VED__I

Fan coil unit with Brushless Inverter motor (EC) for ducted systems
Cooling capacities 8÷10kW

AERMEC
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- **HORIZONTAL OR VERTICAL INSTALLATION**
- **VERSIONS FOR 2/4 PIPE SYSTEMS**
- **1 –2 ROW HEATING ONLY COIL**
- **LARGE RANGE OF AVAILABLE STATIC PRESSURE**
- **CENTRIFUGAL FANS INVERTER**
- **ACCESSIBLE FAN ASSEMBLY**
- **AIR FILTER CLASS G3**
- **REVERSIBLE COIL**

Unit selection

By choosing the appropriate options it is possible to select the model to suit the specific system requirements.

Configuration fields:

1 2 3	4	5	6	7
Code	Size	Main Coil	Main coil only hot	Inverter motor

Example:

1 2 3	4	5	6	7
VED	**5**	**3**	**2**	**I**

Characteristics

- Ducted air conditioning terminal unit
- Internal installation
- 3 row main coil and heating only coil accessory for 4-pipe systems
- Versions for systems with 4 pipes with main coil with 3 or 4 rows and heating only coil with 1 or 2 rows
- Reversibility of the hydraulic connection in the installation phase
- Low pressure drop in the heat exchange coils
- 3-way valves accessories
- 2-way valves accessories for systems with variable water flow rate
- Centrifugal fans with motor inverter
- Wide range of useful static pressure
- Centrifugal fans in antistatic plastic. Due to their features, they allow to reduce the energy consumption with respect to normal fans
- Fans with wing-shaped profile studied to obtain high flow rate and static pressure performance and low noise emission at the same time
- Compatible with the VMF system
- Wide range of controls
- Wide range of accessories to satisfy all system requirements
- Rectangular flow flange already integrated into the framework
- Class G3 air filter with easy extraction and cleaning
- Internal insulation in Class 1 fire resistance
- IP20 protection rating
- Plastic augers, extractable for easy and efficient cleaning
- Easy installation and maintenance
- Full respect of the accident-prevention standards

Accessories

Control panel

A range of dedicated controllers, wall-mounted or on the machine, is available but it is essential to choose between these panels for simple and complete tuning, for more details please refer to the dedicated sheet.

Probes and accessories for control panels

- **WMT21**: Electronic thermostat with LCD display (wall installation).
- **SWAI**: Water temperature probe for WMT21 control panels. Cable length L=2m.

VMF system

- **VMF-E4**: Wall mounted user interface allowing control via a capacitive touch keyboard.
- **VMF-E5**: Wall recessed panel allowing control of a complete hydronic system via a capacitive touch keyboard.
- **VMF-E18**: Thermostat for serial communication
- **VMF-SW**: water sensor replacing that supplied with VMF-E1 thermostats for installation upstream of the valve.
- **VMF-SW1:** additional water sensor for 4-pipe systems with E1 thermostats offering maximum control in the cooling range.

Valve kit

- **VCF4_C**: **Kit made up from motorised 3-way valves** with isolating shell, fittings and isolated copper pipes. For main coils. 230V~50Hz power supply
- **VCF4_H**: **Kit made up from motorised 3-way valves**, fittings and isolated copper pipes. For heating only coils. 230V~50 Hz power supply
- **VCF25C: Kit made up from motorised 2-way valves**, with fittings and isolated copper pipes. For main coils. 230V~50 Hz power supply
- **VCF25H: Kit made up from motorised 2-way valves,** with fittings and copper pipes. For heating only coils. 230V~50 Hz power supply
- **VJP/VJP_M: Control and balancing combination valve for 2 and 4 pipe systems to install outside the unit, supplied without fittings and hydraulic components.** The valve, which can guarantee a constant water flow rate in the terminal, within its operating range, is available with 230V and 24V~50Hz power supply.

The VJP is controlled by on-off logic with compatible control panels (accessories)

The VJP_M is controlled by modulating logic with panels not supplied by Aermec

The design water flow rate is crucial to refine the selection of the valve shown in the compatibility table.

Ducting Accessories:

- **MZC**: Plenum with motor-driven dampers
- **RDA_V**: Straight intake connection with rectangular flange.
- **RDAC_V**: Straight intake connection with circular flanges.
- **RPA_V**: Intake plenum with rectangular flange.
- **RDMC_V**: Straight discharge with circular flanges. Internally insulated.
- **PA_V**: Intake plenum with circular flanges. Flanges in plastic material.
- **RPM_V**: Discharge plenum with rectangular flange. Internally insulated.
- **PM_V**: Discharge plenum with circular flanges. Internally insulated. Flanges in plastic material.
- **KFV10**: Circular flanges kit for intake/discharge plenum.

Grid

- **GA**: Intake grid with fixed louvers.
- **GAF**: Intake grid with fixed louvers with filter.
- **GM**: Flow grid with adjustable louvers.

For more details on the control panels and VMF system refer to the dedicated sheet

VED_I	530	532	540	541	730	732	740	741
Probes and accessories for control panels								
WMT21	•	•	•	•	•	•	•	•
SWAI	In combination with WMT21							
VMF System								
VMF-E18	•	•	•	•	•	•	•	•
VMF-E4	•	•	•	•	•	•	•	•
VMF-E5	•	•	•	•	•	•	•	•
VMF-SW	•	•	•	•	•	•	•	•
VMF-SW1	•	•	•	•	•	•	•	•
Water valves								
3 way valve kit								
VCF45C	•	•	•	•				
VCF47C					•	•	•	•
3 way valve kit for heating coil only								
VCF45H		•		•				
VCF47H						•		•
2 way valve kit								
VCF25C	•	•	•	•	•	•	•	•
2 way valve kit for heating coil only								
VCF25H		•		•		•		•
Combined adjustment and balancing valve independent of pressure*								
VJP150/150M (1)	•	•	•	•				•
VJP270M (1)					•	•	•	•
Plenum for duct installation								
MZC5040	•	•	•	•				
MZC7050					•	•	•	•
RDA 450 V	•	•	•	•				
RDA 670 V					•	•	•	•
RPA 450 V	•	•	•	•				
RPA 670 V					•	•	•	•
PA 450 V	•	•	•	•				
PA 670 V					•	•	•	•
RPM 450 V	•	•	•	•				
RPM 670 V					•	•	•	•
PM 450 V	•	•	•	•				
PM 670 V					•	•	•	•
KFV	•	•	•	•	•	•	•	•

For more details on the control panels, VMF system MZC refer to the dedicated sheet.

(1) VJP090M-VJP150M-VJP270M are 24V

*** VJP/VJP_M The compatibility of the hot water valves with the designed air flow in a four-pipe installation is to be verified.**

Technical data

VED_I			530			540			730			740		
Fan speed			**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**
Heating Performance														
2 pipe configuration														
Heating capacity (70°C)	(1)	kW	17,57	16,47	13,80	19,91	18,59	15,38	29,00	25,36	21,18	31,71	27,65	22,88
Water flow rate	(1)	l/h	1541	1444	1210	1746	1630	1349	2543	2224	1857	2781	2425	2007
Pressure drops	(1)	kPa	21	18	13	29	25	18	67	55	38	46	36	26
Heating capacity (45°C)	(2)	kW	8,74	8,19	6,87	9,90	9,25	7,65	14,43	12,62	10,54	15,77	13,76	11,38
Water flow rate	(2)	l/h	1517	1421	1191	1719	1604	1327	2503	2190	1828	2737	2387	1975
Pressure drops	(2)	kPa	20	17	13	28	24	17	65	53	37	45	35	25
Cooling Performance														
Total cooling capacity	(3)	kW	7,76	7,39	6,16	8,97	8,54	7,43	13,85	12,20	10,40	16,08	14,23	11,96
Sensible cooling capacity	(3)	kW	6,02	5,71	4,72	6,45	6,13	5,04	11,44	9,99	8,48	11,32	9,97	8,34
Water flow rate	(3)	l/h	1335	1271	1060	1543	1469	1278	2382	2098	1789	2766	2448	2057
Pressure drops	(3)	kPa	21	19	12	28	25	19	58	46	35	45	37	27
Fans														
Fan - Centrifugal		n°		2			2			3			3	
Air flow rate		m³/h	1520	1400	1120	1500	1380	1100	2410	2040	1640	2350	2000	1600
High static pressure		Pa	58	50	32	56	50	32	69	50	32	69	50	32
Sound data														
Sound power level (inle+radiator)	(5)	dB(A)	62	59	53	62	59	53	68	66	62	68	66	62
Sound power level (outlet)		dB(A)	58	55	49	58	55	49	64	62	58	64	62	58
Diameter connections														
Standard coil		Ø		3/4"			3/4"			3/4"			3/4"	
Additional coil		Ø		/			/			/			/	
Electrical Features														
Absorbed power		W	205	170	115	205	170	115	370	245	140	370	245	140
Max. input current		A		1,4			1,4			2,1			2,1	
Signal 0-10V		%	66	84	90	66	84	90	62	76	90	62	76	90
Power supply			230V~50Hz											

VED_I			541			741		
Fan speed			**H**	**M**	**L**	**H**	**M**	**L**
Heating Performance								
4 pipe configuration								
Heating capacity (65°C)	(4)	kW	7,90	7,62	6,70	12,96	11,88	10,57
Water flow rate	(4)	l/h	692	666	584	1133	1040	925
Pressure drops	(4)	kPa	26	24	19	25	21	17
Cooling Performance								
Total cooling capacity	(3)	kW	8,97	8,54	7,43	16,08	14,23	11,96
Sensible cooling capacity	(3)	kW	6,45	6,13	5,04	11,32	9,97	8,34
Water flow rate	(3)	l/h	1543	1469	1278	2766	2448	2057
Pressure drops	(3)	kPa	28	25	19	45	37	27
Fan								
Fan - Centrifugal		n°		2			3	
Air flow rate		m³/h	1460	1360	1060	2350	2000	1600
High static pressure		Pa	56	50	32	69	50	32
Sound data								
Sound power level (inle+radiator)	(5)	dB(A)	62	59	53	68	66	62
Sound power level (outlet)		dB(A)	58	55	49	64	62	58
Diameter connections								
Standard coil		Ø		3/4"			3/4"	
Additional coil		Ø		1/2"			1/2"	
Electrical Features								
Absorbed power		W	185	163	106	363	240	138
Max. input current		A		1,4			2,1	
Signal 0-10V		%	66	84	90	64	78	90
Power supply			230V~50Hz					

H max. speed; **M** med.speed; **L** min.speed

(1) Room air 20°C b.s.; Water (in/out) 70°C/60°C;

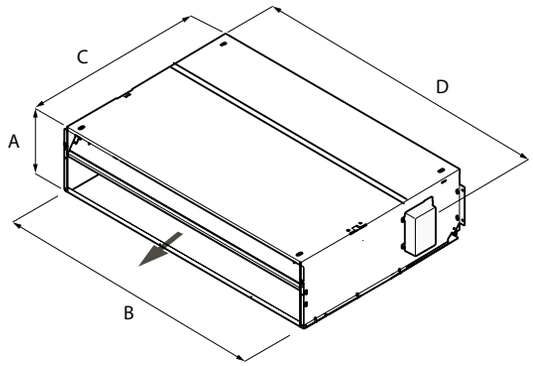
(2) Room air 20°C b.s.; Water (in/out) 45°C/40°C (EUROVENT)

(3) Room air 27°C b.s./19°C b.u.; Water (in/out) 7°C/12°C (EUROVENT)

(4) Room air 20°C b.s.; Water (in/out) 65°C/55°C (EUROVENT)

(5) Sound power level on the basis of measurements made in compliance with Eurovent 8/2

Dimensional data (mm)



VED_I		530	532	540	541	730	732	740	741
A	mm	300	300	300	300	351	351	351	351
B	mm	1133	1133	1133	1133	1533	1533	1533	1533
C	mm	737	737	737	737	789	789	789	789
D	mm	1158	1158	1158	1158	1558	1558	1558	1558
Weight	Kg	42	47	44	47	58	58	61	61

Cod.: SVEDI530_741UY.05/ 1612

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italia
Tel. 0442633111 - Telefax 044293577
www.aermec.com