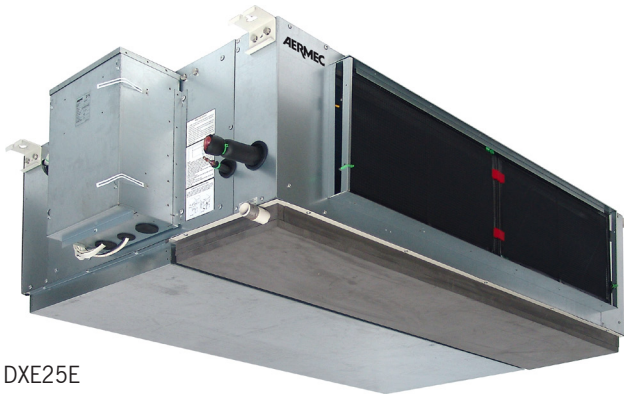
Air cooled heat pump unit in two sections.
Horizontal ducted installation



DXE20E



DXE30E



DXE25E



DXE40E

Features

- Available in 4 sizes
 - Manufactured with refrigerant R410A
 - Heat pump versions
 - Auto-Restart (function can be disabled)
 - Condensation control device as standard for operation in cooling down to -15°C external air temperature series.
- Internal Unit (DXE E):
- Ducted unit for horizontal installation
 - Units supplied with two air sensors: one on the wired control panel and one on the internal unit air intake. Selected from the wired control panel
 - Metal casing in galvanised sheet steel
 - Double inlet centrifugal fans
 - Cleanable filter
 - Infra red remote controller with liquid cry

stal display for control of all functions

- Wired panel with liquid crystal display for control of all functions, infra red receiver and ambient temperature sensor
 - Microprocessor controller
- External unit (DXE CT):
- Metal casing with anti-corrosion protective painting
 - Thermal heat exchanger coil with copper tubes and aluminium fins
 - Axial fans with direct drive electric motor
 - Maximum refrigerant line length of 50m and maximum elevation difference of

DXE is a split heat pump unit with cooling capacity up to 39.5kW.

It is a series particularly suitable for large spaces that require a split solution having high capacities compared to traditional series.

The internal units are ducted type with double inlet centrifugal fans.

R410A

Technical Data

Outdoor Unit			20 CT	25 CT	30 CT	40 CT
Indoor Unit			20 E	25 E	30 E	40 E
Cooling capacity	nominale	kW	20	24,5	30	39,5
Total power input cooling mode	nominale	kW	8,4	9,8	12,50	13,6
Heating capacity	nominale	kW	22	27,5	33	42
Total power input heating mode	nominale	kW	7	9	10,50	11,8
Refrigerant connections	Ø (gas)	mm(inch)	3/4" (19,05)	1" (25,4)	9/8" (28,6)	9/8" (28,6)
	Ø (liquido)	mm(inch)	3/8" (9,52)	3/8" (9,52)	1/2" (12,7)	5/8" (15,9)

Dimensional Data (Indoor Unit)

DXE (Indoor Unit)		20E	25E	30E	40E
Height	mm	389	500	500	650
Width	mm	1463	1745	1745	1700
Depth	mm	799	1116	1116	1100
Weight	kg	86	150	170	215

Dimensional Data (Outdoor Unit)

Dimensional data DXE (outdoor unit)		20CT	25CT	30CT	40CT
Height	mm	1350	1600	1772	1772
Width	mm	1150	1150	990	1290
Depth	mm	460	460	880	800
Weight	kg	158	185	218	285

Maximum overall dimensions

MKM

Multisplit system heat pump Inverter MultiSplit System Wall mounted unit with air ioniser standard



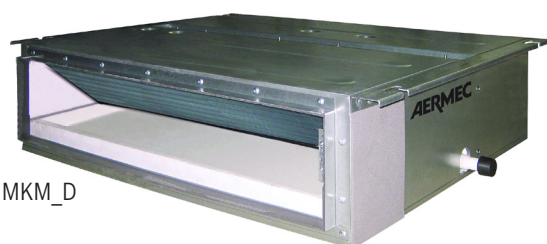
MKM_WS



MKM_C
MKM_CS



MKM_W



MKM_D



MKM_F



Regulation (EU) N. 206/2012
Delegated Regulation (EU) N. 626/2011

Features

Dualsplit:

• External units MKM42, MKM52 and MKM72 connected to 1 or 2 internal units

Trisplit:

• External unit MKM73 connected to 2 or 3 internal units

Quadrisplit:

• External units MKM84 and MKM104 connected to 2, 3 or 4 internal units

Pentasplit:

• External unit MKM125 connected to 3, 4 or 5 internal units

Internal unit choices from:

• Wall (Wall mounted) with remote controller:

MKM 20W - 25W - 35W - 50W

MKM 20WS - 25WS - 35WS - 50WS

• Cassette 600x600 (False ceiling mounted)

with remote controller and wired panel:

MKM35CS - 50CS (it is required to connect with accessory MKMGL40S)

• Cassette 840x840 (False ceiling mounted)

with remote controller and wired panel:

MKM35C - 50C - 70C (it is required to connect with accessory MKMGL40)

• Floor Ceiling (Wall or ceiling mounted)

with remote controller and wired panel:

MKM25F - 35F - 50F - 70F

• Ducted (Horizontal installation) with remote controller and wired panel:

MKM25D - 35D - 50D - 60D - 70D

Nominal head 10Pa (450m³/h)

• Refrigerant R410A

• DC Inverter rotary compressor for higher energy savings and for optimised ambient conditions

• Internal unit with three speed fan

• External unit multi-speed single fan

• Rotary compressor with variable speed

• Horizontally adjustable air discharge louvres (MKM_W, MKM_WS, MKM_C, MKM_CS, MKM_F)

• Motorised deflector louvres for vertical adjustment of discharge air (MKM_W, MKM_WS, MKM_C, MKM_CS, MKM_F)

• Air ioniser standard for wall mounted units (MKM_W, MKM_WS)

• Extremely low noise operation

• Infrared remote controller with liquid crystal display to control all functions

• Wired panel with liquid crystal display and Soft Touch buttons to control all functions (MKM_C, MKM_CS, MKM_D, MKM_F)

• Microprocessor control

• Possibility to set the ambient temperature

sensor in the intake of the internal unit or in the wired panel (MKM_C, MKM_CS, MKM_D, MKM_F)

• Timer for programming switch on and/or off

• Operating modes: Cooling, Heating, Dehumidification,

Automatic or Ventilation Only

• Auto-diagnostic function

• Air filter easily removed and cleaned

• Efficient defrost control

• Condensate discharge pump standard in versions MKM_CS, MKM_C and MKM_D

• Flare type refrigerant connections

• Multi-line refrigerant connection system, where each internal unit is connected to the external unit through dedicated refrigerant lines

• Total refrigerant line length:

up to 20m for the external units MKM42, MKM52 and MKM72;

up to 70m for the external units MKM73, MKM84 and MKM104;

up to 80m for the external unit MKM125;



Technical data

Outdoor Unit			42	52	72	73	84	104	125
Cooling capacity	nominal	W	4100	5000	7000	7100	8000	10000	12100
	min. - max.	W	2050-4500	2050-6200	2200-10000	2200-10000	2200-10000	2100-11000	3500-13600
Total power input	nominal	W	1200	1550	2460	2550	2490	3750	3590
	min. - max.	W	500-1500	500-2250	650-4550	650-4450	650-4550	700-3900	1300-4900
SEER			5,6	5,6	5,8	5,1	5,1	5,1	-
Energy efficiency class in cooling*			A+	A+	A	A	A	A	-
Heating capacity	nominal	W	4500	5600	7700	8500	9300	11000	13000
	min. - max.	W	2500-5000	2500-6550	3600-11000	3600-11000	2880-11000	2600-13000	4500-14000
Total power input	nominal	W	1150	1550	2560	2350	2580	3800	3540
	min. - max.	W	580-1500	580-2700	980-3950	980-3950	980-3950	1300-3900	1300-4400
SCOP			3,8	3,8	3,8	3,8	3,8	3,8	-
Energy efficiency class in heating*			A	A	A	A	A	A	-

Dimensional Data (Indoor Unit)

	Width (mm)	Height (mm)	Depth (mm)	Weight (kg)
MKM20W	794	265	186	9
MKM25W	794	265	186	9
MKM35W	845	275	180	10
MKM50W	945	298	208	13
MKM20WS	770	283	201	8
MKM25WS	770	283	201	8
MKM35WS	865	305	215	9
MKM50WS	1007	315	219	12
MKM35CS*	600	600	230	18
MKM50CS*	600	600	230	18
MKMGL40S	650	650	50	5

	Width (mm)	Height (mm)	Depth (mm)	Weight (kg)
MKM35C**	840	840	190	25
MKM50C**	840	840	190	25
MKM70C**	840	840	240	30
MKMGL40	950	950	50	5
MKM25D	782	635	200	22
MKM35D	782	635	200	24
MKM50D	982	635	200	25
MKM60D	1182	635	200	29
MKM70D	1182	635	200	29
MKM25F	1220	700	225	40
MKM35F	1220	700	225	40
MKM50F	1220	700	225	40
MKM70F	1220	700	225	45
MKM42	903	378	596	43
MKM52	955	396	700	50
MKM72	980	427	790	63
MKM73	980	427	790	64
MKM84	980	427	790	65
MKM104	1087	440	1103	102
MKM125	1087	440	1103	102

* = Requires grille MKMGL40S (mm 650x650)

** = Requires grille MKMGL40 (mm950x950)

MKM

Multisplit system heat pump Inverter MultiSplit System Wall mounted unit with air ioniser standard



Accessories

MKMGL40S: (600x600)

MKMGL40: (840x840)

Supply and return air grille. Supply grilles are motorised. Fitted

with infrared receiver and emergency operation button.

Is a required accessory as the units MKM_C and MKM_CS are shipped without.

Mod.	MKM035CS	MKM050CS	MKM35C	MKM50C	MKM70C
MKMGL40S	✓	✓			
MKMGL40			✓	✓	✓

Combination of internal units permitted

Indoor Units MKM_C - MKM_CS - MKM_D - MKM_F - MKM_W - MKM_WS:

Dualsplit: possible installation of 1 or 2 internal units

Unit Outdoor dualsplit MKM 42 (14kBtu/h)			Unit Outdoor dualsplit MKM 52 (18kBtu/h)			Unit Outdoor dualsplit MKM 72 (24kBtu/h)		
Total (K)	Unit A	Unit B	Total (K)	Unit A	Unit B	Total (K)	Unit A	Unit B
7	20 (7k)	-	7	20 (7k)	-	14	20 (7k)	20 (7k)
9	25 (9k)	-	9	25 (9k)	-	16	20 (7k)	25 (9k)
12	35 (12k)	-	12	35 (12k)	-	18	25 (9k)	25 (9k)
14	20 (7k)	20 (7k)	14	20 (7k)	20 (7k)	19	20 (7k)	35 (12k)
16	20 (7k)	25 (9k)	16	20 (7k)	25 (9k)	21	25 (9k)	35 (12k)
18	25 (9k)	25 (9k)	18	25 (9k)	25 (9k)	24	35 (12k)	35 (12k)
19	20 (9k)	35 (12k)	19	20 (9k)	35 (12k)	25	20 (7k)	50 (18k)
21	25 (9k)	35 (12k)	21	25 (9k)	35 (12k)	27	25 (9k)	50 (18k)
						30	35 (12k)	50 (18k)

Trisplit: it is required to install at least 2 internal units for correct system operation

Outdoor Unit Trisplit MKM 73 (24kBtu/h)

Total (K)	Unit A	Unit B	Unit C	Total (K)	Unit A	Unit B	Unit C
14	20 (7k)	20(7k)	-	25	20 (7k)	25 (9k)	25 (9k)
16	20 (7k)	25 (9k)	-	26	20 (7k)	20 (7k)	35 (12k)
18	25 (9k)	25(9k)	-	27	25 (9k)	25 (9k)	25 (9k)
19	20 (7k)	35 (12k)	-	28	20 (7k)	25 (9k)	35 (12k)
21	25 (9k)	35 (12k)	-	30	25 (9k)	25 (9k)	35 (12k)
24	35 (12k)	35 (12k)	-	31	20 (7k)	35 (12k)	35 (12k)
25	20 (7k)	50 (18k)	-	32	20 (7k)	20 (7k)	50 (18k)
27	25 (9k)	50 (18k)	-	33	25 (9k)	35 (12k)	35 (12k)
30	35 (12k)	50 (18k)	-	34	20 (7k)	25 (9k)	50 (18k)
36	50 (18k)	50 (18k)	-	36	25 (9k)	25 (9k)	50 (18k)
21	20 (7k)	20 (7k)	20 (7k)	36	35 (12k)	35 (12k)	35 (12k)
23	20 (7k)	20 (7k)	25 (9k)				



Quadrisplit: it is required to install at least 2 internal units for correct system operation
Outdoor Unit Quadrisplit MKM 84 (28kBtu/h)

Total (K)	Unit A	Unit B	Unit C	Unit D	Total (K)	Unit A	Unit B	Unit C	Unit D
14	20 (7k)	20 (7k)	-	-	34	20 (7k)	25 (9k)	50 (18k)	-
16	20 (7k)	25 (9k)	-	-	36	25 (9k)	25 (9k)	50 (18k)	-
18	25 (9k)	25 (9k)	-	-	36	35 (12k)	35 (12k)	35 (12k)	-
19	20 (7k)	35 (12k)	-	-	37	20 (7k)	35 (12k)	50 (18k)	-
21	25 (9k)	35 (12k)	-	-	39	25 (9k)	35 (12k)	50 (18k)	-
24	35 (12k)	35 (12k)	-	-	42	35 (12k)	35 (12k)	50 (18k)	-
25	20 (7k)	50 (18k)	-	-	28	20 (7k)	20 (7k)	20 (7k)	20 (7k)
27	25 (9k)	50 (18k)	-	-	30	20 (7k)	20 (7k)	20 (7k)	25 (9k)
30	35 (12k)	50 (18k)	-	-	32	20 (7k)	20 (7k)	25 (9k)	25 (9k)
36	50 (18k)	50 (18k)	-	-	33	20 (7k)	20 (7k)	20 (7k)	35 (12k)
21	20 (7k)	20 (7k)	20 (7k)	-	34	20 (7k)	25 (9k)	25 (9k)	25 (9k)
23	20 (7k)	20 (7k)	25 (9k)	-	35	20 (7k)	20 (7k)	25 (9k)	35 (12k)
25	20 (7k)	25 (9k)	25 (9k)	-	36	25 (9k)	25 (9k)	25 (9k)	25 (9k)
26	20 (7k)	20 (7k)	35 (12k)	-	37	20 (7k)	25 (9k)	25 (9k)	35 (12k)
27	25 (9k)	25 (9k)	25 (9k)	-	38	20 (7k)	20 (7k)	35 (12k)	35 (12k)
28	20 (7k)	25 (9k)	35 (12k)	-	39	20 (7k)	20 (7k)	20 (7k)	50 (18k)
30	25 (9k)	25 (9k)	35 (12k)	-	39	25 (9k)	25 (9k)	25 (9k)	35 (12k)
31	20 (7k)	35 (12k)	35 (12k)	-	40	20 (7k)	25 (9k)	35 (12k)	35 (12k)
32	20 (7k)	20 (7k)	50 (18k)	-	41	20 (7k)	20 (7k)	25 (9k)	50 (18k)
33	25 (9k)	35 (12k)	35 (12k)	-	42	25 (9k)	25 (9k)	35 (12k)	35 (12k)

External unit Quadrisplit MKM 104 (36kBtu/h)

Total connected capacity to the external unit between 50% and 150% of its nominal capacity (36k)

Pentasplit: it is required to install at least 3 internal units for correct system operation

External unit Pentasplit MKM125 (42kBtu/h)

Total connected capacity to the external unit between 50% and 150% of its nominal capacity (42k)

MDW

Multisplit heat pump with heat recovery for Domestic Hot Water

Variable Refrigerant Flow (VRF) with Inverter



MDW



Wired panel for MDW HB



MDW_HB



HBI_WT/WTS

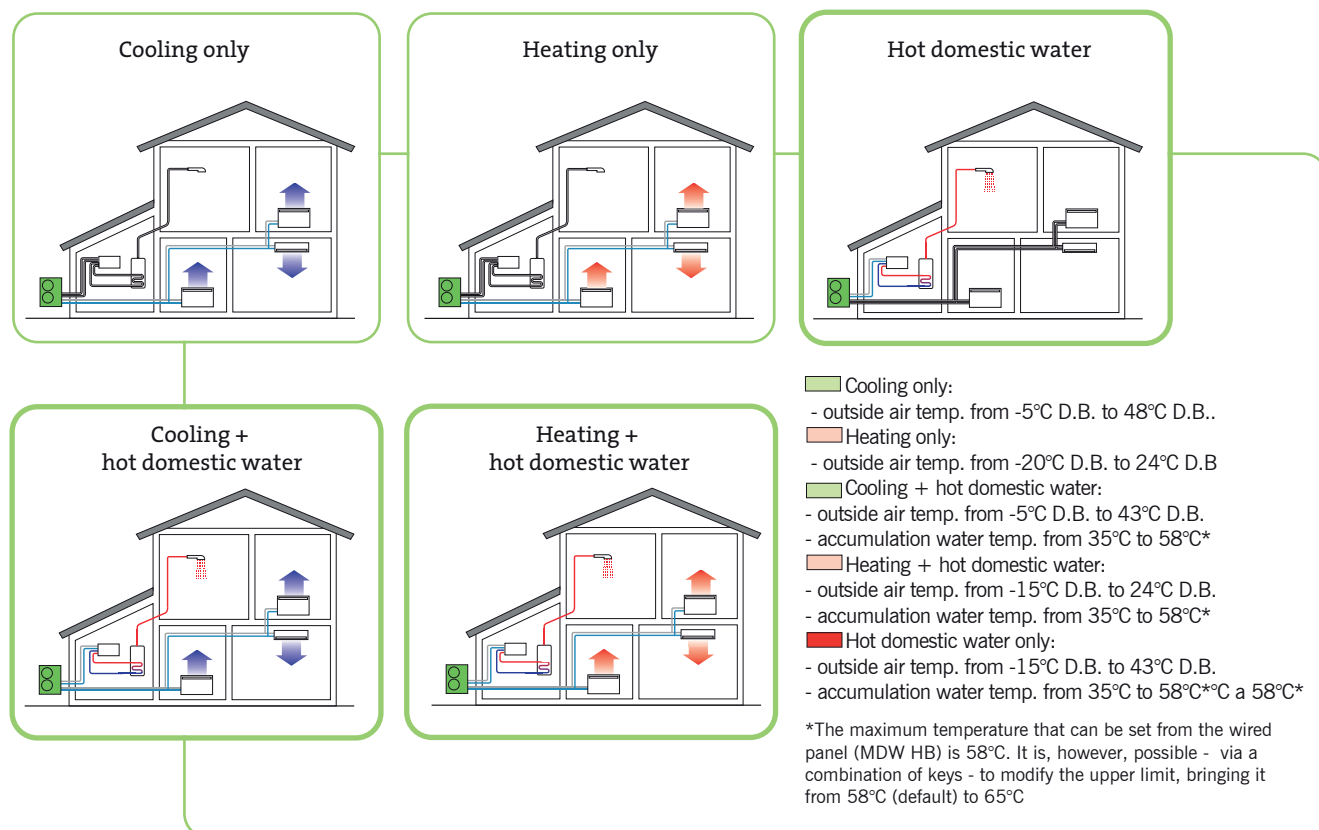
Characteristics

- Available with 4 external unit sizes
- 2 internal hydronic modules available (MDS_HB) for production of domestic hot water, supplied with soft-touch back-lit wired panel
- Same internal units available from the direct expansion MDS series: wall mounted (MDS_WN), cassette (MDS_CS / C), floor/ceiling mounted (MDS_F) and horizontal ducted installation (MDS_DH)
- 4 sizes of domestic hot water storage tank available of 200, 300, 350 or 400 litres with main serpentine coil, electric immersion heater and supplementary serpentine coil possible
- From 2 to 7 internal units connected to the external unit
- Refrigerant R410A
- Wired panel standard for all internal units
- Infra red remote controller standard on all direct expansion internal units
- External unit supplied with two DC Inverter motor fans with continuous speed control
- DC Inverter compressors are selected to maximise efficiency, reduce consumption and minimise starting currents
- Microprocessor controller
- In the MDW systems the refrigerant connections to the internal units are made using brazed Y splitter pieces, ensuring maximum system flexibility
- Anti-legionella Cycle: function enabled through the Wired panel of the hydronic module
- Extremely low noise operation
- Air filter easily removed and cleaned
- Refrigerant lines up to 150m length
- External unit with four flare type refrigerant connections: two dedicated to the hydronic module and two to the direct expansion internal unit lines
- Auto-Restart Function: enabled as default, can be disabled
- Anti-freeze Function for hydronic module and Domestic Hot Water storage tank
- **Condensation control device as standard for operation in cooling down to -5°C**

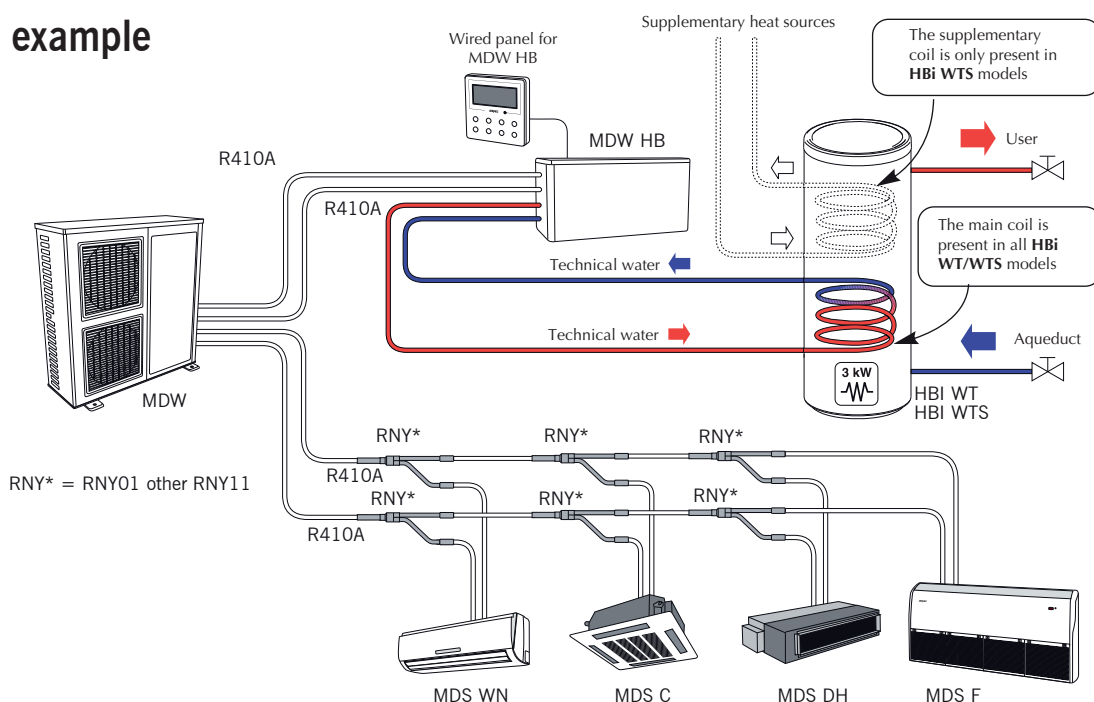
Accessories

- **RNY01 or RNY11**: Y splitter. The accessory consists of two Y splitter pieces, one for the liquid line and one for the gas line. Accessory mandatory
- **MDW_HB**: Hydronic module for the production of hot water. Internal installation with capacity 5kW or 8kW. Accessory mandatory
- **HBI_WT**: Domestic Hot Water storage tank of 200, 300, 350 or 400 litres with main serpentine coil and electric immersion supplementary heater of 3kW. Internal installation. Accessory mandatory (as an alternative to HBI_WTS)
- **HBI_WTS**: Domestic Hot Water storage tank of 200, 300, 350 or 400 litres with main serpentine coil, supplementary serpentine coil and electric immersion supplementary heater of 3kW. Internal installation. Accessory mandatory (as an alternative to HBI_WT)
- **MDSGL40S**: Supply and return air grille for internal cassette type units. Accessory mandatory for MDS_CS
- **MDSGL40**: Supply and return air grille for internal cassette type units. Accessory mandatory for MDS_C
- **ECD**: Remote control kit. Allows the start/stop control of direct expansion internal units by a remote contact.
- **MDSCC1**: Centralised control through which it is possible to control up to 64 communication modules (accessory MDSCM), for a maximum of 64 external units.
- **MDSCM1**: Communication module
- **MDSRC**: Simplified central control panel. Allows the controls of direct expansion internal units individually or in groups.
- **MDSR**: Signal repeater. Required if the communication cables exceed 1000 m in length.

Operating modes



Connection example



* The maximum temperature the Wired Panel (MDW_HB) can set is 58°C, it is possible through a combination of keys to modify the upper limit and take it from 58°C (default) to 65°C.

MDW Multisplit heat pump with heat recovery for Domestic Hot Water Variable Refrigerant Flow (VRF) with Inverter



Internal unit	MDS	22WN	28WN	36WN	45WN	50WN	56WN
Cooling capacity	W	2200	2800	3600	4500	5000	5600
Heating capacity	W	2500	3200	4000	5000	5800	6300
Refrigerant connections	Ø liquid	6,35(1/4")	6,35(1/4")	6,35(1/4")	6,35(1/4")	6,35(1/4")	9,52(3/8")
	Ø gas	9,52(3/8")	9,52(3/8")	12,7(1/2")	12,7(1/2")	12,7(1/2")	15,9(5/8")
	Type	flare	flare	flare	flare	flare	flare

Internal unit	MDS	28C	36C	45C	50C	56C	71C	90C	112C
Cooling capacity	W	2800	3600	4500	5000	5600	7100	9000	11200
Heating capacity	W	3200	4000	5000	5500	6300	8000	10000	12500
Refrigerant connections	Ø liquid	6,35(1/4")	6,35(1/4")	6,35(1/4")	6,35(1/4")	9,52(3/8")	9,52(3/8")	9,52(3/8")	9,52(3/8")
	Ø gas	9,52(3/8")	12,7(1/2")	12,7(1/2")	12,7(1/2")	15,9(5/8")	15,9(5/8")	15,9(5/8")	15,9(5/8")
	Type	flare	flare	flare	flare	flare	flare	flare	flare

Internal unit	MDS	28CS	36CS	45CS
Cooling capacity	W	2800	3600	4500
Heating capacity	W	3200	4000	5000
Refrigerant connections	Ø liquido	6,35(1/4")	6,35(1/4")	6,35(1/4")
	Ø gas	9,52(3/8")	12,7(1/2")	12,7(1/2")
	Type	flare	flare	flare

Internal unit	MDS	28F	36F	50F	71F	112F
Cooling capacity	W	2800	3600	5000	7100	11200
Heating capacity	W	3200	4000	5800	8000	12500
Refrigerant connections	Ø liquid	6,35(1/4")	6,35(1/4")	6,35(1/4")	9,52(3/8")	9,52(3/8")
	Ø gas	9,52(3/8")	12,7(1/2")	12,7(1/2")	15,9(5/8")	15,9(5/8")
	Type	flare	flare	flare	flare	flare

Internal unit	MDS	22DH	28DH	36DH	45DH	56DH
Cooling capacity	W	2200	2800	3600	4500	5600
Heating capacity	W	2500	3200	4000	5000	6300
Refrigerant connections	Ø liquid	6,35(1/4")	6,35(1/4")	6,35(1/4")	6,35(1/4")	9,52(3/8")
	Ø gas	9,52(3/8")	9,52(3/8")	12,7(1/2")	12,7(1/2")	15,9(5/8")
	Type	flare	flare	flare	flare	flare

Internal unit	MDS	71DH	90DH	112DH	140DH
Cooling capacity	W	7100	9000	11200	14000
Heating capacity	W	8000	10000	12500	14500
Refrigerant connections	Ø liquido	9,52(3/8")	9,52(3/8")	9,52(3/8")	9,52(3/8")
	Ø gas	15,9(5/8")	15,9(5/8")	15,9(5/8")	15,9(5/8")
	Tipo	flare	flare	flare	flare

Technical data Domestic Hot Water storage tank

	HBI	200WT	200WTS	300WT	300WTS	350WT	350WTS	400WT	400WTS
Capacity	l	200	200	300	300	350	350	400	400
Electric Heater Capacity	kW	3	3	3	3	3	3	3	3
Current input Electric Heater	A	13	13	13	13	13	13	13	13
Power supply		230V ~ 50Hz							
System hydraulic connections (In/Out)	Ø	G1/2	G1/2	G1/2	G1/2	G1/2	G1/2	G1/2	G1/2
Main serpentine hydraulic connections (In/Out)	Ø	G3/4	G3/4	G3/4	G3/4	G3/4	G3/4	G3/4	G3/4
Supplementary serpentine hydraulic connections (In / Out)	Ø	-	G3/4	-	G3/4	-	G3/4	-	G3/4
Supplementary serpentine	L m	-	10	-	10	-	10	-	10
	Ø x s mm	-	22 x 0,8	-	22 x 0,8	-	22 x 0,8	-	22 x 0,8



Technical data external unit and hydronic module

Outdoor	MDW	100	120	140	160
Cooling capacity (nominal)	kW	10	12	14	16
Power input (nominal)	kW	4,5	5,0	5,5	5,9
Heating capacity(nominale)	kW	11	14	15,4	17,6
Power input (nominale)	kW	3,8	4,2	4,9	5,3
Maximum power input	kW	5,7	6,2	6,5	6,8
Refrigerant connections (towards Internal Unit)	Ø liquid	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
	Ø gas	19,05 (3/4")	19,05 (3/4")	19,05 (3/4")	19,05 (3/4")
	Type	a cartella	a cartella	a cartella	a cartella
Refrigerant connections (verso MDW_HB)	Ø liquid	12,7 (1/2")	12,7 (1/2")	12,7 (1/2")	12,7 (1/2")
	Ø gas	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")	15,9 (5/8")
	Type	flare	flare	flare	flare
Power supply		230V ~ 50Hz	230V ~ 50Hz	230V ~ 50Hz	230V ~ 50Hz

Domestic Hot Water hydronic module	MDW	50HB	80HB
Heating capacity (nominal)*	kW	5	8
Hot water circulator	Flow	l/min	16,7
	Head (max)	m	6
Total power input	W	80	80
Refrigerant line length (max)	m	10	10
External unit/Hydronic Module elevation difference	m	5	5
Refrigerant connections towards External Unit	Ø liquid	12,7 (1/2")	12,7 (1/2")
	Ø gas	15,9 (5/8")	15,9 (5/8")
	Type	a cartella	a cartella
Hydraulic connections (In/Out)	Ø	G3/4	G3/4
Hydraulic line length			
Hydronic Module / Storage Tank (max)	m	5	5
Power supply		230V ~ 50Hz	230V ~ 50Hz

(*) Only Domestic Hot Water:

- External air temperature 20°C db, 15°C wb

- Initial/final water temperature in storage tank 15°C/55°C

Dimensional data (mm)

	Height mm	Width mm	Depth mm	Weight kg		Height mm	Width mm	Depth mm	Weight kg
MDS22WN	250	770	190	8	MDS50F	695	840	238	26
MDS28WN	250	770	190	8	MDS71F	600	1300	188	32
MDS36WN	285	830	189	11	MDS112F	695	1590	238	42
MDS45WN	285	830	189	11	MDS22DH	250	880	665	29
MDS50WN	310	1020	228	12	MDS28DH	250	880	665	31
MDS56WN	310	1020	228	12	MDS36DH	250	880	665	31
MDS28CS*	230	570	570	20	MDS45DH	266	980	721	36
MDS36CS*	230	570	570	20	MDS56DH	300	1155	756	51
MDS45CS*	230	570	570	20	MDS71DH	300	1155	756	51
MDS28C**	190	840	840	25	MDS90DH	300	1425	756	64
MDS36C**	190	840	840	25	MDS112DH	300	1425	756	64
MDS45C**	190	840	840	25	MDS140DH	300	1425	756	66
MDS50C**	190	840	840	25	MDW50HB	250	650	300	25
MDS56C**	240	840	840	30	MDW80HB	250	650	300	25
MDS71C**	240	840	840	30	MDW100	1250	950	340	105
MDS90C**	320	840	840	38	MDW120	1250	950	340	105
MDS112C**	320	840	840	38	MDW140	1250	950	340	115
MDS28F	695	840	238	26	MDW160	1250	950	340	115
MDS36F	695	840	238	26	HBI200WT / WTS	1595	540	/	68/71
					HBI300WT / WTS	1620	620	/	82/87
					HBI350WT / WTS	1895	620	/	96/100
					HBI400WT / WTS	2125	620	/	106/110

*: Grille dimensions MDSGL40S mm 650x650x50, Weight = 5kg

** : Grille dimensions MDSGL40 mm 950x950x60, Weight = 6,5kg

MVF/MDS

Multisplit heat pump Variable refrigerant flow (VRF)



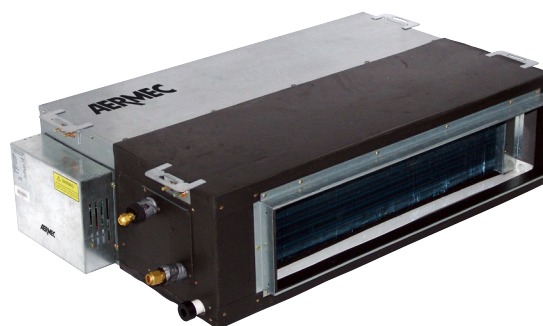
MDS_C



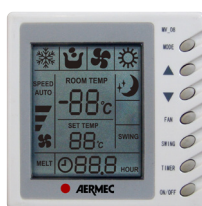
MDS_WN



MDS_F



MDS_DH



The multisplit system MVF/MDS series has been considered to satisfy the requirements for installations with several internal units (from a minimum of two to a maximum of 32 internal units).

Such systems are capable of modulating the output capacity through the use of a variable flow compressor with one or more on/off compressors. The flexibility of the system design is assured by the length the refrigerant

lines can reach.

Additionally the system installation is fast and simple, ensuring significant savings getting the system running. The internal units are designed to offer the maximum flexibility during the design phase, offering solutions to requested types, covering a significant capacity range from 10 to 60 kW. The available internal units are:

• wall mounted versions: MDS_WN

• floor / ceiling mounted versions:

MDS_F series

• cassette versions: MDS_C/CS series

• ducted versions: MDS_DH series

The MVF/MDS series has the possibility of being centrally controlled; such a solution allows having a single control point for several systems, from which to monitor and control all the internal units.

Characteristics

- Available in 5 sizes of external units for the MDS series and 5 for the MVF series
- Combination with internal units of wall mounted (MDS_WN), cassette (MDS_CS/C), floor/ceiling mounted (MDS_F) and ducted horizontal installation types (MDS_DH)
- From 2 to 32 internal units can be connected
- Refrigerant R410A
- Total capacity connected to the external unit between 50% and 135% of nominal capacity
- Wired panel standard for all internal units
- Infra red remote controller standard for all internal units
- The DC Inverter compressors (MVF) and Digital Scroll (MDS) are selected to maximise efficiency, reduce consumption, minimise starting currents, to have efficient control of oil return and a precise control of the space temperature and humidity
- External unit MVF supplied with two AC Inverter motor fans with continuous speed control
- Microprocessor controller
- In MDS systems the refrigerant connections are made using Y brazed splitter pieces (supplied as mandatory accessories), ensuring flexibility of installation and full compliance to safety standards, as well as reduced environmental impact due to the absence of leaks
- Extremely low noise operation
- Air filter easily removed and cleaned
- Maximum refrigerant line length of 150m for the units MVF100, MVF120, MVF140, MVF140T, MVF160T
- Maximum refrigerant line length of 300m for the units MDS200, up to 500m for units MDS260T, MDS300T, MDS450T, MDS560T and MDS600T
- Auto-Restart Function active as default and can be disabled

• Condensing control standard: allows the operation in cooling even with low external temperatures

Accessories

- RNY11: Y splitter for total installed capacity less than or equal to 20kW; the accessory consists of two Y splitters, one for the liquid line and one for the gas line
- RNY12: Y splitter for total installed greater than 20kW and less than or equal to 30kW; the accessory consists of two Y splitters, one for the liquid line and one for the gas line
- RNY13: Y splitter for total installed greater than 30kW; the accessory consists of two Y splitters, one for the liquid line and one for the gas line
- MDSGL40S: Supply and return air grille for internal cassette type units. Accessory mandatory for MDS CS
- MDSGL40: Supply and return air grille for internal cassette type units. Accessory mandatory for MDS C
- MDSCC1: Centralised controller through which it is possible to control up to 64 communication modules (accessory MDSCM), for a maximum of 64 external units and 1024 internal units
- MDSCM1: Communication module which can connect up to 16 internal units

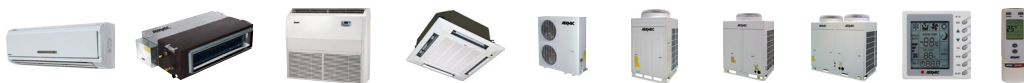
and the respective external unit

- MDSR: Signal repeater: necessary if the communication signals exceed 1000 metres in length
- ECD: Remote control kit. Allows the start/stop control of direct expansion internal units by a remote contact.
- MDSRC: Simplified central control panel. Allows the controls of direct expansion internal units individually or in groups.

Compressors

- MVF100-160T: 1 DC Inverter compressor
- MDS260T-300T: 1 Digital Scroll compressor and 1 Scroll compressor
- MDS450T: 1 Digital Scroll compressor and 2 Scroll compressors
- MDS560T-600T: 1 Digital Scroll compressor and 3 Scroll compressors

MVF/MDS Multisplit heat pump Variable refrigerant flow (VRF)



Installation example:



Technical data

Outdoor Unit	MVF	100	120	140	140T	160T
Cooling capacity (nominal)	kW	10	12	14	14	16
Total power input (nominal)	kW	2,86	3,50	4,36	4,50	5,10
Heating capacity (nominal)	kW	11	14	15,4	15,4	17,6
Total power input (nominal)	kW	2,60	3,40	4,05	4,30	4,80
Refrigerant connections	Ø liquid	9,52(3/8")	9,52(3/8")	9,52(3/8")	9,52(3/8")	9,52(3/8")
	Ø gas	15,9(5/8")	15,9(5/8")	15,9(5/8")	15,9(5/8")	19(3/4")

Technical data

Outdoor Unit	MDS	260T	300T	450T	560T	600T
Cooling capacity (nominal)	kW	26	30	45	56	60
Total power input (nominal)	kW	8,5	9,0	14,5	18,5	19,2
Heating capacity (nominal)	kW	28,5	33,5	48	60	63
Total power input (nominal)	kW	8,0	8,8	13,7	18	18,2
Refrigerant connections	Ø liquid	9,52(3/8")	9,52(3/8")	12,7(1/2")	15,9(5/8")	15,9(5/8")
	Ø gas	22,2(7/8")	22,2(7/8")	28,6(1" 1/8")	28,6(1" 1/8")	28,6(1" 1/8")

Dimensional data

	Height (mm)	Width (mm)	Depth (mm)	Weight (kg)
MDS22WN	250	770	190	8
MDS28WN	250	770	190	8
MDS36WN	285	830	189	11
MDS45WN	285	830	189	11
MDS50WN	310	1020	228	12
MDS56WN	310	1020	228	12
MDS28C*	190	840	840	25
MDS36C*	190	840	840	25
MDS45C*	190	840	840	25
MDS50C*	190	840	840	25
MDS56C*	240	840	840	30
MDS71C*	240	840	840	30
MDS90C*	320	840	840	38
MDS112C*	320	840	840	38
MDS28CS**	230	570	570	20
MDS36CS**	230	570	570	20
MDS45CS**	230	570	570	20
MDS28F	695	840	238	26
MDS36F	695	840	238	26
MDS50F	695	840	238	26
MDS71F	600	1300	188	32

Dati dimensionali

	Height (mm)	Width (mm)	Depth (mm)	Weight (kg)
MDS112F	695	1590	238	42
MDS22DH	250	880	665	29
MDS28DH	250	880	665	31
MDS36DH	250	880	665	31
MDS45DH	266	980	721	36
MDS56DH	300	1155	756	51
MDS71DH	300	1155	756	51
MDS90DH	300	1425	756	64
MDS112DH	300	1425	756	64
MDS140DH	300	1425	756	66
MVF100	1250	950	340	111
MVF120	1250	950	340	111
MVF140	1250	950	340	111
MVF140T	1250	950	340	115
MVF160T	1250	950	340	115
MDS260T	1772	990	880	280
MDS300T	1772	990	880	300
MDS450T	1772	1290	880	450
MDS560T	1760	1980	920	600
MDS600T	1760	1980	920	600

*: Grid dimensions MDSGL40
mm 950x950x60;
Weight = 6,5 kg;

**: Grid dimensions MDSGL40S
mm 650x650x50;
Weight = 5 kg;

Technical data

Indoor Unit wall mounted unit	MDS	22WN	28WN	36WN	45WN	50WN	56WN
Cooling capacity	W	2200	2800	3600	4500	5000	5600
Heating capacity	W	2500	3200	4000	5000	5800	6300
Refrigerant connections	Ø liquido	6,35(1/4")	6,35(1/4")	6,35(1/4")	6,35(1/4")	6,35(1/4")	9,52(3/8")
	Ø gas	9,52(3/8")	9,52(3/8")	12,7(1/2")	12,7(1/2")	12,7(1/2")	15,9(5/8")

Indoor Unit "cassette" unit	MDS	28C	36C	45C	50C	56C	71C	90C	112C
Cooling capacity	W	2800	3600	4500	5000	5600	7100	9000	11200
Heating capacity	W	3200	4000	5000	5500	6300	8000	10000	12500
Refrigerant connections	Ø liquid	6,35(1/4")	6,35(1/4")	6,35(1/4")	6,35(1/4")	9,52(3/8")	9,52(3/8")	9,52(3/8")	9,52(3/8")
	Ø gas	9,52(3/8")	12,7(1/2")	12,7(1/2")	12,7(1/2")	15,9(5/8")	15,9(5/8")	15,9(5/8")	15,9(5/8")

Indoor Unit "cassette" 60x60	MDS	28CS	36CS	45CS
Cooling capacity	W	2800	3600	4500
Heating capacity	W	3200	4000	5000
Refrigerant connections	Ø liquid	6,35(1/4")	6,35(1/4")	6,35(1/4")
	Ø gas	9,52(3/8")	12,7(1/2")	12,7(1/2")

Indoor Unit floor/ceiling mounted unit	MDS	28F	36F	50F	71F	112F
Cooling capacity	W	2800	3600	5000	7100	11200
Heating capacity	W	3200	4000	5800	8000	12500
Refrigerant connections	Ø liquid	6,35(1/4")	6,35(1/4")	6,35(1/4")	9,52(3/8")	9,52(3/8")
	Ø gas	9,52(3/8")	12,7(1/2")	12,7(1/2")	15,9(5/8")	15,9(5/8")

Indoor Unit "Duct"	MDS	22DH	28DH	36DH	45DH
Cooling capacity	W	2200	2800	3600	4500
Heating capacity	W	2500	3200	4000	5000
Air Flow rate	m3/h	450	570	570	700
Refrigerant connections	Ø liquido	6,35(1/4")	6,35(1/4")	6,35(1/4")	6,35(1/4")
	Ø gas	9,52(3/8")	9,52(3/8")	12,7(1/2")	12,7(1/2")

Internal ducted unit	MDS	56DH	71DH	90DH	112DH	140DH
Cooling capacity	W	5600	7100	9000	11200	14000
Heating capacity	W	6300	8000	10000	12500	14500
Air Flow rate	m3/h	1000	1100	1700	1700	2000
Refrigerant connections	Ø liquido	9,52(3/8")	9,52(3/8")	9,52(3/8")	9,52(3/8")	9,52(3/8")
	Ø gas	15,9(5/8")	15,9(5/8")	15,9(5/8")	15,9(5/8")	15,9(5/8")



AERMEC



Blue Line

- EWIH
- EFI
- EFSI
- MIH
- SMUFFO
- CWX
- FW-R

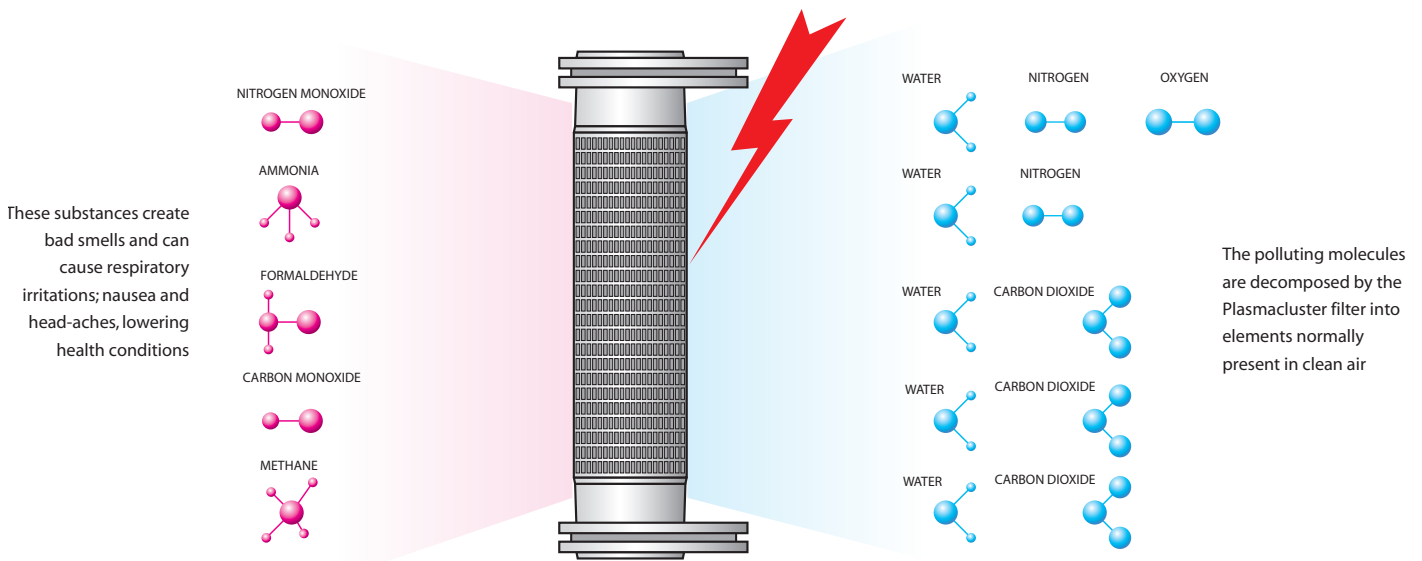
Plasmacluster, the total filter



Plasmacluster is an exclusive system not just limited to deodorising and cleaning the air, but to eliminating bacteria, virus, mould, mites, pollen and dust. The Plasmacluster purifier establishes the correct equilibrium between positive and negative ions in closed spaces, refreshing the air and ensuring an ideal condition for a healthy life. The result is an air always fresh, deodorised, really purified and extremely healthy that favours the resurgence and recovery of energies exactly as that in a wood, close to a waterfall. Asthma, dermatitis and other problems of the respiratory system are often caused by pollution, from mite dust, to pollens and from domestic animal hairs. Plasmacluster ensures a perfect hygiene of the air in closed spaces, consisting of a valid help against the diffusion of allergens. The air purification mechanism generated by Plasmacluster can be

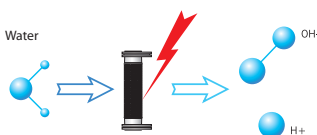
summarised as follows: a generator, decomposing the water molecules present in humid spaces by means of electric discharges, creates a flow of hydrogen and oxygen ions (plasma). Ion clusters collect around polluting agents (for example a virus). At this point positive and negative ions combine to make the hydroxyl radical OH that removes from the virus the hydrogen surrounded, necessary for its survival. From acquiring the hydrogen by the hydroxyl OH water is generated which is introduced into the space; at the same time the virus damaged by the reaction is eradicated. The Plasmacluster purification process is completed. This technology simulates the natural process that has always purified the terrestrial atmosphere; this is why the Plasmacluster technology is completely safe for humans and domestic animals

Plasmacluster operating schematic

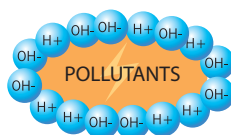


How it works

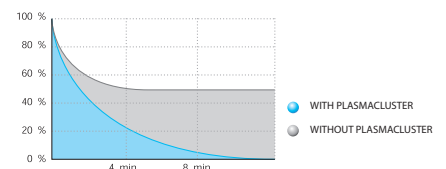
Plasmacluster works on the water molecules normally present in air in the form of humidity. Through electric discharges Plasmacluster splits the water molecule: the result is the formation of positive ions H⁺ and negative ions OH⁻.



These ions are chemically very active and are able to decompose the molecules of polluting and malodorous molecules



Test on the concentration of nitrogen monoxide generated from cigarettes in a closed space



EWIH

Heat pump with Inverter technology and Plasmacluster filter for wall mounting



Regulation (EU) N. 206/2012
Delegated Regulation (EU) N. 626/2011



EWIH091H
EWIH121H



EWIH182H
EWIH242H

The new Aermech heat pump air conditioning units of the EWIH series are at the forefront of performance, in ease of use and in energy savings. These units are in fact fitted with Inverter

technology that automatically adjusts the compressor rotational speed and electrical consumption to the effective request of the space being conditioned, and the innovative PLASMACLUSTER filter that

purifies and ionises the air eliminating the polluting molecules present in dirty air. EHIW was conceived to be at the highest energy efficiency levels. The new louvres have been

designed to eliminate troublesome drafts of hot or cold air. The louvres can actually be controlled to direct the flow of air towards the ceiling (cooling mode) or towards the floor (heating mode) ensuring a uniform distribution of air in the space creating the COANDA effect.

Characteristics

- Refrigerant R410A
- Available in 4 versions of different capacities
- Inverter device for higher energy savings and for optimising ambient conditions
- Achieving desired temperature within 2/3 of the time from start up compared to an air conditioner without Inverter device
- High ratio between heating and cooling capacity using the Inverter device
- Three speed tangential type fan
- Variable speed rotary compressor
- Horizontally adjustable supply air louvres
- Motorised deflector louvres for vertical

supply air adjustment controlled by the remote controlled

- Extremely low noise operation
- Infra red remote control with liquid crystal display for the control of all functions
- Microprocessor controller
- Local control possibility
- Timer to programme starts and stops
- Programmes for cooling only, heating only, for dehumidification, for automatic operation (heating/cooling)
- Auto-diagnostic function
- Defrost control

• Condensation control for the operation in cooling mode with external temperature down to -10°C

- Flare type refrigerant connections
- Refrigerant line lengths up to 15m (091H-121H), 20m (EWI182H) and 30m (EWI242H))

EWIH

Heat pump with Inverter technology and Plasmacluster filter for wall mounting



Technical data

Internal Unit			EWI091H	EWI121H	EWI182H	EWI242H
External Unit			CWI09 H	CWI121H	CWI182H	CWI242H
Cooling capacity	nominal	W	2640	3500	5000	7000
	min. - max.	W	900 - 3000	900 - 3800	1400 - 5700	1500 - 8000
Energy efficiency class*			A++	A	A++	A+
SEER		W/W	6,3	5,4	6,7	5,9
Power input	nominal	W	780	1090	1470	2160
	min. - max.	W	200 - 960	210 - 1300	260 - 1890	260 - 2990
Heating capacity	nominal	W	3100	4000	5700	7500
	min. - max.	W	900 - 4800	1000 - 6000	1100 - 8000	1100 - 9500
Energy efficiency class*			A+	A	A	A+
SCOP		W/W	4,3	3,9	3,8	4,0
Power input	nominal	W	730	1030	1510	2015
	min. - max.	W	160 - 1400	180 - 1900	240 - 2380	240 - 2830
Refrigerant connections	liquid	Ø	1/4"	1/4"	1/4"	1/4"
	gas	Ø	3/8"	3/8"	1/2"	5/8"

* Seasonal Energy Efficiency. See technical data

Dimensional Data

		EWI				CWI			
		091H	121H	182H	242H	091H	121H	182H	242H
Height	mm	278	278	325	325	540	540	710	710
Width	mm	790	790	1040	1040	730	730	850	850
Depth	mm	198	198	222	222	250	250	330	330
Weight	kg	10	10	12	13	36	36	49	53

EFI

Heat pump with Inverter technology and Plasmacluster filter for wall or ceiling mounting: the perfect air conditioner for everywhere



EFI is the air conditioner that puts together all the spaces. Place it where you like best, ceiling or floor mounted: it has been designed to be perfect everywhere. Its lines fit into every space, its technology is unbeatable.

Characteristics

- Refrigerant R410A
- Available in 4 versions of different capacities
- Inverter device for higher energy savings and for optimising ambient conditions
- Achieving desired temperature within 2/3 of the time from start up compared to an air conditioner without Inverter device
- High ratio between heating and cooling capacity using the Inverter device
- Three speed tangential type fan
- Variable speed rotary compressor
- Condensation control for the operation in cooling mode with external temperature down to -10°C, as standard for sizes 091H, 121H and 181H, not available for size 241H
- Possibility to be hung horizontally or vertically
- Horizontally adjustable supply air louvres
- Motorised deflector louvres for vertical supply air adjustment controlled by the remote controlled
- Extremely low noise operation
- Infra red remote control with liquid crystal display for the control of all functions
- Microprocessor controller
- Timer to programme starts and stops
- Programmes for cooling only, heating only, for dehumidification, for automatic operation (heating/cooling)
- Auto-diagnostic function
- Refrigerant line lengths up to 15m for EFI091 -121, up to 30m for EFI 181 -241



Regulation (EU) N. 206/2012
Delegated Regulation (EU) N. 626/2011

Technical data

Indoor Unit		EFI091H	EFI121H	EFI181H	EFI241H
External Unit		CWI091H	CWI121H	CFI181H	CFI241H
Cooling capacity	W (nominal)	2640	3500	5000	7000
	W (min. - max.)	900 - 3400	900 - 4000	1700 - 6100	2400 - 8000
Energy efficiency class in cooling*		A++	A	A+	A
SEER		6,3	5,4	5,6	5,2
Total power input	W (nominal)	780	1090	1560	2180
	W (min. - max.)	230 - 960	230 - 1300	370 - 2650	630 - 3120
Heating capacity	W (nominal)	3100	4000	6200	8000
	W (min. - max.)	900 - 4500	900 - 5800	1700 - 7500	2800 - 9000
Energy efficiency class in heating*		A+	A	A	A
SCOP		4,3	3,9	3,9	3,7
Total power input	W (nominal)	730	1030	1700	2210
	W (min. - max.)	250 - 1120	290 - 1750	370 - 2200	730 - 2800
Refrigerant connections	Ø liquid	1/4"	1/4"	1/4"	3/8"
	Ø gas	3/8"	3/8"	1/2"	5/8"

* Seasonal Energy Efficiency. See technical data

Dimensional data

		EFI				CWI		CFI	
		091H	121H	181H	241H	091H	121H	181H	241H
Height	mm	680	680	680	680	540	540	800	800
Width	mm	1025	1025	1300	1300	730	730	890	890
Depth	mm	212	212	212	212	250	250	320	320
Weight	kg	31	31	34	36	33	37	57	65

EFSI

Split system heat pump with Inverter and Plasmacluster filter for floor mounting



Regulation (EU) N. 206/2012
Delegated Regulation (EU) N. 626/2011

Characteristics

- Refrigerant R410A
- Available in 3 versions of different capacities
- Vertical floor mounted installation
- Elegant design with compact design
- Plasmacluster air purifier
- Inverter device for higher energy savings and for optimising ambient conditions
- Achieving desired temperature within 2/3 of the time from start up compared to an air conditioner without Inverter device
- High ratio between heating and cooling capacity using the Inverter device
- Variable speed rotary compressor
- Double outlets with supply louvres for air outlet both in lower and higher parts for a better air distribution and to minimise the temperature difference at different heights
- Different air distribution in cooling mode and in heating mode to obtain the best comfort
- Microprocessor controller
- Infra red remote control with liquid crystal display for the control of all functions
- Timer to programme starts and stops
- Operating modes: Cooling, Heating, Dehumidification and Automatic
- Auto-restart
- Auto-diagnostic function
- Extremely low noise operation
- Cleanable filter
- Flare type refrigerant connections
- Easy installation and maintenance
- Condensation control for the operation in cooling mode with external temperature down to -10oC
- Operation in heating mode with external air temperature down to -15°C

Technical data

Indoor Unit		EFSI090H	EFSI120H	EFSI180H
Outdoor Unit		CFSI090H	CFSI120H	CWI181H
Cooling capacity	W (nominal)	2500	3500	5000
	W (min - max)	900 - 3000	900 - 4000	900 - 5700
Energy efficiency class in cooling*		A++	A+	A
SEER		6,7	5,8	5,6
Total power input	W (nominal)	615	1075	1660
	W (min - max)	200 - 890	230 - 1320	260 - 2190
Heating capacity	W (nominal)	3400	4500	5700
	W (min - max)	900 - 5000	900 - 6000	900 - 7700
Energy efficiency class in heating*		A	A	A
SCOP		3,9	3,9	3,8
Total power input	W (nominal)	780	1230	1580
	W (min - max)	200 - 1400	230 - 1730	260 - 2400
Refrigerant connections	Ø liquid	1/4"	1/4"	1/4"
	Ø gas	3/8"	3/8"	1/2"

* Seasonal Energy Efficiency. See technical data

Dimensional data

		EFSI			CFSI	CFSI	CWI
		090H	120H	180H	090H	120H	181H
Height	mm	670	670	670	540	540	540
Width	mm	750	750	750	730	730	780
Depth	mm	235	235	235	250	250	265
Weight	kg	17	17	17	33	33	37

MIH Tri-quadsplit heat pump with Inverter



MIHP071E MIHP121E
MIHP091E



MIHP181E



MDIH



MVIH



MFIH

The multisplit MIH series is supplied with Inverter technology that significantly reduces the electrical consumption by eliminating continuous start/stops of the compressor. The internal units

available are of the wall mounted (MIHP_E), pavement/ceiling mounted (MFIH), floor mounted (MVIH_E series) types with different air distribution in heating and cooling mode, ducted (MDIH series).

Additionally the units of the MIHP E, MFIH, MVIH_E are supplied with the Plasmacluster filter that purifies the air from malodorous and pollutant molecules. The anti-mould filter, which is supplied with all internal units, is removable and its maintenance is easy and quick. The multisplit MIH series have a high heating capacity, even for low external air temperatures, which makes it convenient for installation in cold climates.

**Operation in heating mode
with external air temperature
down to -15°C.**



Regulation (EU) N. 206/2012
Delegated Regulation (EU) N. 626/2011



Technical Data

Outdoor Unit	Indoor Unit*	Cooling capacity nominal (min/max)	Power input nominal (min/max)	** SEER	Heating capacity nominal (min/max)	Power input nominal (min/max)	** SCOP
	MIHP - MVIH MFIH - MDIH	kW	kW		kW	kW	
183C	09xE + 09xE + 09xE	5,2 (2,2 / 7,2)	1,41 (0,43 / 2,56)	-	6,8 (2,2 / 8,4)	1,66 (0,42 / 2,48)	-
	12xE + 09xE + 07xE	5,2 (2,2 / 7,2)	1,41 (0,43 / 2,56)	-	6,8 (2,2 / 8,4)	1,66 (0,42 / 2,48)	-
	12xE + 07xE + 07xE	5,2 (2,2 / 7,2)	1,41 (0,43 / 2,56)	-	6,8 (2,2 / 8,4)	1,66 (0,42 / 2,48)	-
	09xE + 09xE + 07xE	5,2 (2,2 / 7,2)	1,41 (0,43 / 2,56)	-	6,8 (2,2 / 8,4)	1,66 (0,42 / 2,48)	-
	09xE + 07xE + 07xE	5,2 (2,2 / 7,2)	1,41 (0,43 / 2,56)	-	6,8 (2,2 / 8,4)	1,66 (0,42 / 2,48)	-
	07xE + 07xE + 07xE	5,2 (2,2 / 7,0)	1,41 (0,43 / 2,46)	A+ 6,0	6,8 (2,2 / 8,4)	1,66 (0,42 / 2,48)	A+ 4,1
244C	09xE + 09xE + 09xE + 09xE	7,0 (3,0 / 8,2)	2,18 (0,60 / 2,98)	-	8,0 (3,0 / 9,2)	2,00 (0,56 / 2,56)	-
	12xE + 09xE + 07xE + 07xE	7,0 (3,0 / 8,2)	2,18 (0,60 / 2,98)	-	8,0 (3,0 / 9,2)	2,00 (0,56 / 2,56)	-
	09xE + 09xE + 09xE + 07xE	7,0 (3,0 / 8,2)	2,18 (0,60 / 2,98)	-	8,0 (3,0 / 9,2)	2,00 (0,56 / 2,56)	-
	12xE + 07xE + 07xE + 07xE	7,0 (3,0 / 8,2)	2,18 (0,60 / 2,98)	-	8,0 (3,0 / 9,2)	2,00 (0,56 / 2,56)	-
	09xE + 09xE + 07xE + 07xE	7,0 (3,0 / 8,2)	2,18 (0,60 / 2,98)	-	8,0 (3,0 / 9,2)	2,00 (0,56 / 2,56)	-
	09xE + 07xE + 07xE + 07xE	7,0 (3,0 / 8,2)	2,18 (0,60 / 2,98)	-	8,0 (3,0 / 9,2)	2,00 (0,56 / 2,56)	-
302C	07xE + 07xE + 07xE + 07xE	7,0 (3,0 / 8,2)	2,18 (0,60 / 2,98)	A++ 6,2	8,0 (3,0 / 9,2)	2,00 (0,56 / 2,56)	A+ 4,3
	18xE + 07xE + 07xE + /	8,3 (4,3 / 8,9)	2,99 (1,07 / 3,49)	-	8,9 (4,4 / 10,5)	2,40 (0,94 / 3,06)	-
	18xE + 09xE + 07xE + /	8,3 (4,3 / 8,9)	2,99 (1,07 / 3,49)	-	8,9 (4,4 / 10,5)	2,40 (0,94 / 3,06)	-
	18xE + 09xE + 09xE + /	8,3 (4,3 / 8,9)	2,99 (1,07 / 3,49)	-	8,9 (4,4 / 10,5)	2,40 (0,94 / 3,06)	-
	18xE + 12xE + 07xE + /	8,3 (4,3 / 8,9)	2,99 (1,07 / 3,49)	-	8,9 (4,4 / 10,5)	2,40 (0,94 / 3,06)	-
	07xE + 07xE + 07xE + 07xE	8,0 (4,3 / 9,0)	2,78 (1,07 / 3,49)	-	8,5 (4,4 / 9,8)	2,23 (0,94 / 2,85)	-
	07xE + 07xE + 07xE + 09xE	8,4 (4,3 / 9,0)	2,99 (1,07 / 3,49)	A 5,2	9,0 (4,4 / 10,6)	2,40 (0,94 / 3,06)	A 3,9
	07xE + 07xE + 09xE + 09xE	8,4 (4,3 / 9,0)	2,99 (1,07 / 3,49)	-	9,0 (4,4 / 10,6)	2,40 (0,94 / 3,06)	-
	07xE + 09xE + 09xE + 09xE	8,4 (4,3 / 9,0)	2,99 (1,07 / 3,49)	-	9,0 (4,4 / 10,6)	2,40 (0,94 / 3,06)	-
	09xE + 09xE + 09xE + 09xE	8,4 (4,3 / 9,0)	2,99 (1,07 / 3,49)	-	9,0 (4,4 / 10,6)	2,40 (0,94 / 3,06)	-
	07xE + 07xE + 07xE + 12xE	8,4 (4,3 / 9,0)	2,99 (1,07 / 3,49)	-	9,0 (4,4 / 10,6)	2,40 (0,94 / 3,06)	-
	07xE + 07xE + 09xE + 12xE	8,4 (4,3 / 9,0)	2,99 (1,07 / 3,49)	-	9,0 (4,4 / 10,6)	2,40 (0,94 / 3,06)	-
	07xE + 09xE + 09xE + 12xE	8,4 (4,3 / 9,0)	2,99 (1,07 / 3,49)	-	9,0 (4,4 / 10,6)	2,40 (0,94 / 3,06)	-
	07xE + 07xE + 12xE + 12xE	8,4 (4,3 / 9,0)	2,99 (1,07 / 3,49)	-	9,0 (4,4 / 10,6)	2,40 (0,94 / 3,06)	-

* = replace the x with 0 (zero) for units MVIH – MDIH and with 1 (one) for units MFIH – MIHP E.

** = Seasonal Energy Efficiency. See technical data.

Trisplit: Mandatory installation of at least 2 internal units for correct system operation

Quadsplit: Mandatory installation of at least 3 internal units for correct system operation

The 18k indoor unit (MIHP181E o MVIH180E) can be matched with the MIH302C outdoor unit only. In this case the MIH302C outdoor unit can be combined with max. 3 indoor units (see the recommended combinations)

Dimensional Data

Mod.		MIHP 071E	MFIH 71	MDIH 70	MVIH 090	MIHP 091E	MFIH 91	MDIH 90	MVIH 120	MIHP 121E	MFIH 121	MDIH 120	MVIH 180	MIHP 181E
Height	A	278	680	216	670	278	680	216	670	278	680	216	670	325
Width	B	790	1025	592	750	790	1025	823	750	790	1025	1043	750	1040
Depth	C	198	212	457	235	198	212	457	235	198	212	457	235	229
Weight	kg	10	31	17	17	10	31	23	17	10	31	26	17	16

Mod.		MIH 183C	MIH 244C	MIH 302C
Height	A	645	800	800
Width	B	950	950	940
Depth	C	323	357	320
Weight	kg	53	64	70

INDOOR UNIT REFRIGERANT LINE DIAMETERS: ·SIZE 07x-09x-12x: 1/4" · 3/8"

·SIZE 18x: 1/4" · 1/2"

SMUFFO

Here today, there tomorrow: the dehumidifier only where required

R410A



NEW DESIGN!

Smuffo is the portable dehumidifier that limits excess humidity of the air.

No more heavy air, condensation, mould, bad smells: just a click and in a few instants the house is filled with spring.

Smuffo is exceptional in the summer, when it liberates the air from stuffiness and humidity; Smuffo is exceptional all year especially in these rooms – taverns, living rooms, kitchens, basements, laundry rooms, and bathrooms – where the air is often heavy and stale.

Characteristics

- Available in 3 sizes of different capacities
- Modern look and casing in plastic material
- Easy to move from one room to another with 4 rotating wheels
- Relative humidity setting between 80% and 35%
- Visual display of the humidity setting and that read in the room
- Possibility to set continuous operation for operation at maximum dehumidification capacity
- 3 fan speed settings
- Easy and immediate use unit mounted control panel
- Delay timer for starting/stopping (2h, 4h)
- Possibility to discharge the condensate into the bucket mounted in

the unit or to externally drain directly through the outlet pipe on the side of the unit

- If the condensate collection bucket is full the dehumidifier will stop and light up the relative indicator
- Indicator lights to show the requirement to clean the filter
- Automatic defrost
- Easy of the filter and the condensate collection bucket cleaning and maintenance
- Auto-diagnostic Function
- Auto-Restart Function

Technical data

Mod.		DMK12	DMK20	DMK24
Dehumidification capacity ¹	l/24h	12	20	24
	max. m ³ /h	150	150	190
	med. m ³ /h	120	130	170
Air flow rate	min. m ³ /h	100	115	145
	Nominal power input ²	W	330	480
Refrigerant		R134a	R134a	R134a

1 Internal air temperature 30°C b.s. ; 27°C b.u.

2 Test in accordance with EN-60335

Dimensional Data

		DMK12	DMK20	DMK24
Height	mm	523	523	523
Width	mm	343	343	343
Depth	mm	270	270	270
Weight	kg	12,5	14,5	15

CWX

Water cooled unit.
Cooling only operation. Internal installation



Characteristics

- Available in 3 versions of different capacities
- The units are manufactured with refrigerant R410A (CWX1200, CWX1800, CWX2400)
- Cooling only operation water cooled
- External unit with rotary compressor
- EXC: internal unit with three speed centrifugal fan with the possibility of changing the electrical connection to increase the available static pressure. Mandatory accessory (PF) wired panel) or TL3 (remote controller), indispensable for the operation of the unit
- EWA-H – EWP: internal unit with three speed tangential type fan. Horizontally adjustable supply air louvres and motorised deflector louvres controlled by the remote controller to vertically adjust the supply air Infra red remote controller with liquid crystal display
- Extremely low noise operation
- Microprocessor controller
- Programmable start/stop delay timer
- Programmes for cooling only, heating only, for dehumidification, for automatic operation (heating/cooling)
- Easily removable and cleanable filter, with anti-mould treatment
- Flare type refrigerant connections
- Refrigerant lines up to 15m
- Vast choice of accessories provided for the internal EXC unit

Technical data

Outdoor Unit		CWX1200	CWX1800	CWX2400
Cooling capacity	W	3500	5100	6700
Total power input	W	795	1370	1940
Water consumption 16°C	l/h	140	235	345
Water consumption a 30-35°C	l/h	706	1082	1450
Refrigerant connections	Ø liquid	1/4"	1/4"	1/4"
	Ø gas	1/2"	1/2"	5/8"

Indoor Unit		EXC123	EXC183	EXC243
EER	W/W	-	3,72	3,45
Energy efficiency class		-	A	B
Refrigerant connections	Ø liquido	1/4"	1/4"	1/4"
	Ø gas	1/2"	1/2"	5/8"

Indoor Unit		EWA120H	EWP181H	EWP241H
EER	W/W	4,40	-	-
Energy efficiency class		A	-	-
Refrigerant connections	Ø liquido	1/4"	1/4"	1/4"
	Ø gas	1/2"	1/2"	1/2"*

* = Apply the connection (1/2"F – 5/8"M) supplied loose of the condensing unit CX 2400 to the refrigerant connection of the unit EWP H

Dimensional data

		CWX					
		1200	1800	2400			
Height	mm	450	450	570			
Width	mm	470	470	470			
Depth	mm	260	260	260			
Weight	kg	35	38	49			

		EXC	EXC	EXC	EWP	EWP	EWA
		123	183	243	181H	241H	120H
Height	mm	457	457	562	325	325	278
Width	mm	1043	1043	1182	1040	1040	790
Depth	mm	216	216	216	229	229	198
Weight	kg	26	27	37	16	16	10

FW-R

Water cooled air conditioner with capacity from 2.4 to 4.0 kW

R410A



The air conditioners from the integrated system of the FW-R series are autonomous units designed and manufactured to maintain the best ambient conditions. With simple and elegant lines, they are particularly quiet that makes them suitable to be installed domestic or commercial ambient. They are supplied with a water cooled condensing unit and besides carrying

out the typical functions of cooling, dehumidification, ventilation and filtration of the air, present notable advantages from the point of view of installation and application. They permit the heating in winter when equipped with the heating coil (water or electric); they achieve an efficient zone division of the spaces by the independent operation of each unit; they ensure an economy of service by the rapid control of the ambient conditions by virtue of the reduced system thermal inertia; and they operate silently because of the thermoacoustic insulation of the compressor. All the units are completely factory assembled and individually tested.

Characteristics

- High efficiency rotary compressor
- Reduced dimensions
- Silent operation
- Automatic temperature control
- Contained water consumption
- Low power input

Accessories

- BR: Shielded type electric heater with safety thermostat.
- BVR: 1 row hot water coil.

Technical data

Mod.	FW	130R	160R
Cooling capacity	W (max.)	2900	4000
Energy efficiency class		A	A
EER	W/W	4,08	4,65
Humidity removed	l/h	1,78	1,78
Total electrical power input	W	710	860
Current input	A	3,55	4,02
Water coil heating capacity (BVR1)	W	4350	5200
Water coil pressure drop (BVR1)	l/h	600	600
Electric coil heating capacity (BVR1)	kPa	12,6	12,6
Potenza termica batteria elettrica (BR26)	W	1200	1200
Number of fans	n.	2	2
Air flow rate	m ³ /h (max.)	470	690
	m ³ /h (med.)	390	525
	m ³ /h (min.)	270	375
Fan speed	g/m (max.)	800	1140
	g/m (med.)	660	885
	g/m (min.)	500	665
*Sound pressure	dB (A)	44	47,5
Water consumption 30-35°C	l/h	586	804
Condenser pressure drops	kPa	22	40
Refrigerant charge	g	750	830
Starting current	A	18	32
Hydraulic connections	ø	1/2"	1/2"

Performances refer to the following conditions:

* Sound pressure measured in a semi-anechoic chamber 85m³ with reverberation time Tr=0.5s.

Dimensional data

		FW130R	FW160R
Height	mm	723	723
Width	mm	1121	1121
Depth	mm	242	242
Weight	kg	63	67



Training courses

Aermec contributes to the cultural growth of the air conditioning market promoting the dissemination of the most current technical and scientific themes: the expansion of a factory and the reliability of its products go together with the training of its collaborators and all those who operate "in the field", recommending and installing the units. For this reason Aermec annually organises a series of update and training courses at the purpose built centre within the factory. From the 1970's, year after year, over 15,000 Italian and European thermo-hydraulic designers and installers have benefited from courses held by specialised personnel, providing important occasions for comparison, technical updating and professional growth.

Training courses are targeted for

- * Designers
- * Installers

Designer Courses

The courses for DESIGNERS are at two levels. The First Level course deal with the subjects of thermal comfort and air treatment, calculation of summer loads, refrigerant circuits, fundamentals of air and water with related designs for ducting and hydraulic circuits, acoustics, and information on the use of Aermec technical manuals and use of the MC 11300 programme for the calculation of

thermal gains and losses. The Second Level course deals with fan coil systems, primary air, all air plants, with practical examples and visits to the production departments and the test chambers for high capacity refrigeration units.

Installer Courses

The courses for INSTALLERS are organised on request, with a minimum of 10 participants, and can be personalised in relation to the demands. They consist of presentation and descriptions of refrigerant circuits, information on the characteristics

of refrigerant gases, illustrations of the particulars and characteristics of direct expansion and hydronic systems, conditions for the correct unit installation.



On the suite www.aermec.it and at the Aermec agencies the annual calendar for courses are available and all the organizational and operation information can be obtained.





AERMEC



air conditioning

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