

VED Air handling terminal with cooling capacities from 8 to 18 kW For ducted systems



VMF

AERMEC participates in the EUROVENT programme for: FCP/2/H
Check ongoing validity of certificate online: www.eurovent-certification.com



- **WIDE RANGE OF ACCESSORIES**
- **HORIZONTAL AND VERTICAL INSTALLATION**
- **COMPATIBLE WITH THE VMF SYSTEM**
- **VERSIONS FOR 2/4 PIPE SYSTEMS**
- **HEAT EXCHANGER ONLY WITH 1 OR 2 ROWS**
- **WIDE RANGE OF USEFUL STATIC PRESSURE**
- **5 SPEED VENTILATION UNIT**
- **CENTRIFUGAL FANS IN ANTISTATIC PLASTIC**
- **INSPECTIONABLE FAN UNIT**
- **INTERNAL ISOLATION WITH CLASS 1 FIREPROOF PROTECTION**
- **CLASS G3 AIR FILTER**
- **COIL REVERSIBILITY**

Choosing the unit

By appropriately combining the options available, it is possible to select the model that satisfies the specific system requirements.

Fields configurator:

1 2 3 Code	4 Size	5 Main coil n°. rows	6 Heating only coil n°. rows
1 2 3 VED	4 5	5 3	6 2

(VED532 = unit size 5, with Main Coil 3 Rows and Heating Coil 2 Rows)

Features

- Air handling terminal for ducted systems
- EUROVENT FCP Certification Program
- Horizontal and vertical installation
- Indoor installation
- Available in 4 sizes and 4 configurations
- Versions for 2 pipe systems with 3 or 4 row coil
- 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
- 5 speed fan unit (3 selectable)
- 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

- **RDA_V:** Straight fitting with rectangular flange for ducting.
In galvanised sheet steel
- **RPA_V:** Intake plenum with rectangular flange for ducting.
In galvanised sheet steel
- **PA_V:** Intake plenum with circular flanges for ducting.
In galvanised sheet steel, the flanges are in plastic
- **RPM_V:** Flow plenum with rectangular flange for ducting.
In galvanised sheet steel, internally isolated.
- **PM_V:** Flow plenum with circular flanges for ducting
In galvanised sheet steel, internally isolated, the flanges are in plastic
- **KFV:** Circular flange kit for intake/flow plenum.
In plastic
- **VCF4_C:** Kit made up from motorised 3-way valves with isolating shell, fittings and isolated copper pipes. For main coils. 230V~50 Hz 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
- **VCF2_C:** Kit made up from motorised 2-way valves, with fittings and isolated copper pipes. For main coils. 230V~50 Hz power supply
- **VCF2_H:** Kit made up from motorised 2-way valves, with fittings and copper pipes.
For heating only coils. 230V~50 Hz power supply

CONTROL PANELS

The complete features of the control panels are described in the dedicated sheet.
Some control panels require coupling with other accessories, consult the relative documentation.

ACCESSORIES TO COUPLE WITH THE CONTROL PANELS

- **SIT3 :** Thermostat interface board
Mandatory accessory on the VED units

coupled to thermostats different to the VMF System

- **SIT5:** Thermostat interface board.
Allows to realise a network of VED units (max 3) controlled by a centralised PXAE panel
- **SW3:** Water minimum temperature probe to use with PXAE control panel.

VARIABLE MULTI FLOW SYSTEM

VMF System: The complete fittings of the VMF System management system are described in the dedicated sheet.

Some VMF components require coupling with other accessories, consult the relative documentation.

- **VMF-SIT 3 :** Thermostat Interface Board
VMF. Mandatory accessory on the VED unit supplied with VMF-E0 / E1 thermostat.

Mod. VED	Accessories compatibility															
	430	432	440	441	530	532	540	541	630	632	640	641	730	732	740	741
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	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SW3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SIT 3*	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SIT 5**	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
PXAE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
WMT05	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
WMT06	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
WMT10	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
VCF45C	✓	✓	✓	✓	✓	✓	✓	✓								
VCF45H		✓		✓		✓		✓								
VCF47C									✓	✓	✓	✓	✓	✓	✓	✓
VCF47H										✓		✓		✓		✓
VCF25C	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
VCF25H		✓		✓		✓		✓		✓		✓		✓		✓
VMF-SIT3***	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
VMF-E0	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
VMF-E1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
VMF-SW	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
VMF-SW1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
VMF-E4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
VMF-E5B	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
VMF-E5N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

* SIT3 =Mandatory accessory on the VED units coupled to thermostats different to the VMF System
 ** SIT5 = Allows to realise a network of VED units (max 3) controlled by a centralised PXAE panel
 *** VMF-SIT3 = Mandatory accessory for coupling with VMF-E0 or VMF-E1

Technical data

Mod. VED		430	432	440	441	530	532	540	541	630	632	640	641	730	732	740	741
Heating Capacity 70°C (heating only coil circuit)	W (nominal)	-	13875	-	8990	-	15020	-	9510	-	22800	-	14800	-	25080	-	15800
	W (max.) (E)	-	12090	-	8160	-	13540	-	8850	-	20500	-	13750	-	22180	-	14500
	W (med.) (E)	-	10725	-	7480	-	12850	-	8520	-	17750	-	12370	-	19720	-	13330
	W (min.) (E)	-	8280	-	6190	-	10720	-	7475	-	14690	-	10770	-	16730	-	11830
Water flow rate 70°C (heating only coil circuit)	l/h (nominal)	-	1193	-	773	-	1292	-	818	-	1961	-	1273	-	2157	-	1359
	l/h (max.)	-	1040	-	702	-	1164	-	761	-	1763	-	1183	-	1907	-	1247
	l/h (med.)	-	922	-	643	-	1105	-	733	-	1527	-	1064	-	1696	-	1146
	l/h (min.)	-	712	-	532	-	922	-	643	-	1263	-	926	-	1439	-	1017
70°C water pressure drop (heating only coil circuit)	kPa (nominal)	-	22	-	32	-	25	-	35	-	33	-	31	-	39	-	34
	kPa (max.) (E)	-	17	-	27	-	21	-	31	-	27	-	27	-	31	-	30
	kPa (med.) (E)	-	14	-	23	-	19	-	29	-	21	-	23	-	25	-	26
	kPa (min.) (E)	-	9	-	17	-	14	-	23	-	15	-	18	-	19	-	21
Heating capacity 50°C	W (nominal)	10420	-	11950	-	11340	-	13110	-	18220	-	19600	-	20060	-	21820	-
	W (max.) (E)	9475	-	10740	-	10420	-	11820	-	16070	-	17930	-	17280	-	19150	-
	W (med.) (E)	8250	-	9130	-	9775	-	11050	-	13500	-	14940	-	15120	-	16680	-
	W (min.) (E)	6195	-	6810	-	8190	-	9170	-	11100	-	11980	-	12640	-	13840	-
50°C water pressure drop (main coil circuit)	kPa (nominal)	17	-	24	-	19	-	29	-	57	-	37	-	69	-	43	-
	kPa (max.) (E)	13	-	19	-	16	-	23	-	48	-	32	-	57	-	35	-
	kPa (med.) (E)	11	-	15	-	15	-	21	-	36	-	24	-	44	-	28	-
	kPa (min.) (E)	7	-	9	-	11	-	16	-	26	-	17	-	33	-	21	-
Total cooling capacity	W (nominal)	8010	8010	9290	9290	8660	8660	10280	10280	13900	13900	16450	16450	15360	15360	18100	18100
	W (max.) (E)	6950	6950	8010	8010	7760	7760	8970	8970	12530	12530	15180	15180	13850	13850	16080	16080
	W (med.) (E)	6150	6150	7060	7060	7395	7395	8545	8545	10700	10700	12760	12760	12200	12200	14230	14230
	W (min.) (E)	4685	4685	5340	5340	6160	6160	7435	7435	8890	8890	10430	10430	10400	10400	11960	11960
Sensitive cooling capacity	W (nominal)	6225	6225	6675	6675	6755	6755	7255	7255	11500	11500	11590	11590	12770	12770	12800	12800
	W (max.) (E)	5360	5360	5735	5735	6020	6020	6450	6450	10300	10300	10660	10660	11440	11440	11320	11320
	W (med.) (E)	4715	4715	5040	5040	5715	5715	6130	6130	8750	8750	8910	8910	9990	9990	9970	9970
	W (min.) (E)	3545	3545	3785	3785	4720	4720	5040	5040	7220	7220	7240	7240	8480	8480	8340	8340
Water flow rate (cooling)	l/h (nominal)	1378	1378	1598	1598	1490	1490	1768	1768	2391	2391	2829	2829	2642	2642	3113	3113
	l/h (max.)	1195	1195	1378	1378	1335	1335	1543	1543	2155	2155	2611	2611	2382	2382	2766	2766
	l/h (med.)	1058	1058	1214	1214	1272	1272	1470	1470	1840	1840	2195	2195	2098	2098	2448	2448
	l/h (min.)	806	806	918	918	1060	1060	1279	1279	1529	1529	1794	1794	1789	1789	2057	2057
Water head loss (cooling)	kPa (nominal)	22	22	30	30	26	26	37	37	58	58	47	47	70	70	56	56
	kPa (max.) (E)	17	17	22	22	21	21	28	28	48	48	41	41	58	58	45	45
	kPa (med.) (E)	13	13	17	17	19	19	25	25	36	36	30	30	46	46	37	37
	kPa (min.) (E)	8	8	10	10	13	13	19	19	26	26	21	21	35	35	27	27
Air flow rate	m ³ /h (nominal)	1520	1520	1520	1520	1700	1700	1700	1700	2450	2450	2450	2450	2800	2800	2800	2800
	m ³ /h (max.) (E)	1350	1250	1340	1250	1520	1460	1500	1460	2210	2110	2200	2110	2410	2350	2380	2350
	m ³ /h (med.) (E)	1130	1060	1100	1060	1400	1360	1380	1360	1800	1730	1770	1730	2040	2000	2020	2000
	m ³ /h (min.) (E)	790	750	780	750	1120	1060	1100	1060	1380	1340	1370	1340	1640	1600	1620	1600
Useful static pressure (with filter installed)	Pa (nominal)	55	40	50	40	40	30	35	30	68	53	63	53	47	37	42	37
	Pa (max.) (E)	72	70	70	70	58	56	56	56	75	75	75	75	69	69	69	69
	Pa (med.) (E)	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	Pa (min.) (E)	24	25	24	25	32	32	32	32	30	30	30	30	32	32	32	32
Motor speed connections	(nominale)	V5	V5	V5	V5	V5	V5	V5	V5	V5	V5	V5	V5	V5	V5	V5	V5
	(max.) (E)	V5	V5	V5	V5	V5	V5	V5	V5	V5	V5	V5	V5	V5	V5	V5	V5
	(med.) (E)	V3	V3	V3	V3	V4	V4	V4	V4	V3	V3	V3	V3	V3	V3	V3	V3
	(min.) (E)	V1	V1	V1	V1	V2	V2	V2	V2	V1	V1	V1	V1	V1	V1	V1	V1
Input power	W (nominal)	238	242	240	242	283	281	282	281	376	376	376	376	411	411	411	411
	W (max.) (E)	228	215	222	215	270	265	267	265	339	339	339	339	371	371	371	371
	W (med.) (E)	182	175	178	175	232	229	230	229	268	268	268	268	285	285	285	285
	W (min.) (E)	137	130	135	130	175	169	172	169	224	224	224	224	234	234	234	234
Maximum input power	W	290	290	290	290	300	300	300	300	436	436	436	436	440	440	440	440
Maximum input current	A	1,4	1,4	1,4	1,4	1,35	1,35	1,35	1,35	2,07	2,07	2,07	2,07	2,00	2,00	2,00	2,00
Protection rating		IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20
Number of fans	n°	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3
Coil connections (main)	ø Gas (Female)	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Coil connections (heating only)	ø Gas (Female)	-	1/2"	-	1/2"	-	1/2"	-	1/2"	-	1/2"	-	1/2"	-	1/2"	-	1/2"
Net Weight	kg	41	45,5	43	45,5	41	45,5	43	45,5	57	63	60	63	57	63	60	63
Gross Weight	kg	44	48,5	46	48,5	44	48,5	46	48,5	72	78	75	78	72	78	75	78

The performance refers to the following conditions:

(E) : Certificate Data in compliance with the Eurovent FCP Program

- Electric power supply: 230V~50Hz

- Class G3 air filter installed

- The nominal speed represents the upper limit of the air flow rate for which the heat exchanger has been dimensioned

Cooling (Eurovent):

- Inlet air temperature D.B. = 27°C
- Inlet air temperature W.B. = 19°C
- Water inlet temperature = 7°C
- Outlet water temperature = 12°C
- Water flow rate depending on the Dtw constant

Heating 50°C (Eurovent):

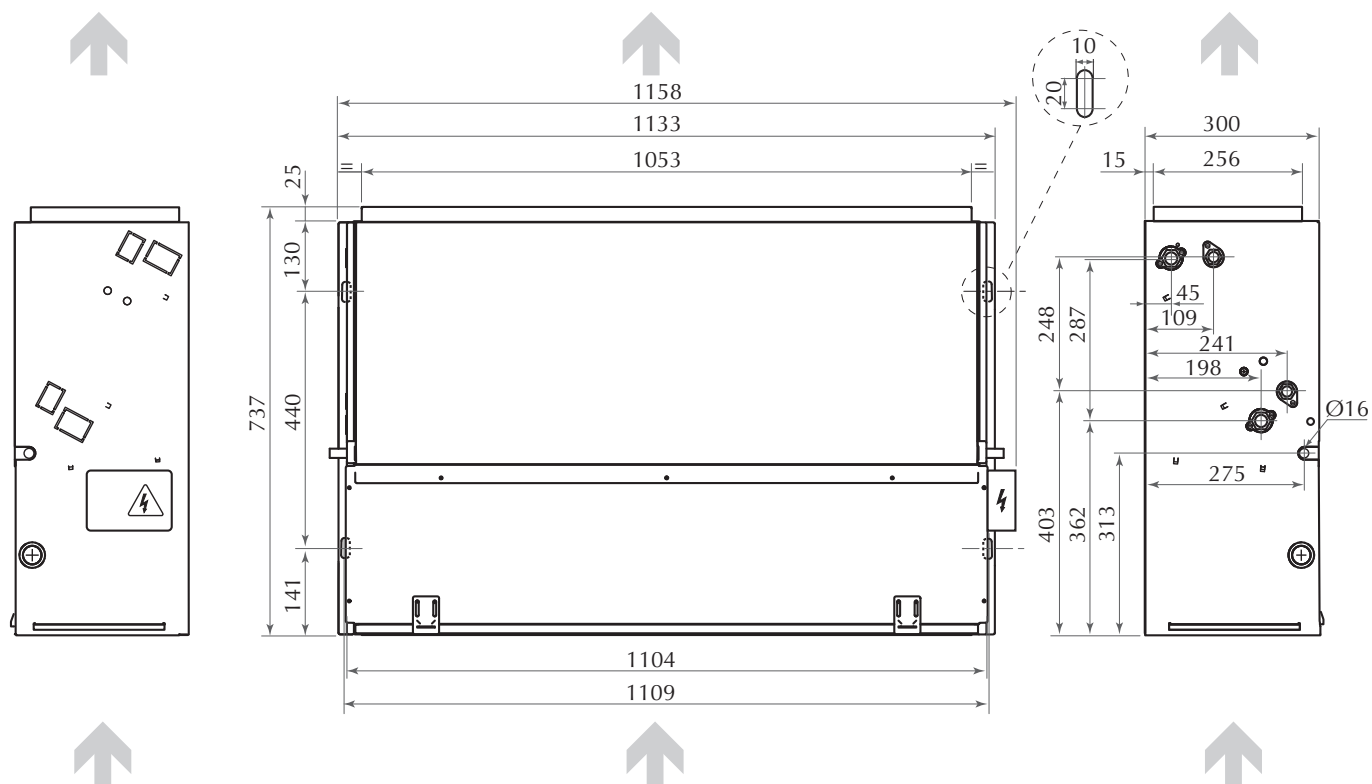
- Inlet air temperature D.B. = 20°C
- Inlet air temperature W.B. = 15°C
- Water inlet temperature = 50°C
- Water flow rate as in the cooling test

Heating 70°C (Eurovent):

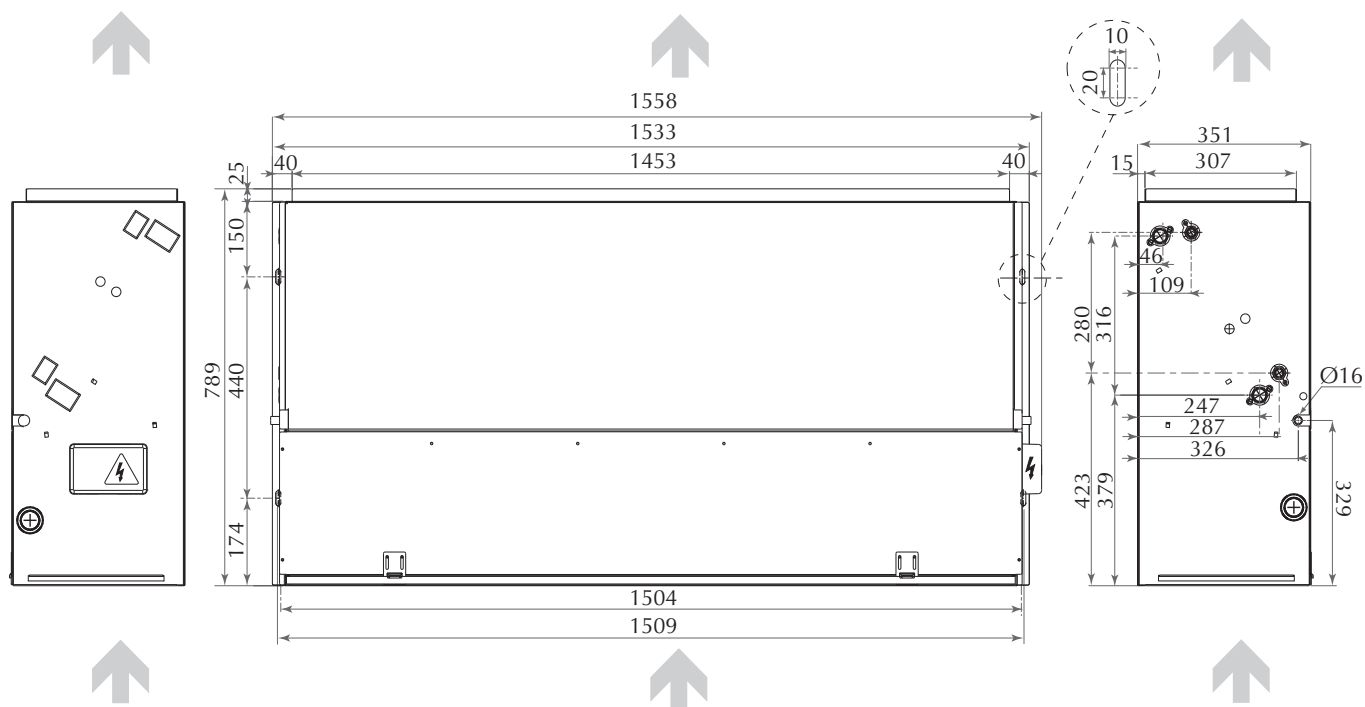
- Inlet air temperature D.B. = 20°C
- Inlet air temperature W.B. = 15°C
- Water inlet temperature = 70°C
- Outlet water temperature = 60°C
- Water flow rate depending on the Dtw constant

Dimensional data (mm)

VED: 430 - 432 - 440 - 441 - 530 - 532 - 540 - 541



VED: 630 - 632 - 640 - 641 - 730 - 732 - 740 - 741



The technical data given on this documentation is not binding. Aermec S.p.A. reserves the right to apply at any time all the modifications deemed necessary for improving the product.

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italy
Tel. 0442633111 - Telefax 044293730
www.aermec.com