

MEC-W



Water-cooled packaged air conditioners With radial fans

Capacities from 11 up to 55 kW

FEATURES

- Available in 5 different sizes
- All versions are supplied for use with R407C
- Metallic protective cabinet with rustproof polyester paint
- Double suction radial fans
- Electric motors with belt transmission
- Four row evaporator coil with copper tubes and aluminium fins
- Washable air filter
- Room thermostat with one or two contacts depending on the model
- Hermetic compressors
- Plate-type condenser
- Water flow control valve driven directly in relation to condensing pressure

ACCESSORIES

- BAS: Hot water coil with three rows of aluminium finned copper tubes.
- PL: Air distribution plenum comprising delivery grille with two rows of adjustable slats and internal lining of sound insulating material.

COMPATIBILITY OF ACCESSORIES

Mod.	307 W	507 W	757 W	1007 W	1507 W
BAS 30	.				
BAS 50		.			
BAS 75			.		
BAS 100				.	
BAS 150					.
BAS 200					
BAS 300					
PL 22	.				
PL 23		.			
PL 26			.		
PL 37				.	
PL 38					.
PL 39					
PL 300					.

TECHNICAL DATA

Mod. MEC		307 W	507 W	757 W	1007 W	1507 W
Cooling capacity	kW	11	18	29	35	55
Input power	kW	3,05	4,45	7,3	8,5	13,7
Water flow rate at 30 °C	l/h	2350	3740	5900	7270	11270
Pressure drops	kPa	38	65	56	65	53
Water consumption at 16 °C*	l/h	620	990	1550	1910	2970
Pressure drops*	kPa	3,5	6,7	5	5,3	5
Heating capacity (accessory BAS)	kW	25,28	46,61	58,01	78,59	113,68
Pressure drops (accessory BAS)	kPa	3,47	4,01	3,97	4,59	5,77
Coil rows	n.	4	4	4	4	4
Nominal air flow rate	m ³ /h	2040	3400	5100	6800	10200
e Sound pressure	dB (A)	63	65,5	72,5	69,5	73,5
Motor power	kW	0,375	0,75	1,125	1,5	1,125
Speed	g/m (min.)	840	840	840	620	840
	g/m (max.)	1120	1120	1120	810	1120
Motor pulley diameter	mm (min.)	79	79	79	79	79
	mm (max.)	104	104	104	104	104
Fan pulley diameter	mm	130	130	130	180	130
	m ³ /h (min.)	1600	2750	4100	5500	8200
Air flow rate	m ³ /h (max.)	2400	4100	6000	8200	12000
	A (230 V)	12,2	15,4	24,2	30,8	46,6
Input current	A (400 V)	6	8,9	13,9	17,8	26,9
	A (230 V)	98	142	168	157	190
Peak current	A (400 V)	48	68	101	77	115

Power supply: 3~ 230V 50Hz; 3N~ 400V 50Hz.

Cooling

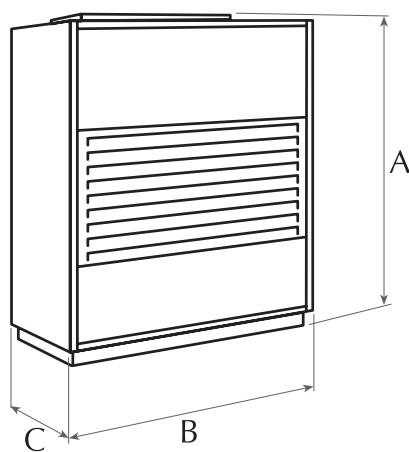
- room air temperature 27 °C D.B., 19 °C W.B.;
- condensing temperature 40 °C;
- * condensing temperature 35 °C.

Heating

- water inlet temperature 85 °C;
- air intake temperature 15 °C;

Sound pressure measured in an 85 m3 semi-reverberant test chamber with reverberation time Tr = 0.5s..

DIMENSIONS (MM)



Mod.		307 W	507 W	757 W	1007 W	1507 W
Height	A	1290	1410	1680	1700	1745
Width	B	900	1040	1220	1450	1880
Depth	C	494	558	648	723	753
Weight	kg	147	184	273	335	484

Aermec reserves the right to make any modifications deemed necessary.
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FW-R

Water-cooled air conditioners

Capacities from 2.9 up to 4.0 kW



TL 3
Mandatory accessory



TL3 Receiver board

TL3 wall-mounted receiver

DESCRIPTION

FW-R series integrated system air conditioners are independent appliances designed and built to create and maintain optimum room comfort conditions.

Discreetly and elegantly styled, these remarkably quiet units are ideal for installation in the home or commercial premises.

Equipped with a water-cooled condenser, FW-R appliances perform all typical cooling, dehumidification, ventilation and air filtration functions while offering particular benefits in terms of ease of application and installation.

Suitable also for winter operation when equipped with an electric heater or hot water coil; console air conditioners are able to provide different microclimates within the same room because each appliance can be adjusted independently; low running costs are assured by fast arrival at the required room temperature because of the low thermal inertia of the system; quiet operation and thermal efficiency are also promoted by the heat and sound insulation of the compressor bay.

All appliances are factory assembled and individually tested.

FEATURES

- High efficiency rotary compressor
- Compact size
- Quiet operation
- Automatic temperature adjustment
- Reduced water consumption
- Low electrical power consumption

ACCESSORIES

- TL3 : Mandatory accessory, remote controller, required for the operation of the unit
- BR: Armoured heating element with safety thermostat.
- BVR: Single row hot water coil.

Compatibility of accessories		
	FW130R	FW160R
TL 3	•	•
BR 26	•	•
BVR 1	•	•

TECHNICAL DATA

Mod.	FW	130R	160R
Cooling capacity	W (max.)	2900	4000
Energy Efficiency Class		A	A
EER		4.08	4.65
Humidity removed	l/h	1.78	1.78
Input power	W	710	860
Input current	A	3.55	4.02
Heating capacity with water coil (BVR1)	W	4350	5200
Water flow rate (BVR1)	l/h	600	600
Pressure drops (BVR1)	kPa	12,6	12,6
Heating capacity electric coil (BR26)	W	1200	1200
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
Fans 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 at 30-35°C	l/h	586	804
Condenser pressure drops	kPa	22	40
Refrigerant	Tipo / GWP	R410A / 2088kgCO ₂ eq	
Refrigerant charge	g	750	830
Input nominal power consumption *	W	1120	1500
Nominal input current *	A	4.97	6.65
Input current	A	18	32
Water connections	ø	1/2" F	1/2" F

Power supply = 230V ~ 50Hz.

Sound pressure measured in an 85 m³ semi-reverberant test chamber with reverberation time Tr = 0.5s

* In accordance with UNI EN-60335

Data declared in accordance with EN-14511

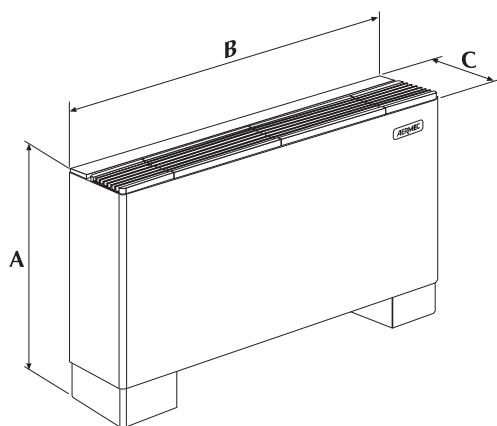
Cooling

- Room air temperature 27°C B.S. ; 19°C B.U.
- Entering water temperature 30°C
- Leaving water temperature 35°C
- Max speed

Heating (BVR1) :

- Room air temperature 20°C
- Entering water temperature 70°C
- Max speed

DIMENSIONS (MM)



		FW 130 R	FW 160 R
Height	A	723	723
Width	B	1121	1121
Depth	C	242	242
Weight	kg	63	67

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CWX-CWXM

Water motocondensing unit functioning only in cooling mode Internal installation

Power from 2.7 to 7.1 kW



CWX_W



EXC



CWX



CWXM



IR remote control
CWX_W



TL 3 accessory



PF accessory

VERSIONS

CWX condensing unit for cooling only MONOSPLIT

CWXM condensing unit cold only DUALSPLIT

FEATURES

CWX power module

- Available in 4 versions with different potentiality
- The versions are realised using R410A refrigerant gas
- Only cold operation with water condensation
- Outdoor unit with rotary compressor
- Refrigerant lines with flared connections
- Refrigerant lines up to 15m

CWXM power module

- Available in 2 versions with different potentiality
- The versions are realised using R410A refrigerant gas
- Only cold operation with water condensation
- Outdoor unit with rotary compressor
- Refrigerant lines with flared connections
- Refrigerant lines up to 10m

CWX_W indoor unit:

- Wall indoor unit for wall installation with infrared ray remote control supplied;
- Air flow louvers adjustable horizontally and motorised deflecting louvers, which can be activated by remote control to direct the outlet air flow vertically, with fixed (LV) or floating (SW) positions

- Extremely silent functioning
- Microprocessor control
- Programmable switch-on/off timer
- Air filter that can be easily removed and regenerated
- Night time well-being (SLEEP) function
- Functioning mode: cooling, dehumidification, ventilation only)
- Autorestart function after interruption of electricity
- Tangential fan with 3 directly selectable speeds
- Energy saving (ECONO) and fast cooling (TURBO) mode

EXC indoor unit:

- Indoor unit with 3-speed centrifugal fan with the possibility of varying the electric connection to increase the useful static pressure. PF (wired control panel) or TL3 (remote control) mandatory accessories, essential unit functioning
- Functioning mode: cooling, heating (with BV or RX accessories), dehumidification or automatic
- Programmable switch-on/off timer
- Cooling or fast heating (TURBO) mode
- Autorestart function after interruption of electricity
- Wide range of accessories for EXC indoor unit
- Microprocessor control
- Extremely silent functioning
- Air filter that can be easily removed and regenerated

TECHNICAL DATA

Indoor units			CWX250W	CWX350W	CWX500W	CWX700W	CWX350W+ CWX350W	CWX500W+ CWX500W
Power module			CWX250	CWX350	CWX500	CWX700	CWXM520	CWXM720
Cooling capacity	W		2750	3400	5200	6700	4826	7100
Total input power	W		637	778	1330	1860	1279	1780
Total input current	A		2,86	3,56	6,02	9,28	5,8	9,0
EER	W/W		4,32	4,37	3,91	3,60	3,77	3,99
Water flow rate at (in/out) 30°C/35°C	l/h		572	705	1091	1446	1066	1510
Water side pressure drops	kPa		21	32	74	125	68	127
Water flow rate at (in) 15°C	l/h		102	122	225	308	190	255
Refrigerant gas	Tipo/GWP		R410A / 2087,5 kgCO2eq					
Refrigerant gas load	kg		0,65	0,75	0,85	0,97	0,9	1,1
Nominal input power	(1)	W	1500	1500	2300	2650	2300	2650
Humidity removed		l/h	1,08	1,18	1,96	2,38	1,0	1,3
Air flow rate	max	m³/h	445	537	882	1010	537	882
	average	m³/h	428	501	828	935	501	828
	min	m³/h	404	467	776	842	467	776
Sound power (indoor unit)	max	dB(A)	51	51	56	58	51,0	56,0
	average	dB(A)	50	50	55	56	50,0	55,0
	min	dB(A)	49	48	53	54	48,0	53,0

Indoor units			EXC093	EXC123	EXC183	EXC243	EXC123+ EXC123	EXC183+ EXC183
Power module			CWX250	CWX350	CWX500	CWX700	CWXM520	CWXM720
Cooling capacity	W		2700	3500	5250	6700	5380	7100
Total input power	W		656	790	1422	1856	1314	1820
Total input current	A		2,95	3,65	6,44	9,29	6,0	9,1
EER	W/W		4,12	4,43	3,69	3,61	4,09	3,90
Water flow rate at (in/out) 30°C/35°C	l/h		573	715	1140	1455	1172	1510
Water side pressure drops	kPa		21	33	81	126	82	68
Water flow rate at (in) 15°C	l/h		102	125	235	311	200	255
Refrigerant gas	Tipo/GWP		R410A / 2087,5 kgCO2eq					
Refrigerant gas load	kg		0,65	0,75	0,85	0,97	0,9	1,1
Nominal input power	(1)	W	1500	1500	2300	2650	2300	2650
Humidity removed		l/h	1,02	1,31	2,16	2,45	1,0	1,3
Air flow rate	max	m³/h	480	520	950	960	520	950
	average	m³/h	370	400	840	830	400	840
	min	m³/h	280	310	650	610	310	650
Sound power (indoor unit)	max	dB(A)	46	47,5	60	56,5	47,5	60,0
	average	dB(A)	41	43	58,5	53,5	43,0	58,5
	min	dB(A)	37	37,5	55	49,5	37,5	55,0
Heating capacity (water coil)	(2)	W	2640	3040	4670	5690	3040	4670
Water flow rate (water coil)	(2)	l/h	231	266	409	497	266	409
Pressure drops (water coil)	(2)	kPa	14,0	17,0	36,0	12,0	17,0	36,0
Heating capacity (electric resistance)	(2)	W	1300	1650	1950	2200	1650	1950
Input current (electric resistance)	(2)	A	5,7	7,2	8,5	9,6	7,2	8,5

Power module			CWX250	CWX350	CWX500	CWX700	CWXM520	CWXM720
Sound power	dB(A)		52	56	59	59	59,0	59,0
Compressor	type		Rotary	Rotary	Rotary	Rotary	Rotary	Rotary
Refrigerant connections	Φ liquid	inch	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
	Φ gas	inch	3/8"	1/2"	1/2"	5/8"	1/2"	1/2"
	Φ liquid	mm (inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
Refrigerant lines	Φ gas	mm (inch)	9,52 (3/8")	12,7 (1/2")	12,7 (1/2")	15,9 (5/8")	12,7 (1/2")	12,7 (1/2")
	Max pipe Length	m	15	15	15	15	10 + 10	10 + 10
	Max level difference	m	7	7	7	7	5	5
Hydraulic connections	F		3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Electric power supply	V ~ Hz		220-240V ~ 50Hz					

(1) The nominal input power, is the maximum electric input power of the system, in accordance with the Standard EN-60335-1 and EN-60335-2-40

(2) Ambient air 20°C d.b.; Water (in/out) 65°C/55°C; maximum speed

■ Nominal conditions (Cooling EN-14511):

- Room air temperature 27 °C D.B. ; 19 °C W.B.
- Water temperature (in/out) 30°C / 35 °C
- maximum speed
- pipe length 5m

ACCESSORIES

PF or TL3 mandatory accessories are essential for functioning of the EXC units:

PF: Control panel with electronic room thermostat for wall installation. It is a mandatory accessory as the EXC units are delivered without.

TL3: Infrared remote control with liquid crystal display to control all functions. Kit complete with recessed receiver. It is a mandatory accessory as the EXC units are

delivered without.

AMP: Kit for wall/ceiling mounted installation.

BC: Auxiliary condensate drip tray.

BV: Hot water coil with 1 row.

DSC4: Condensate draining device when level differences must be exceeded.

GA: Intake grid with fixed louvers.

GAF: Intake grid with fixed louvers with filter.

GM: Flow grid with adjustable louvers.

MA: Tall protective cabinet.

MU: Universal protective Cabinet.

PA: Galvanised sheet steel intake plenum equipped with plastic flow fittings for circular section ducts.

PC: Steel sheet panel for closing the rear unit side.

PM: Galvanised sheet steel flow plenum, externally insulated, equipped with plastic flow fittings for ducts

and circular sections.

RD: Straight flow fitting for ducting.

RDA: Straight intake fitting for ducting.

RP: 90° flow fitting for ducting.

RPA: 90° intake fitting for ducting.

RX: Armoured electrical coil with safety thermostat.

SE: External air damper with manual control.

SW3: Probe which enables operation of the unit only with temperature greater than 35 °C.

VCF: Kit composed of 3-way motorised valve and copper pipes and connections.

ZX: Feet for floor assembly for models with MA accessory, or recessed.

		Accessory compatibility			
	Notes	EXC093	EXC123	EXC183	EXC243
TL3	(1)	•	•	•	•
PF	(1)	•	•	•	•
AMP		•	•	•	•
	4 (2)	• (4)	• (4)	• (4)	• (4)
	5 (3)	•	•	•	
BC	6 (3)				•
	8	•	•	•	
	9				•
	132	•			
BV	142		•	•	
	162				•
DSC4		•	•	•	•
	32	•			
GA	42		•	•	
	62				•
	32	•			
GAF	42		•	•	
	62				•
	32	•			
GM	42		•	•	
	62				•
	32	•			
MA	42		•	•	
	62				•
	32	•			
MU	42		•	•	
	62				•
	32	•			
PA	42		•	•	
	62				•
	32	•			
	33	•			
PC	42		•	•	
	43		•	•	
	62				•
	32	•			
PM	42		•	•	
	62				•
	32	•			
RD	42		•	•	
	62				•
	32	•			
RDA	42		•	•	
	62				•
	32	•			
RP	42		•	•	
	62				•
	32	•			
RPA	42		•	•	
	62				•
	090	•			
	120		•		
RX	180			•	
	240				•
	30X	•			
SE	40X		•	•	
	80X				•
SW3		• (5)	• (5)	• (5)	• (5)
VCF	44	•	•	•	
	45				•
	5	•	•	•	
	6				•
ZX	7	•	•	•	
	8				•

(1) it is a mandatory accessory as the LC C units are delivered without.

(2) in combination with MA accessory;

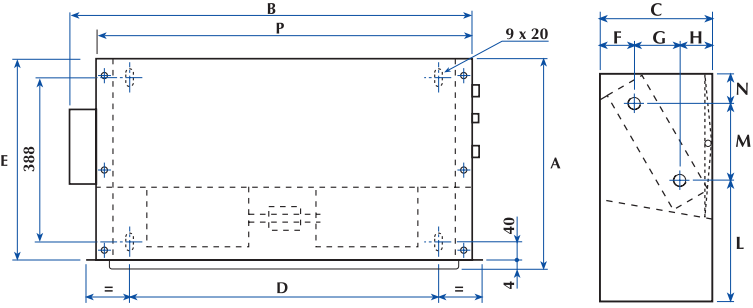
(3) in combination with MU accessory;

(4) the VCF valve and the BC4 tray cannot be installed simultaneously on the same unit;

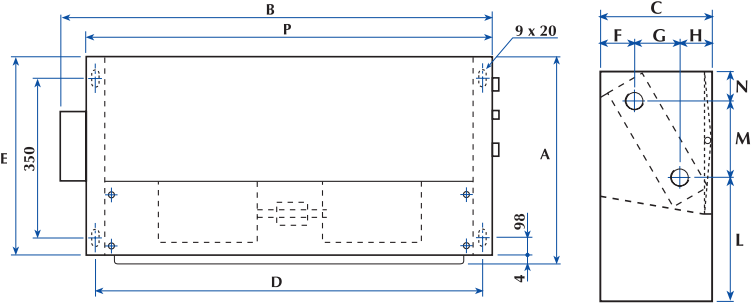
(5) to be coupled with the BV hot water coil.

DIMENSIONAL DATA (MM)

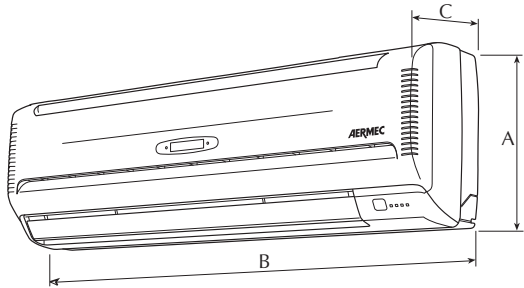
EXC093 - 123 - 183



EXC243

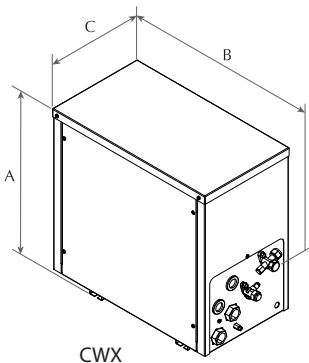


EXC	093	123	183	243
A	457	457	457	562
B	823	1043	1043	1182
C	216	216	216	216
D	671	891	891	1102
E	453	453	453	558
F	41	41	41	41
G	101	101	101	107
H	74	74	74	68
L	260	260	260	273
M	144	144	144	253
N	49	49	49	32
P	753	973	973	1122
Weight (Kg)	23	26	27	37

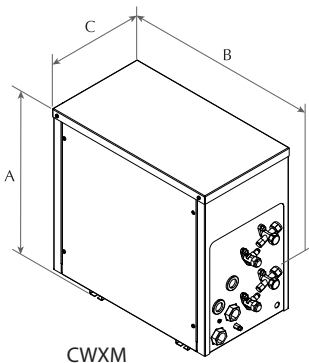


CWX_W

CWX_W		250	350	500	700
Height	A	298	305	360	360
Width	B	880	990	1172	1172
Depth	C	205	210	220	220
Weight	kg	11	12	18,5	20



CWX



CWXM

CWX		250	350	500	700
Height	A	450	450	450	570
Width	B	470	470	470	470
Depth	C	260	260	260	260
Weight	kg	32	35	38	49

CWXM		520	720
Height	A	585	585
Width	B	470	470
Depth	C	260	260
Weight	kg	41	52

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