

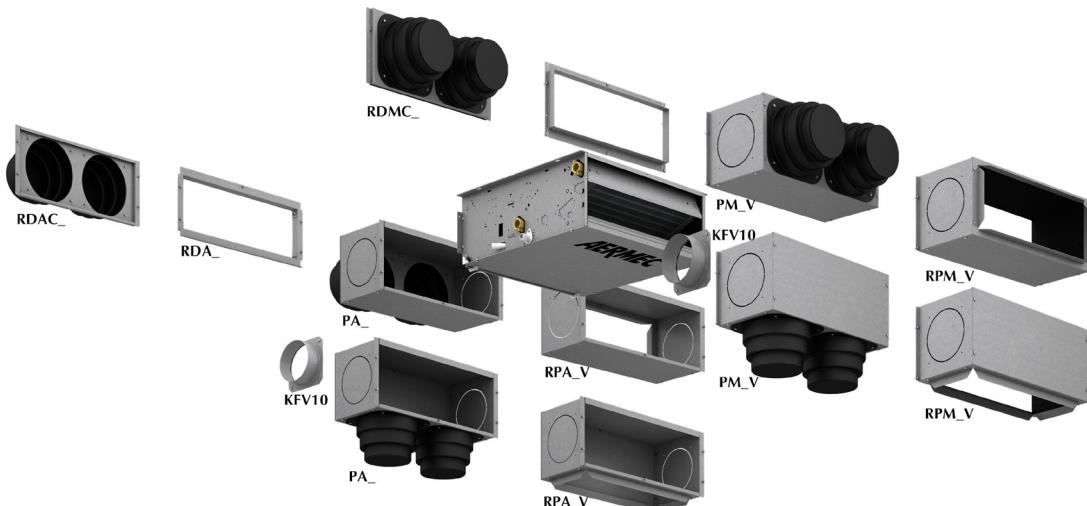
VED Fan coil unit For ducted installations with cooling capacity from 0.99 to 5.82kW



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Variable Multi Flow®

VMF



- **HORIZONTAL OR VERTICAL INSTALLATION**
- **VERSIONS FOR 2/4 PIPE SYSTEMS**
- **1 ROW HEATING ONLY COIL (ACCESSORY BV)**
- **LARGE RANGE OF AVAILABLE STATIC PRESSURE**
- **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
Code	Size	Main Coil	0

Example:

1 2 3	4	5	6
VED	0	3	0

(VED030 = unit Size 0, with 3 Row Main Coil)

Characteristics

- Ducted air conditioning terminal unit
- Horizontal and vertical installation
- Internal installation
- Available in 8 sizes
- 3 or 4 row coils for 2-pipe systems
- 3 row main coil and heating only coil accessory for 4-pipe systems
- Reversing of hydraulic connections side on site
- Low pressure drop heat exchanger
- 3-way valve accessory
- 2-way valve accessory for variable flow systems
- 6 and 7 speed fan assembly (3 selectable)
- Large range of available static pressure
- Centrifugal fans in anti-static plastic material. Their characteristics permit energy savings compared to conventional fans
- Fans with aerofoil profile designed to achieve high airflows and pressures whilst at the same time producing low noise
- Compatible with the VMF system
- Large range of controllers
- Large range of accessories to satisfy all installation requirements
- Compatible with many accessories already available on the FCX range
- Discharge connection supplied loose
- Air filter Class G3, for easy removal and cleaning
- Internal insulation in Class 1 fire retardant material
- Protective rating IP20
- Fan housing in plastic material removable for easy and effective cleaning
- Ease of installation and maintenance
- Full compliance with safety standards.

Accessories

DUCTING ACCESSORIES

Plenum in galvanised sheet steel and connections:

- **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.

Discharge and intake grilles:

- **GA:** Intake grille with fixed louvres.
- **GAF:** Intake grille with fixed louvres with filter.
- **GM:** Discharge grille with adjustable louvres.
- **SE:** External air damper with manual control.

INSTALLATION ACCESSORIES

- **AMP:** Hanging kit.
- **BC:** auxiliary condensate drain tray.
- **DSC4:** Condensate pump to overcome lifts.

Accessory Compatibility

Mod.VED	030	040	130	140	230	240	330	340
RDA000V	•	•						
RDA100V			•	•				
RDA200V					•	•		
RDA300V						•	•	
RPA000V ***	•	•						
RPA100V ***			•	•				
RPA200V ***				•	•			
RPA300V ***						•	•	
RDAC000V	•	•						
RDAC100V			•	•				
RDAC200V					•	•		
RDAC300V						•	•	
PA000V ***	•	•						
PA100V ***			•	•				
PA200V ***					•	•		
PA300V ***						•	•	
PM000V ***	•	•						
PM100V ***			•	•				
PM200V ***					•	•		
PM300V ***						•	•	
RPM000V ***	•	•						
RPM100V ***			•	•				
RPM200V ***					•	•		
RPM300V ***						•	•	
RDMC000V	•	•						
RDMC100V			•	•				
RDMC200V					•	•		
RDMC300V						•	•	
BV030	•							
BV130		•						
BV230			•					
BV162				•				
KFV10	•	•	•	•	•	•	•	•
VMF-EO	•	•	•	•	•	•	•	•
VMF-E1	•	•	•	•	•	•	•	•
VMF-SW	•	•	•	•	•	•	•	•
VMF-SW1	•	•	•	•	•	•	•	•
VMF-E4/E4D	•	•	•	•	•	•	•	•
VMF-E5N/E5B	•	•	•	•	•	•	•	•
FMT10	•	•	•	•	•	•	•	•
FMT21	•	•	•	•	•	•	•	•
TPF	•	•	•	•	•	•	•	•

* The valve kits VCF and the drain pan BC4 cannot be installed together on the same fan coil unit.

** The accessory DSC4 is not compatible with AMP and BC4 - BC6 - BC9.

*** All the Plenums (RPA_V; PA_V; RPM_V; PM_V) have a circular push-outs ($\varnothing=150\text{mm}$) on both sides, which can be removed and used with accessories.

- **ZX:** Feet for recessed installation.

HEATING ONLY COIL

- **BV:** 1 row heating only coil.

WATER VALVES

For main coil, 230V~50 Hz / 24V~50 Hz

- **VCF43 / 4324:** Kit composed of 3-way motorised valve with insulating casing, connections and insulated copper tubes.
- **VCFD3 / 324:** Kit composed of 2-way motorised valve with insulating casing, connections and insulated copper tubes.

For heating only coil, 230V~50 Hz / 24V~50 Hz

- **VCF45 / 4543:** Kit composed of 3-way motorised valve, with connections and insulated copper tubes.
- **VCFD4 / 424:** Kit composed of 2-way motorised valve, with connections and insulated copper tubes.

VCF3X4: Valve kit for 4 pipe systems and fan coil units with single coil and 2 connections.

- Kit composed of special 3 way motorised valve with insulating casing, connections and insulated copper tubes.
Version VCF3X4L for left hand connection fan coils.
Version VCF3X4R for right hand connection fan coils.
Power supply 230V ~ 50Hz.

CONTROL PANELS

The complete characteristics of the control panels are described in the dedicated files.

Some control panels require combination with other accessories; consult the relevant documentation.

ACCESSORIES TO COMBINE TO CONTROL PANELS

- **SIT 3 - 5:** Thermostat Interface Boards. Allows networking of fan coil units (10 max) controlled by a central panel (switch or thermostat).

SIT3: Controls the 3 speeds of the fan and must be installed on each fan coil unit on the network; receives controls from the switch or the SIT5 board.

SIT5: Thermostat interface board. Allows a network of VED units (3 max) controlled by a single panel PXAE.

- **SW3:** Water temperature sensor for control panel PXAE.
- **SWA:** Air and water temperature sensor for control panel FMT21.

VARIABLE MULTI FLOW SYSTEM

VMF System: The complete characteristics of the VMF system are described in the dedicated files.

Some VMF components require combination with other accessories; consult the relevant documentation.

Mod.VED	030	040	130	140	230	240	330	340
SWA	•	•	•	•	•	•	•	•
KTLP	•	•	•	•	•	•	•	•
PX	•	•	•	•	•	•	•	•
PX2 - PX2C6	•	•	•	•	•	•	•	•
PXAR	•	•	•	•	•	•	•	•
PXAE	•	•	•	•	•	•	•	•
WMT05	•	•	•	•	•	•	•	•
WMT06	•	•	•	•	•	•	•	•
WMT10	•	•	•	•	•	•	•	•
SW3	•	•	•	•	•	•	•	•
SIT3	•	•	•	•	•	•	•	•
SIT5	•	•	•	•	•	•	•	•
VCF43-4324 *	•	•	•	•	•	•	•	•
VCF45-4524 *	•							
VCFD3-324 *	•	•	•	•	•	•	•	•
VCFD4-424 *	•							
VCF3X4R	•	•	•	•	•	•	•	•
VCF3X4L	•	•	•	•	•	•	•	•
AMP	•	•	•	•	•	•	•	•
BC4 * / **	•	•	•	•	•	•	•	•
BC6 **	•	•	•	•	•	•	•	•
BC9 **	•	•	•	•	•	•	•	•
DSC4 **	•	•	•	•	•	•	•	•
GA22	•	•						
GA32			•	•				
GA42					•	•		
GA62							•	•
GAF22		•	•					
GAF32			•	•				
GAF42					•	•		
GAF62							•	•
GM22		•	•					
GM32			•	•				
GM42					•	•		
GM62							•	•
SE20X ****		•	•					
SE30X ****			•	•				
SE40X ****					•	•		
SE80X ****							•	•
ZX7	•	•	•	•	•	•	•	•
ZX8							•	•

All the Plenums (RPA_V; PA_V; RPM_V; PM_V) can have intake/discharge either straight or downwards (straight or downwards with reference to horizontal installation).

**** Accessories SE must be combined with the feet ZX.

Technical data

Mod.	VED	Vel.	030	030*	040	130	130*	140	230	230*	240	330	330*	340			
HEATING PERFORMANCE (2 PIPE CONFIGURATION)			BV030			BV130			BV230			BV162					
Heating capacity (70°C)	(1)	W	H	3688	-	3916	6289	-	6575	7160	-	7909	10507	-	10951		
	(1)	W	M	3374	-	3568	5833	-	6089	6500	-	7141	9343	-	10017		
	(1)	W	L	1820	-	2366	4397	-	4518	5350	-	5800	7813	-	8312		
Water flow rate	(1)	l/h	H	323	-	343	551	-	576	616	-	684	921	-	960		
	(1)	l/h	M	296	-	313	511	-	534	559	-	616	819	-	878		
	(1)	l/h	L	160	-	207	385	-	396	460	-	499	685	-	729		
Pressure drop	(1)	kPa	H	9	-	12	26	-	18	37	-	3	16	-	32		
	(1)	kPa	M	7	-	10	22	-	16	30	-	26	13	-	28		
	(1)	kPa	L	3	-	4	13	-	9	27	-	18	9	-	22		
Heating capacity (50°C)	(2)	W	H	2180	-	2340	3750	-	3940	4320	-	4750	6270	-	6550		
	(2)	W	M	1990	-	2130	3480	-	3650	3920	-	4290	5580	-	5980		
	(2)	W	L	1100	-	1410	2620	-	2710	3230	-	3450	4670	-	4970		
Water flow rate	(2)	l/h	H	279	-	327	516	-	566	588	-	691	860	-	922		
	(2)	l/h	M	250	-	296	480	-	525	538	-	624	760	-	824		
	(2)	l/h	L	170	-	193	358	-	390	445	-	499	633	-	685		
Pressure drop	(2)	kPa	H	8	-	12	27	-	19	35	-	31	16	-	21		
	(2)	kPa	M	7	-	10	23	-	16	29	-	26	13	-	17		
	(2)	kPa	L	3	-	5	13	-	9	20	-	13	9	-	13		
HEATING PERFORMANCE (4 PIPE CONFIGURATION - with additional heat exchanger)																	
Heating capacity (70°C)	(3)	W	H	-	2220	-	-	3780	-	-	4493	-	-	5888	-		
	(3)	W	M	-	2080	-	-	3596	-	-	4171	-	-	5499	-		
	(3)	W	L	-	1590	-	-	2946	-	-	3675	-	-	4896	-		
Water flow rate	(3)	l/h	H	-	196	-	-	331	-	-	394	-	-	515	-		
	(3)	l/h	M	-	183	-	-	315	-	-	366	-	-	482	-		
	(3)	l/h	L	-	140	-	-	258	-	-	322	-	-	429	-		
Pressure drop	(3)	kPa	H	-	8	-	-	28	-	-	16	-	-	26	-		
	(3)	kPa	M	-	7	-	-	25	-	-	14	-	-	23	-		
	(3)	kPa	L	-	5	-	-	17	-	-	11	-	-	19	-		
COOLING PERFORMANCE (2 and 4 PIPE CONFIGURATIONS)																	
Total cooling capacity	(4)	W	H	1624	1592	1900	2997	2931	3290	3420	3380	4020	5000	4946	5360		
	(4)	W	M	1454	1416	1720	2790	2727	3050	3130	3080	3630	4420	4380	4790		
	(4)	W	L	990	984	1120	2080	2029	2270	2590	2500	2900	3680	3600	3980		
Sensible cooling capacity	(4)	W	H	1242	1218	1350	2090	2169	2370	2700	2600	3015	3738	3670	3990		
	(4)	W	M	1116	1094	1230	1940	1900	2190	2440	2350	2718	3337,5	3280	3570		
	(4)	W	L	750	745	810	1440	1400	1610	2000	1900	2200	2800	2720	2950		
Water flow rate	(4)	l/h	H	279	274	327	515	504	566	588	581	691	860	851	922		
	(4)	l/h	M	250	244	296	480	469	525	538	530	624	760	753	824		
	(4)	l/h	L	170	169	193	358	349	390	445	430	499	633	619	685		
Pressure drop	(4)	kPa	H	9	9	14	31	31	23	44	42	37	18	18	26		
	(4)	kPa	M	7	7	12	27	27	20	36	35	31	14	14	21		
	(4)	kPa	L	3	3	5	15	15	11	25	23	16	10	9	16		
Air flow rate	m³/h			285	280	277	433	423	420	590	582	570	805	790	775		
	m³/h			256	250	249	397	388	386	524	513	509	704	695	685		
	m³/h			161	160	160	287	280	280	417	412	406	572	568	563		
Fans	type			centrifugal													
	n°			1	1	1	2	2	2	2	2	3	3	3	3		
	Pa			61	61	61	60	60	60	64	64	63	66	66	64		
High static pressure	Pa			50	50	50	50	50	50	50	50	50	50	50	50		
	Pa			21	21	21	26	26	26	32	32	32	33	33	34		
	W			59	59	58	76	76	75	93	93	92	104	104	103		
Absorbed power	W			38	38	38	53	53	52	57	57	57	75	75	74		
	W			23	23	23	34	34	34	43	43	43	63	63	63		
	Max. input current			(A)	0,37	0,37	0,37	0,41	0,41	0,41	0,58	0,58	0,66	0,66	0,66		
Sound power level (inlet+radiator)	(5) dB(A)			H	54	54	54	55	55	57	57	57	58	58	58		
	(5) dB(A)			M	52	52	52	53	53	54	54	54	55	55	55		
	(5) dB(A)			L	44	44	44	47	47	49	49	49	38	38	38		
Sound power level (outlet)	(5) dB(A)			H	50	50	50	50	50	42	42	42	54	54	54		
	(5) dB(A)			M	48	48	48	48	48	49	49	49	51	51	51		
	(5) dB(A)			L	40	40	40	42	42	44	44	44	34	34	34		
Water content																	
Water content (additional heat exchanger)																	
Coil connections																	
Coil connections (additional heat exchanger)																	
Speed connected	H			V6	V6	V6	V6	V6	V6	V7	V6	V7	V7	V7			
	M			V4	V4	V4	V4	V4	V4	V3	V3	V3	V3	V3			
	L			V1	V1	V1	V1	V1	V1	V1	V1	V1	V1	V1			
Power supply																	
230V/1/50Hz																	

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

Heating mode

2 pipes system configuration

(1) Room air temperature 20°C b.s.; Inlet water temperature 70°C; ΔT water 10°C

2 pipes system configuration (EUROVENT)

(2) Room air temperature 20°C b.s.; Inlet water temperature 50°C; Water flow rate as in cooling mode

* 4 pipes system configuration (with additional heat exchanger) (BV)

(3) Room air temperature 20°C b.s.; Inlet water temperature 70°C; ΔT water 10°C

Cooling mode (EUROVENT)

(4) Room air temperature 27°C b.s./19°C b.u.; Inlet water temperature 7°C; ΔT water 5°C

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

Note: The speed of associates may differ from the standard factory configuration, for more information refer to the program selection and the technical documentation available on the website www.aermec.com

VED30÷240

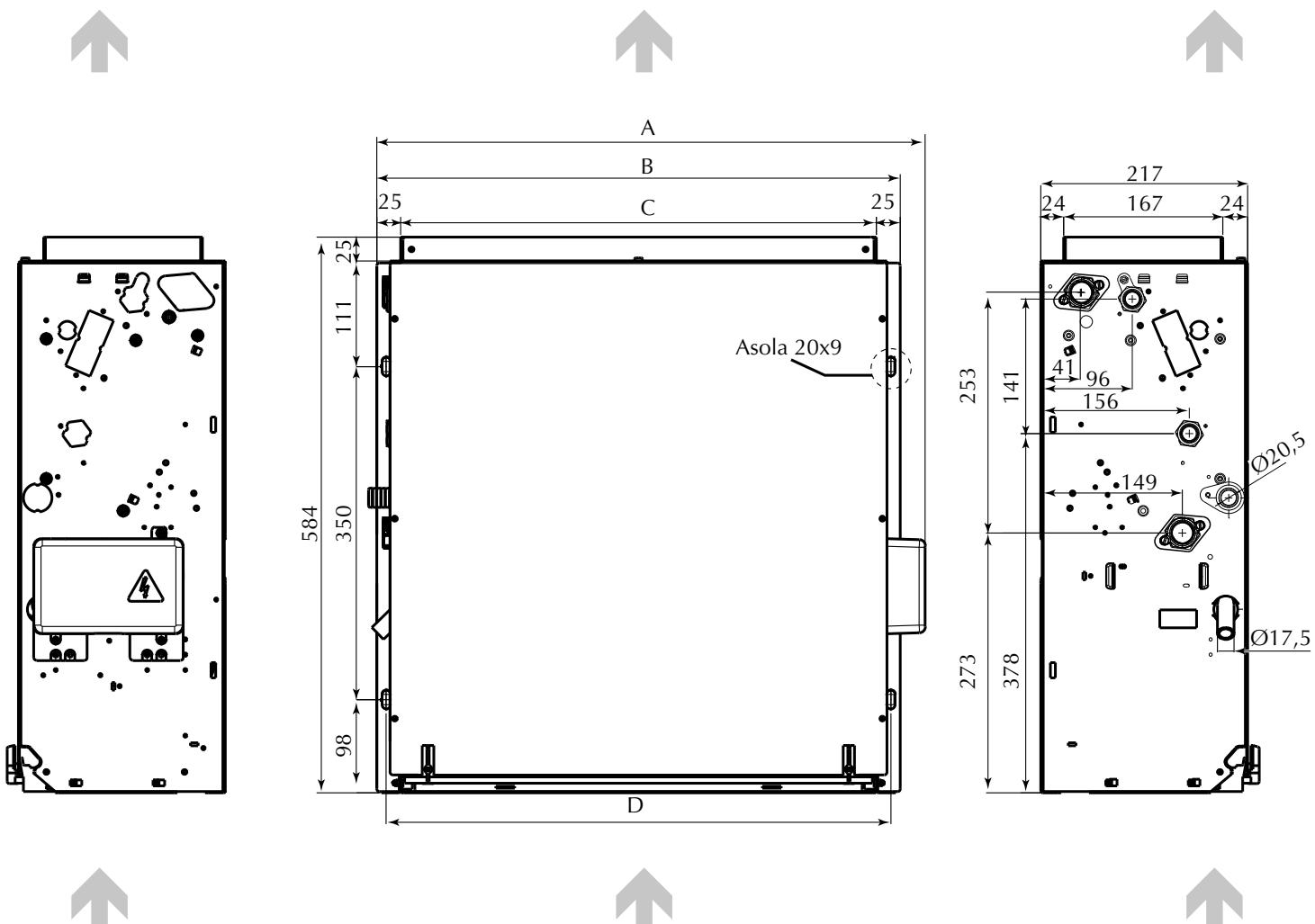
V1	V2	V3	V4	V5	V6	Speed
L6	L5	L4	L3	L2	L1	motor connected

V1	V2	V3	V4	V5	V6	V7
L7	L6	L5	L4	L3	L2	L1

VED330÷340

Dimensions (mm)

VED: 030 - 040 - 130 - 140 - 230 - 240 - 330 - 340



VED	030	040	130	140	230	240	330	340
A mm	576	576	807	807	1027	1027	1148	1148
B mm	550	550	781	781	1001	1001	1122	1122
C mm	500	500	731	731	951	951	1072	1072
D mm	530	530	761	761	981	981	1102	1102
Net weight kg	20	21	23	24	29,5	32	32,5	34

The technical data shown in this documentation is not binding.
Aermec S.p.A. reserves the right to make all modification deemed necessary for improving the product at any time.

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