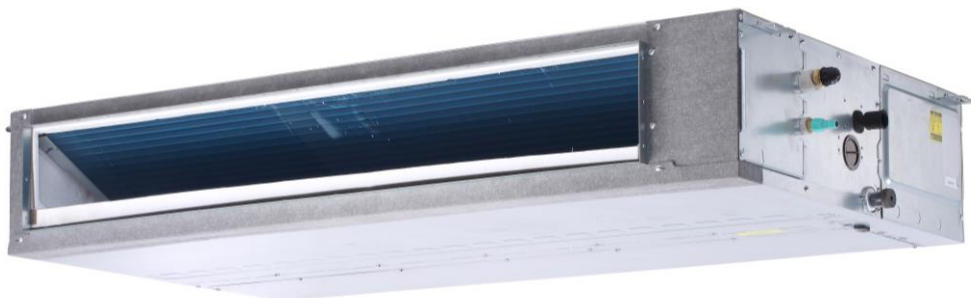


VE (LP-MP) Series

Static Ducted VRF Indoor Unit

Technical Manual

220~240V/1/50-60Hz



Medium Static Pressure Duct

1 Specifications	4
2 Dimensions.....	7
3 Unit Placement.....	9
4 Piping Diagram	10
5 Wiring Diagram	11
6 Capacity Tables.....	13
7 Electrical Characteristics	14
8 Sound Levels	15
9 Fan Performance	18

OMEGA Indoor Units

1 Specifications

Table 1.1: VELP006(008,010,012)TOA specifications

Model			VELP006T0A-DCV015	VELP008T0A-DCV022	VELP010T0A-DCV028	VELP012T0A-DCV036
Power supply			1-phase, 220-240V, 50/60Hz			
Cooling ¹	Capacity	kW	1.5	2.2	2.8	3.6
		kBtu/h	5.1	7.5	9.6	12.3
	Power input	W	33	36	40	50
Heating ²	Capacity	kW	1.8	2.5	3.2	4
		kBtu/h	6.1	8.5	10.9	13.7
	Power input	W	33	36	40	50
Fan motor type			DC			
Indoor coil	Number of rows		2	2	2	2
	Tube pitch	mm	18×10.72			
	Fin spacing and type	mm	1.35 Hydrophilic aluminum			
	Tube OD and type	mm	Φ5 Inner-groove			
	Dimensions (L×H×W)	mm	400×21.44×360			
	Number of circuits		5	5	5	5
Air flow rate ³		m ³ /h	470/438/407/375/343/312/280	500/467/433/400/367/333/300	540/503/467/430/393/357/320	575/535/495/455/415/375/335
External static pressure ⁴		Pa	30 (10-160)			
Sound pressure level ⁵		dB(A)	26.5/26/25/24/23/22.5/22	26.5/26/25/24/23/22.5/22	26.5/26/25/24/23/22.5/22	29/28/27/26/25/23/22
Sound power level		dB(A)	46/44.5/43/41.5/40/38.5/37	47/45.5/44/42.5/41/39.5/38	47/45.5/44/42.5/41/39.5/38	50/48.5/47/45/43/41/39
Unit	Net dimensions ⁶ (W×H×D)		600×245×750			
	Packed dimensions (W×H×D)		765×305×890			
	Net/Gross weight		40.79(18.5)/46.3(21)			
Refrigerant type			R410A/R32			
Throttle type			Electronic expansion valve			
Design pressure (H/L)		MPa	4.4/2.6			
Pipe connections	Liquid/Gas pipe		Φ6.35/Φ12.7			
	Drain pipe		OD Φ25			

Notes:

- Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
- Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
- Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.
- Stable operation external static pressure range. (Note: setting external static pressure outside the unit's optimal static pressure range may lead to higher noise levels and lower airflow rate. For the optimal external static pressure range refer to the unit's installation manual.)
- Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.5m below the unit in an anechoic chamber.
- The dimension is only the body size, excluding the size of the installation lug, connecting copper pipe, etc. For detailed dimensions, please refer to the installation manual
- All specifications are measured at standard external static pressure
- G1 air filter is standard for Medium Static Pressure Duct.

Table 1.2: VELP015(019)TOA; VEMPO24(027)TOA specifications

Model			VELP015T0A-DCV045	VELP019T0A-DCV056	VEMPO24T0A-DCV071	VEMPO27T0A-DCV080
Power supply			1-phase, 220-240V, 50/60Hz			
Cooling ¹	Capacity	kW	4.5	5.6	7.1	8
		kBtu/h	15.4	19.1	24.2	27.3
	Power input	W	70	70	96	102
Heating ²	Capacity	kW	5	6.3	8	9
		kBtu/h	17.1	21.5	27.3	30.7
	Power input	W	70	70	96	102
Fan motor type			DC			
Indoor coil	Number of rows		3	2	3	2
	Tube pitch	mm	18×10.72			
	Fin spacing and type	mm	1.35 Hydrophilic aluminum			
	Tube OD and type	mm	Φ5 Inner-groove			
	Dimensions (L×H×W)	mm	400×32.16×360	600×21.44×360	600×32.16×360	850×21.44×360
	Number of circuits		5	5	10	10
Air flow rate ³		m ³ /h	665/623/580/538/4 95/453/410	970/904/838/773 /707/641/575	1150/1068/986/9 04/822/740/660	1355/1263/1172/1 080/988/897/805
External static pressure ⁴		Pa	30 (10-160)			40 (10-160)
Sound pressure level ⁵		dB(A)	33/32/29.5/28/26.5 /25/24	33/32/31/30/27.5 /26/25	35/33.5/32/30.5/ 29/27.5/26	37/35.5/34/32.5/31 /29.5/28
Sound power level		dB(A)	53/51/49/47/45/43 /41	55/53/51/49/47/4 5/43	58/56/54/51.5/48 /47/45	59/57/55/53/51/49 /47
Unit	Net dimensions ⁶ (W×H×D)		in/mm 23 1/21x 9 5/8x 35 (600×245×750)	31 1/2x 9 5/8x 29 1/2(800×245×750)		41 3/8x 9 5/8x 29 1/2 (1050×245×750)
	Packed dimensions (W×H×D)		in/mm 30 1/8x 12x 35 (765×305×890)	38x 12x 35 (965×305×890)		47 7/8x 12x 35 (1215×305×890)
	Net/Gross weight		lbs/kg	42.99(19.5)/48.5(22)	52.91(24)/60.63(27.5)	55.12(25)/62.83(28.5)
Refrigerant type			R410A/R32			
Throttle type			Electronic expansion valve			
Design pressure (H/L)		MPa	4.4/2.6			
Pipe connections	Liquid/Gas pipe		mm		Φ6.35/Φ12.7	
	Drain pipe		mm		Φ9.52/Φ15.9	
			OD Φ25			

Notes:

- Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
- Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
- Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.
- Stable operation external static pressure range. (Note: setting external static pressure outside the unit's optimal static pressure range may lead to higher noise levels and lower airflow rate. For the optimal external static pressure range refer to the unit's installation manual.)
- Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.5m below the unit in an anechoic chamber.
- The dimension is only the body size, excluding the size of the installation lug, connecting copper pipe, etc. For detailed dimensions, please refer to the installation manual.
- All specifications are measured at standard external static pressure
- G1 air filter is standard for Medium Static Pressure Duct.

OMEGA Indoor Units

Table 1.3: VEMP031(038,048,060)TOA specifications

Model			VEMP031TOA-DCV090	VEMP038TOA-DCV112	VEMP048TOA-DCV140	VEMP060TOA-DCV160
Power supply			1-phase, 220-240V, 50/60Hz			
Cooling ¹	Capacity	kW	9	11.2	14	16
		kBtu/h	30.7	38.2	47.8	54.6
	Power input	W	110	138	172	210
Heating ²	Capacity	kW	10	12.5	16	18
		kBtu/h	34.1	42.7	54.6	61.4
	Power input	W	110	138	172	210
Fan motor type			DC			
Indoor coil	Number of rows		3	2	3	3
	Tube pitch	mm	18×10.72			
	Fin spacing and type	mm	1.35 Hydrophilic aluminum			
	Tube OD and type	mm	Φ5 Inner-groove			
	Dimensions (L×H×W)	mm	850×32.16×360	1200×21.44×360	1200×32.16×360	1200×32.16×360
	Number of circuits		10			
Air flow rate ³	m ³ /h	1420/1323/1225/ 1128/1030/933/8 35	1950/1817/1683/ 1550/1417/1283/ 1150	2105/1971/1837/ 1703/1568/1434/ 1300	2350/2160/2015/ 1871/1776/1533/ 1400	
External static pressure ⁴	Pa	40 (10-160)			50 (10-160)	
Sound pressure level ⁵	dB(A)	37/35.5/34/32.5/ 31/29.5/28	39/37/35/33/31/2 9/28	40/38/36/34/32/3 0/29	42/40/38/36/34/3 3/31	
Sound power level	dB(A)	59/57/55/53/50.5 /48/46	60/58/56.5/55/53. 5/52/50	64/62/61.5/59.5/5 7.5/55/53	65/63/61/58.5/56. 5/54/52	
Unit	Net dimensions ⁶ (W×H×D)	in/mm	41 3/8x 9 5/8x 29 1/2 (1050×245×750)	55 1/8x 9 5/8x 29 1/2 (1400×245×750)		
	Packed dimensions (W×H×D)	in/mm	47 7/8x 12x 35 (1215×305×890)	61 5/8x 12x 35 (1565×305×890)		
	Net/Gross weight	lbs/kg	68.34(31)/76.06(34.5)	81.57(37)/91.49(41.5)	85.98(39)/95.9(43.5)	85.98(39)/95.9(43.5)
Refrigerant type			R410A/R32			
Throttle type			Electronic expansion valve			
Design pressure (H/L)		MPa	4.4/2.6			
Pipe	Liquid/Gas pipe	mm	Φ9.52/Φ15.9			
connections	Drain pipe	mm	OD Φ25			

Notes:

- Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference
- Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference. k
- Fan motor speed and air flow rate are from the highest speed to the lowest speed, total 7 rates for each model.
- Stable operation external static pressure range. (Note: setting external static pressure outside the unit's optimal static pressure range may lead to higher noise levels and lower airflow rate. For the optimal external static pressure range refer to the unit's installation manual.)
- Sound pressure level is from highest level to lowest level, total 7 levels for each model. Sound pressure level is measured 1.5m below the unit in an anechoic chamber.
- The dimension is only the body size, excluding the size of the installation lug, connecting copper pipe, etc. For detailed dimensions, please refer to the installation manual.
- All specifications are measured at standard external static pressure
- G1 air filter is standard for Medium Static Pressure Duct.

2 Dimensions

2.1 Unit Dimensions

Figure 2.1: VELP006(008,010,012,015,019) VEMP027(031,038,048,060) External dimension, air outlet size, and size of fresh air outlet (unit: mm)

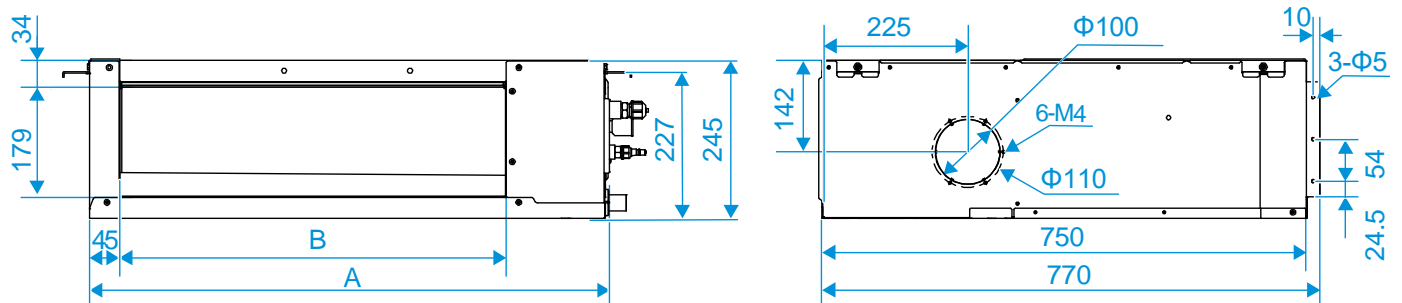


Figure 2.2: Size of return air inlet (rear return air mode): (unit: mm)

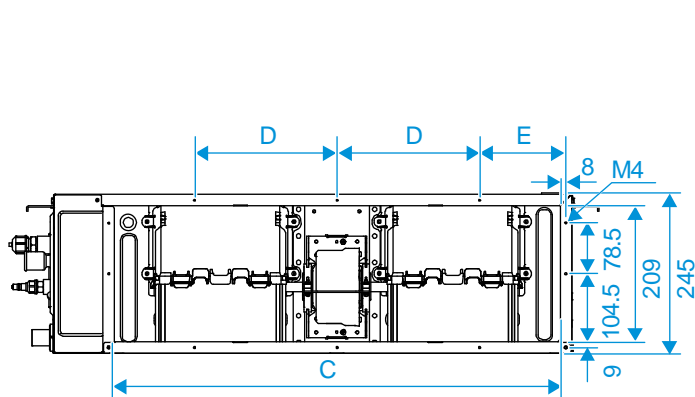


Figure 2.3: Piping and water pipe size:(unit: mm)

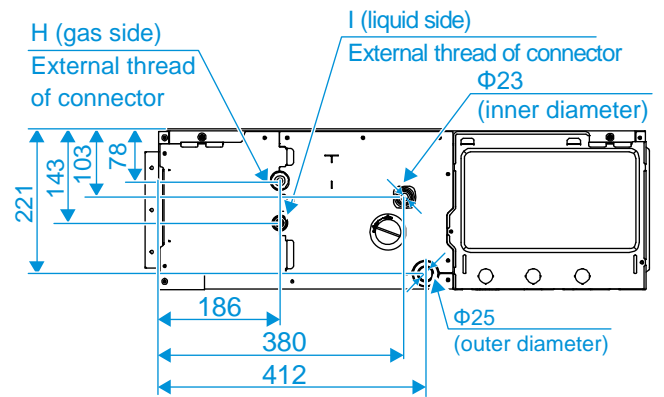
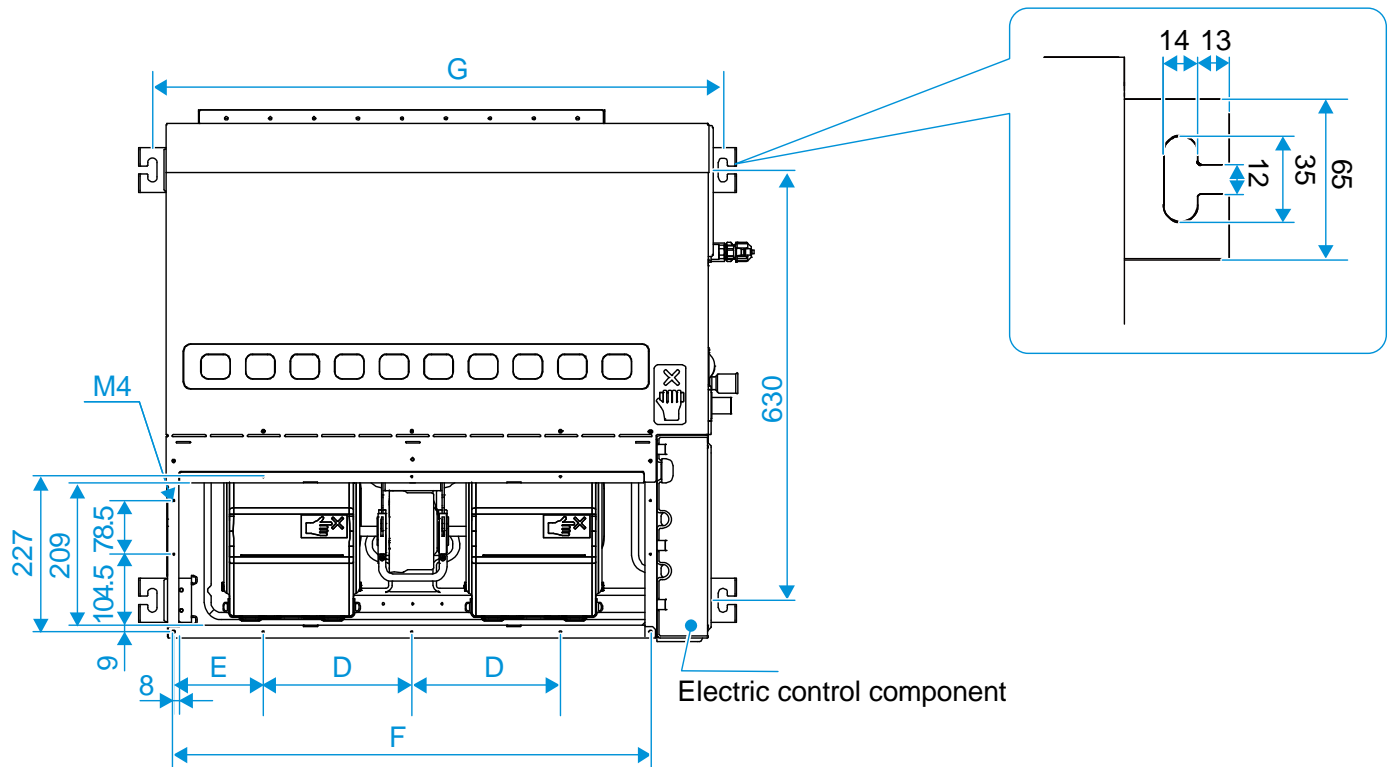


Figure 2.4: Size of return air inlet (bottom return air mode) and distance between lifting lugs:(unit: mm)



Notes: meaning of letters refer to Table 2.1

OMEGA Indoor Units

Table 2.1: VELP006(008,010,012,015,019) VEMP027(031,038,048,060) Letter-Size Correspondence Table: (unit: mm)

Capacity (kW)	A	B	C	D	E	F	G	H	I
VELP006(008,010,012,015)	600	400	490	87.5	165	506	645	3/4-16 UNF	7/16-20 UNF
VELP019	800	600	690	220	134	706	845		
VEMP024	800	600	690	220	134	706	845		
VEMP027(031,038)	1050	850	940	220	146	956	1095	7/8-14 UNF	5/8-18 UNF
VEMP048(060)	1400	1200	1290	220	213	1306	1445		

3 Unit Placement

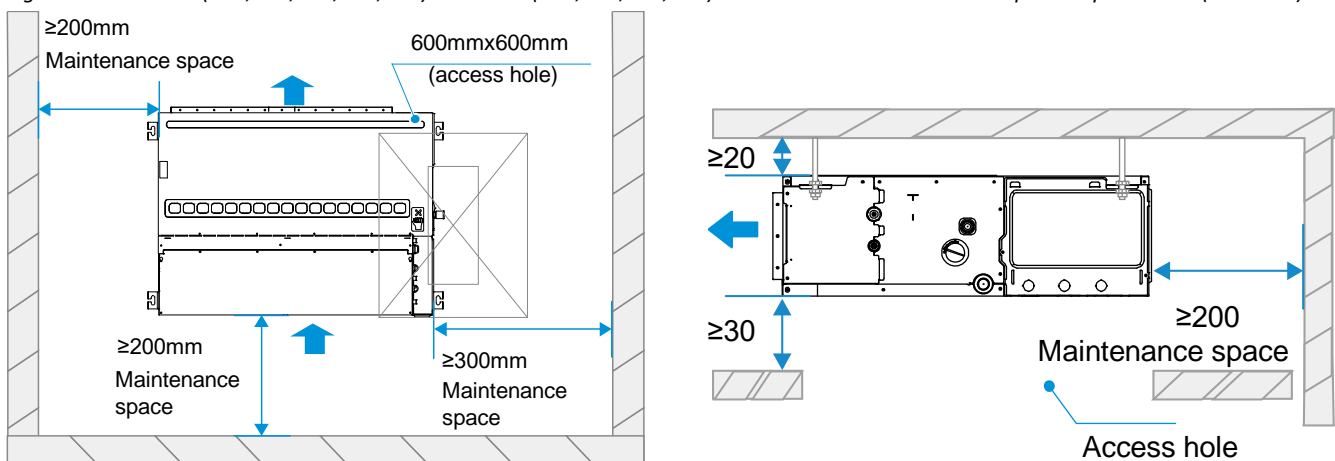
3.1 Placement Considerations

Unit placement should take account of the following considerations:

- Units should not be installed in the following locations:
 - A place filled with mineral oil, fumes or mist, like a kitchen.
 - A place where there are corrosive gases, such as acid or alkaline gases..
 - A place exposed to combustible gases and using volatile combustible gases such as diluent or gasoline.
 - A place where there is equipment emitting electromagnetic radiation.
 - A place where there is a high salt content in the air like a coast.
 - Do not use the air conditioner in an environment where an explosion may occur.
 - Places like in vehicles or cabin rooms.
 - Factories with major voltage fluctuations in the power supplies.
 - Other special environmental conditions.
- Units should be installed in positions where:
 - Ensure that the airflow in and out of the IDU is reasonably organized to form an air circulation in the room.
 - Ensure IDU maintenance space.
 - The nearer the drainage pipe and copper pipe are to the ODU, the lower the pipe cost is.
 - Prevent the air conditioner from blowing directly to the human body.
 - The closer the wiring to the power cabinet, the lower the wiring cost is.
 - Keep the air-conditioning return air away from the setting sun of the room.
 - Be careful not to interfere with the light tank, fire pipe, gas pipe and other facilities.
 - The IDU should not be lifted in the places like load-bearing beam and columns that affect the structural safety of the house.
 - The wired controller and the IDU should be in the same installation space; otherwise, the sampling point setting of the wired controller need to be changed.

3.2 Space Requirements

Figure 3.1: VELP006(008,010,012,015,019) VEMPO27(031,038,048,060) Medium Static Pressure Duct space requirements (unit: mm)



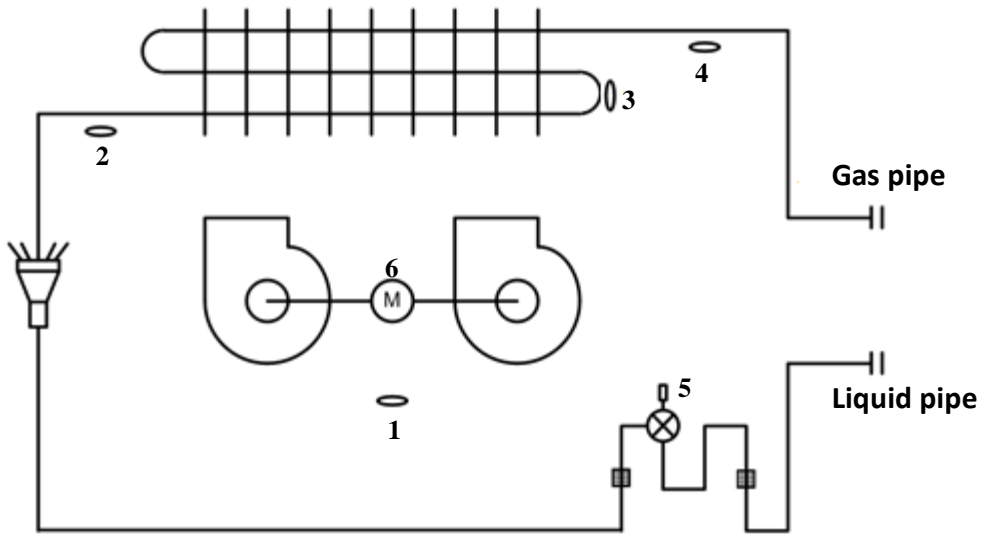
Notes:

1. The centerline of the maintenance hole should be in the same position as the centerline of the indoor unit.

OMEGA Indoor Units

4 Piping Diagram

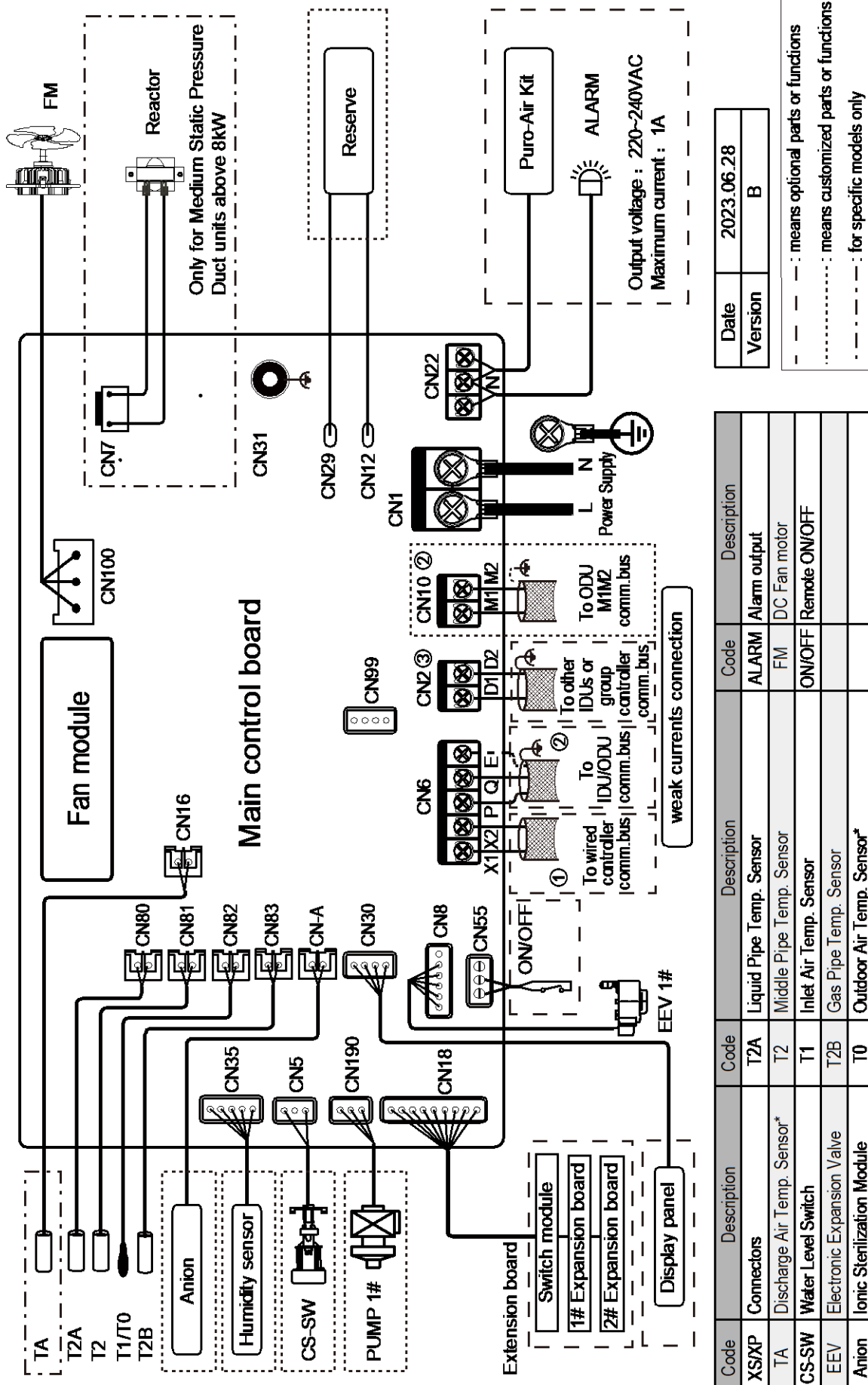
Figure 4.1: VELP006(008,010,012,015,019) VEMPO27(031,038,048,060) Medium Static Pressure Duct piping diagram



Legend	Code	Description
1	T1	Inlet Air Temp. Sensor
2	T2A	Liquid Pipe Temp. Sensor
3	T2	Middle Pipe Temp. Sensor
4	T2B	Gas Pipe Temp. Sensor
5	EEV	Electronic Expansion Valve
6	FAN	DC Fan motor

5 Wiring Diagram

Figure 5.1: VELP006(008,010,012,015,019) VEMPO27(031,038,048,060) Medium Static Pressure Duct wiring diagram



Notes for installers and service engineers

Caution

- All installation, servicing and maintenance must be carried out by competent and suitably qualified, certified and accredited professionals and in accordance with all applicable legislation.
- Units should be grounded in accordance with all applicable legislation. Metal and other conductive components should be insulated in accordance with all applicable legislation.
- Power supply wiring should be securely fastened at the power supply terminals – loose power supply wiring would represent a fire risk.
- After installation, servicing or maintenance, the electric control box cover should be closed. Failing to close the electric control box cover risks fire or electric shock.
- The dotted lines indicate the field wiring or optional function.
- PQ and M1M2 communication ports both are used for indoor and outdoor communication, and only one of them can be used at a time. Meanwhile, be sure to connect the same communication ports (PQ to PQ; M1M2 to M1M2) in case of damage of the main control board.
- D1D2 communication ports are used for group control communication. When connecting the group controller, the D1D2 port of the indoor units that are to be group controlled must be connected in daisy chain, and the group controller must be connected to the X1X2 port of one of the indoor units in the group control, and set to group control mode. In addition, D1D2 communication ports can also be connected to the central controller.

6 Capacity Tables

6.1 Cooling Capacity Table

Table 6.1: VELP006(008,010,012,015,019) VEMPO24(027,031,038,048,060) Medium Static Pressure Duct cooling capacity

Model	Indoor air temperature (°C WB/DB)													
	14/20		16/23		18/26		19/27		20/28		22/30		24/32	
	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
VELP006T0A-DCV015	1.4	1.3	1.5	1.4	1.5	1.3	1.5	1.3	1.6	1.3	1.6	1.2	1.6	1.1
VELP008T0A-DCV022	2.0	1.9	2.1	1.9	2.2	1.9	2.2	1.8	2.3	1.8	2.3	1.7	2.4	1.7
VELP010T0A-DCV028	2.5	2.3	2.7	2.4	2.8	2.4	2.8	2.3	2.9	2.3	2.9	2.2	3.0	2.1
VELP012T0A-DCV036	3.2	3.0	3.4	3.1	3.6	3.1	3.6	3.0	3.7	3.0	3.8	2.8	3.9	2.7
VELP015T0A-DCV045	4.0	3.7	4.3	3.8	4.5	3.9	4.5	3.7	4.6	3.6	4.7	3.5	4.8	3.3
VELP019T0A-DCV056	5.0	4.6	5.3	4.7	5.6	4.8	5.6	4.6	5.7	4.5	5.8	4.3	6.0	4.1
VEMPO24T0A-DCV071	6.3	5.8	6.7	5.9	7.0	6.0	7.1	5.8	7.2	5.7	7.4	5.4	7.6	5.2
VEMPO27T0A-DCV080	7.1	6.3	7.6	6.5	7.9	6.6	8.0	6.5	8.1	6.3	8.3	6.0	8.5	5.8
VEMPO31T0A-DCV090	8.0	7.1	8.5	7.3	8.9	7.4	9.0	7.3	9.1	7.1	9.4	6.8	9.6	6.5
VEMPO38T0A-DCV112	9.9	8.8	10.6	9.1	11.1	9.3	11.2	9.1	11.3	8.8	11.6	8.4	11.9	8.1
VEMPO48T0A-DCV140	12.4	11.1	13.2	11.4	13.8	11.5	14.0	11.3	14.2	11.0	14.5	10.5	14.9	10.1
VEMPO60T0A-DCV160	14.2	12.7	15.1	13.0	15.8	13.2	16.0	12.9	16.2	12.6	16.6	12.0	17.0	11.5

Abbreviations:

TC: Total capacity (kW)

SC: Sensible capacity(kW)

Notes:

1.Shaded cells indicate rating condition.

6.2 Heating Capacity Table

Table 6.2: VELP006(008,010,012,015,019) VEMPO24(027,031,038,048,060) Medium Static Pressure Duct heating capacity

Model	Indoor air temperature (°C DB)					
	16	18	20	21	22	24
	SHC	SHC	SHC	SHC	SHC	SHC
VELP006T0A-DCV015	1.9	1.9	1.8	1.7	1.7	1.6
VELP008T0A-DCV022	2.7	2.7	2.5	2.4	2.4	2.2
VELP010T0A-DCV028	3.4	3.4	3.2	3.1	3.0	2.8
VELP012T0A-DCV036	4.2	4.2	4.0	3.8	3.8	3.5
VELP015T0A-DCV045	5.3	5.3	5.0	4.8	4.7	4.4
VELP019T0A-DCV056	6.7	6.6	6.3	6.1	5.9	5.5
VEMPO24T0A-DCV071	8.5	8.4	8.0	7.8	7.5	7.0
VEMPO27T0A-DCV080	9.5	9.5	9.0	8.7	8.5	7.8
VEMPO31T0A-DCV090	10.6	10.5	10.0	9.7	9.4	8.8
VEMPO38T0A-DCV112	13.3	13.1	12.5	12.1	11.8	10.9
VEMPO48T0A-DCV140	17.0	16.8	16.0	15.5	15.0	13.9
VEMPO60T0A-DCV160	19.1	18.9	18.0	17.5	16.9	15.7

Abbreviations:

SHC: Sensible Heat Capacity

Notes:

1.Shaded cells indicate rating condition.

OMEGA Indoor Units

7 Electrical Characteristics

Table 7.1: VELP006(008,010,012,015,019) VEMPO24(027,031,038,048,060) Medium Static Pressure Duct electrical characteristics

Model name	Power supply						Indoor Fan Motor	
	Hz	Volts	Min. volts	Max. volts	MCA	MFA	Rated power output (W)	FLA
VELP006T0A-DCV015	50/60	220-240	198	264	0.63	15	50	0.50
VELP008T0A-DCV022	50/60	220-240	198	264	0.63	15	50	0.50
VELP010T0A-DCV028	50/60	220-240	198	264	0.63	15	50	0.50
VELP012T0A-DCV036	50/60	220-240	198	264	0.80	15	50	0.64
VELP015T0A-DCV045	50/60	220-240	198	264	1.19	15	50	0.95
VELP019T0A-DCV056	50/60	220-240	198	264	1.19	15	60	0.95
VEMPO24T0A-DCV071	50/60	220-240	198	264	1.50	15	60	1.2
VEMPO27T0A-DCV080	50/60	220-240	198	264	1.50	15	240	1.2
VEMPO31T0A-DCV090	50/60	220-240	198	264	1.63	15	240	1.3
VEMPO38T0A-DCV112	50/60	220-240	198	264	2.29	15	240	1.8
VEMPO48T0A-DCV140	50/60	220-240	198	264	2.31	15	240	1.9
VEMPO60T0A-DCV160	50/60	220-240	198	264	2.76	15	240	2.2

Abbreviations:

MCA: Minimum Circuit Amps

MFA: Maximum Fuse Amps

FLA: Full Load Amps

8 Sound Levels

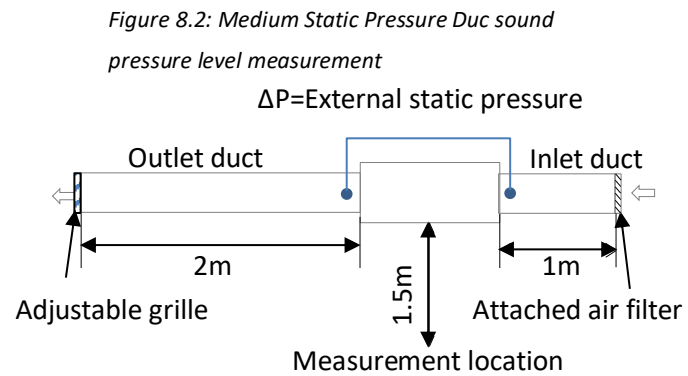
8.1 Overall

Table 8.1: VELP006(008,010,012,015,019) VEMPO24(027,031,038,048,060) Medium Static Pressure Duct sound pressure levels¹

Model name	Sound pressure levels dB						
	SSH	SH	H	M	L	SL	SSL
VELP006T0A-DCV015	26.5	26	25	24	23	22.5	22
VELP008T0A-DCV022	26.5	26	25	24	23	22.5	22
VELP010T0A-DCV028	26.5	26	25	24	23	22.5	22
VELP012T0A-DCV036	29	28	27	26	25	23	22
VELP015T0A-DCV045	33	32	29.5	28	26.5	25	24
VELP019T0A-DCV056	33	32	31	30	27.5	26	25
VEMPO24T0A-DCV071	35	33.5	32	30.5	29	27.5	26
VEMPO27T0A-DCV080	37	35.5	34	32.5	31	29.5	28
VEMPO31T0A-DCV090	37	35.5	34	32.5	31	29.5	28
VEMPO38T0A-DCV112	39	37	35	33	31	29	28
VEMPO48T0A-DCV140	40	38	36	34	32	30	29
VEMPO60T0A-DCV160	42	40	38	36	34	33	31

Notes:

- The sound pressure level is measured in an anechoic chamber at a distance of 1.5m below the unit, under the default static pressure setting at the factory. During on-site operation, the sound pressure level may be higher due to the influence of environmental noise



Connected to a top-discharge outdoor unit and measured in anechoic room. Adjusting the outlet grille to make the ΔP is equal to the rated static pressure, the data was recorded at 1.5m below the unit.

8.2 Octave Band Levels

Figure 8.3: VELP006T0A-DCV015 octave band levels

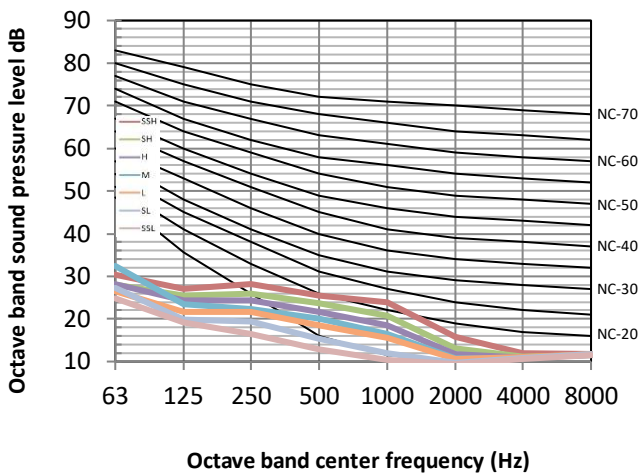
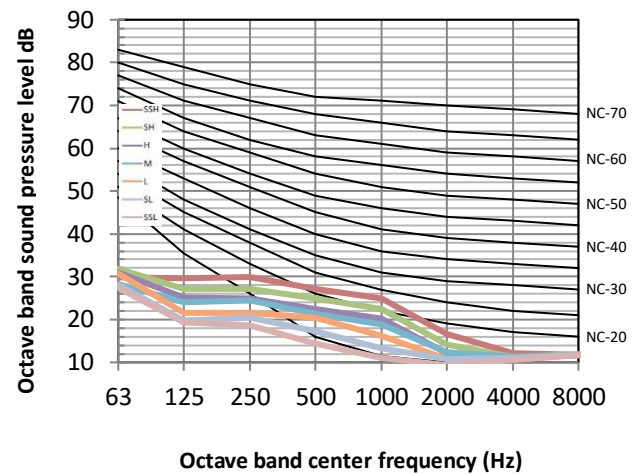


Figure 8.4: VELP008T0A-DCV022 octave band levels



OMEGA Indoor Units

Figure 8.5: VELP010T0A-DCV028 octave band levels

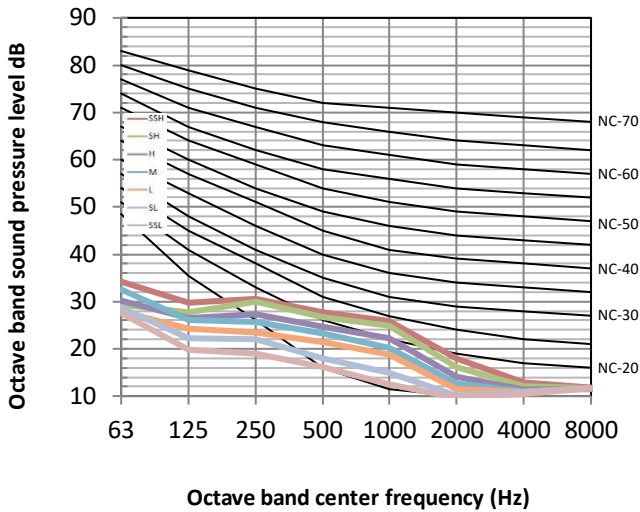


Figure 8.6: VELP012T0A-DCV036 octave band levels

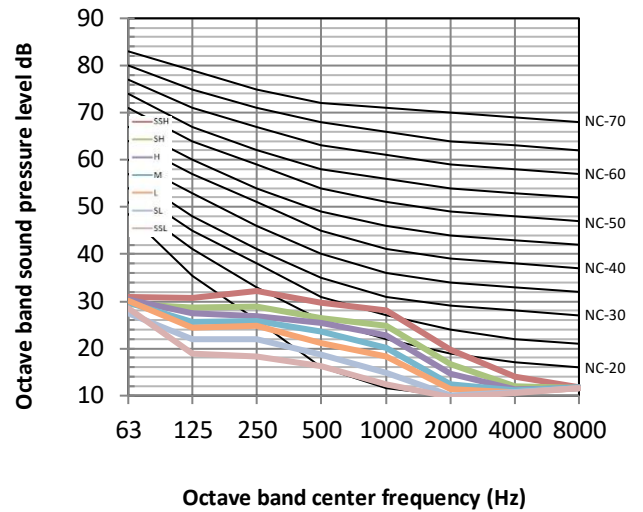


Figure 8.7: VELP015T0A-DCV045 octave band levels

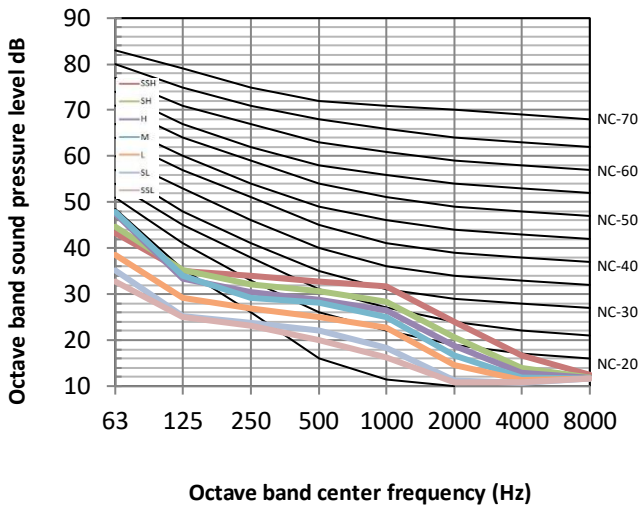


Figure 8.8: VELP019T0A-DCV056 octave band levels

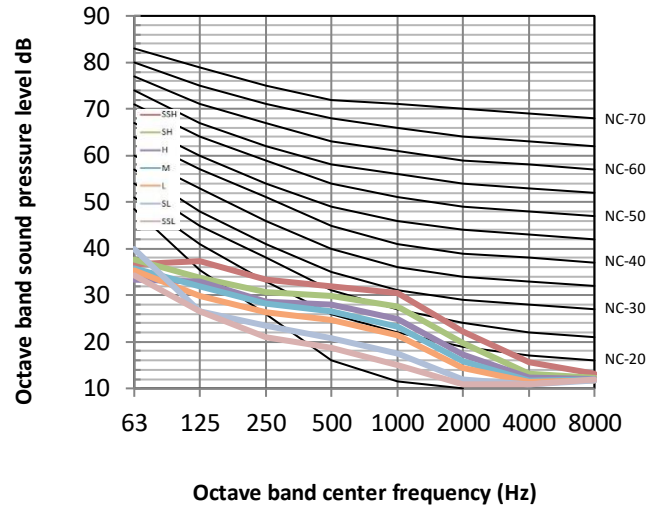


Figure 8.9: VEMP024T0A-DCV071 octave band levels

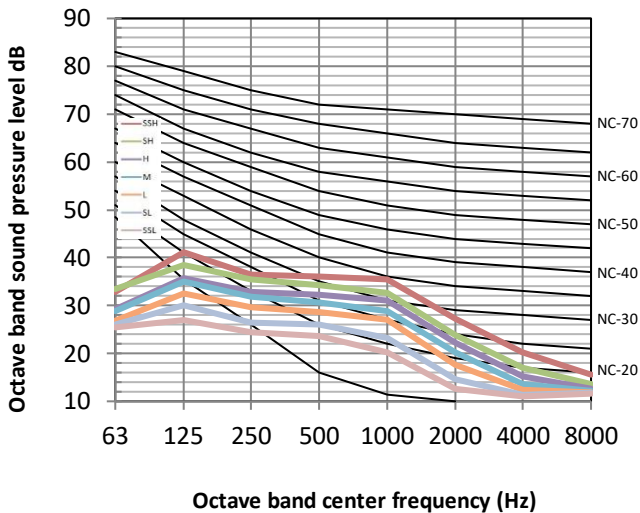


Figure 8.10: VEMP027T0A-DCV080 octave band levels

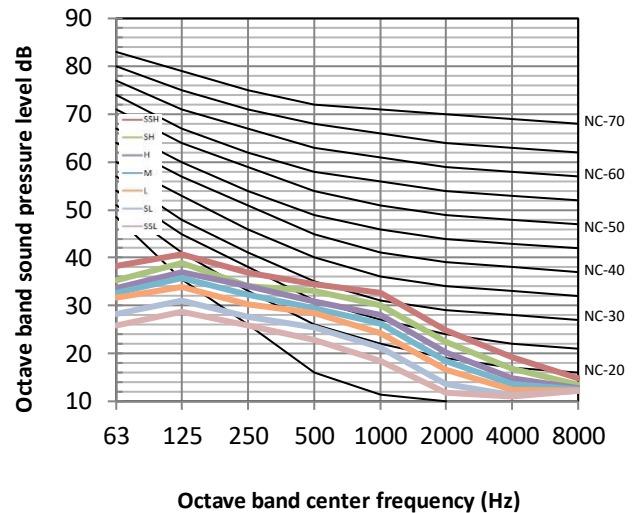


Figure 8.11: VEMP031T0A-DCV090 octave band levels

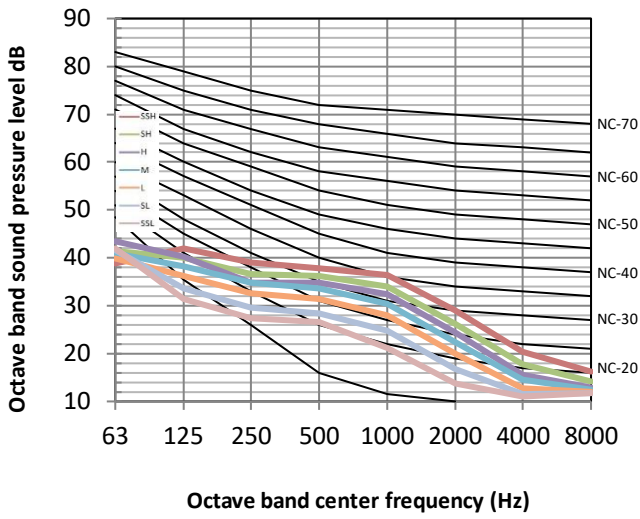


Figure 8.12: VEMP038T0A-DCV112 octave band levels

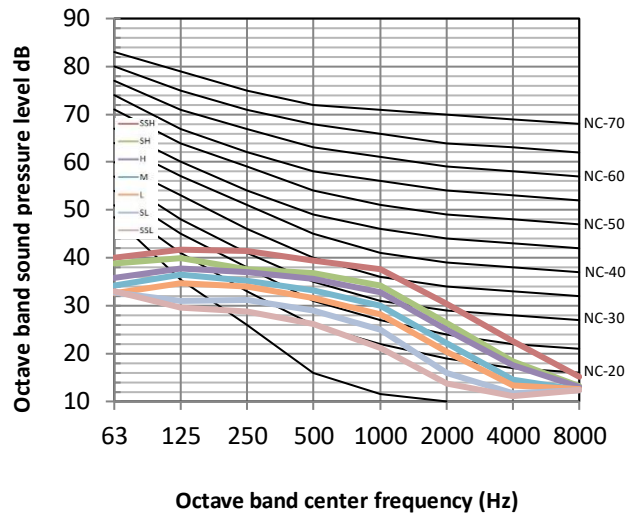


Figure 8.13: VEMP048T0A-DCV140 octave band levels

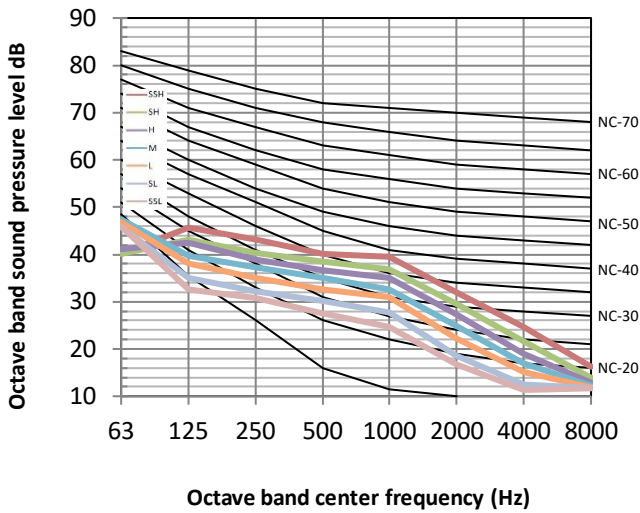
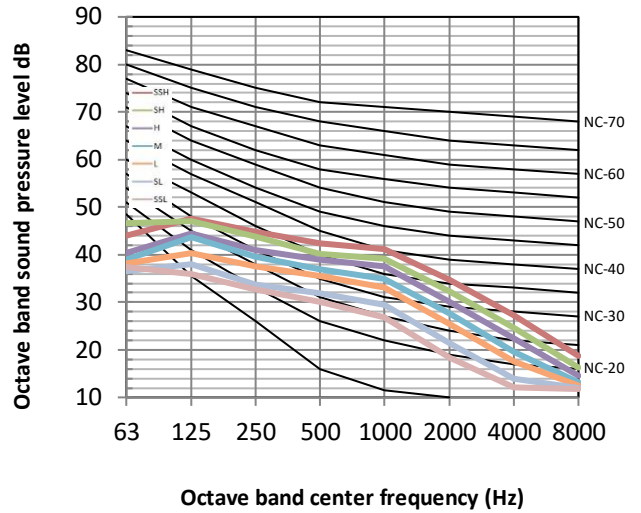


Figure 8.14: VEMP060T0A-DCV160 octave band levels



9 Fan Performance

9.1 How to switch between Constant Airflow mode and Constant Speed mode

① In the main interface, press "≡" + "↵" for 3 seconds at the same time, and the main interface will display "CC". Press the "▲" and "▼" to select the indoor unit ("n00-n63" is displayed, and the last two digits are the indoor unit addresses). Press the "↵" to enter the parameter setting interface, and "n00" will be displayed.

② Press the "▲" and "▼" until "N30" is displayed on the page, and

then press the "↵" to enter the mode setting. Use the "▲" and "▼" keys to adjust to the demand mode parameter values, and press the "↵" to confirm.

③ Press the "⌚" button to return to the previous menu and exit the parameter setting. Parameter setting will also exit after 60 s of no operation

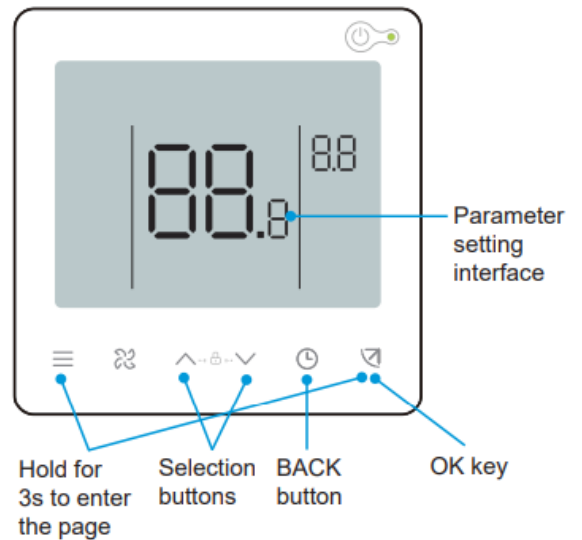


Table 9.1: Arc Duct mode setting

First level menu	Second level menu	Description	Default
n30	00	Constant Speed	-
	01	Constant Airflow	√

Notes:

- The above is only an example. If you choose other controllers, please refer to their instructions for setting.

9.2 Constant Airflow mode

9.2.1 Fan performance diagram

Figure 9.1: VELP006T0A-DCV015

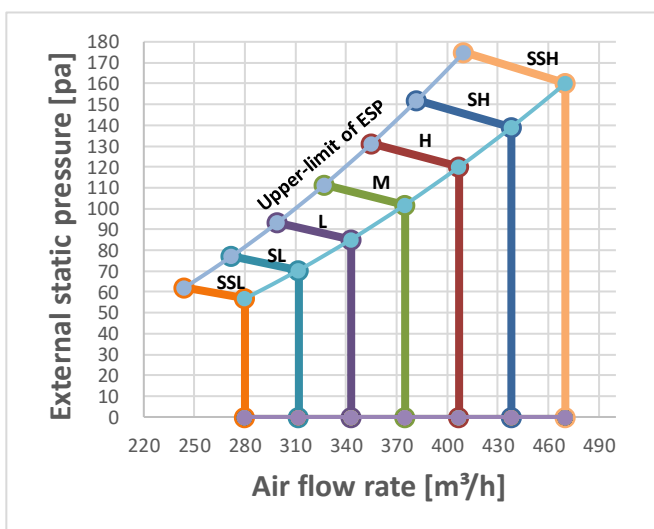


Figure 9.2: VELP008T0A-DCV022

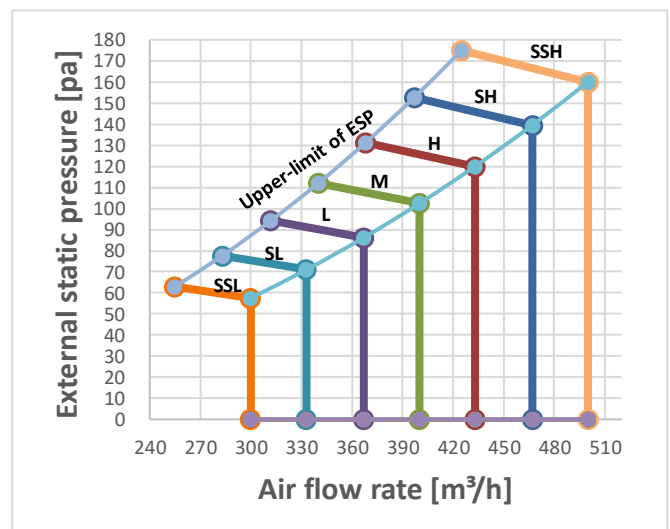


Figure 9.3: VELP010T0A-DCV028

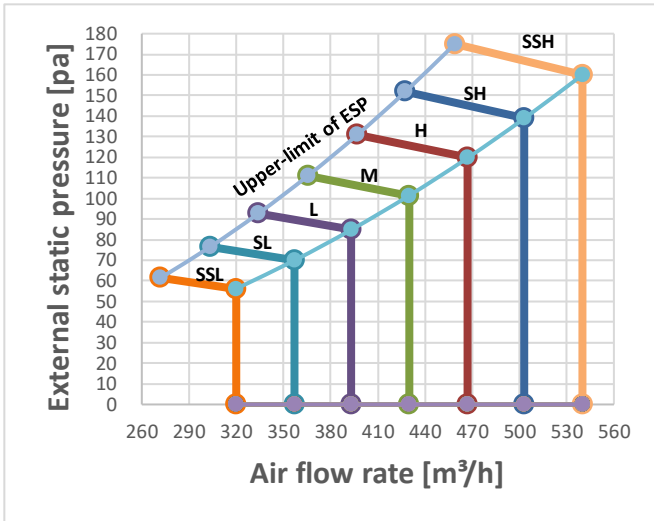


Figure 9.4: VELP012T0A-DCV036

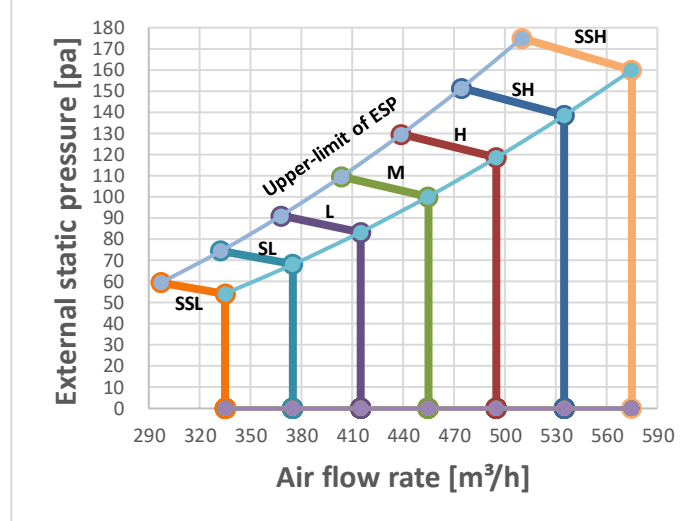


Figure 9.5: VELP015T0A-DCV045

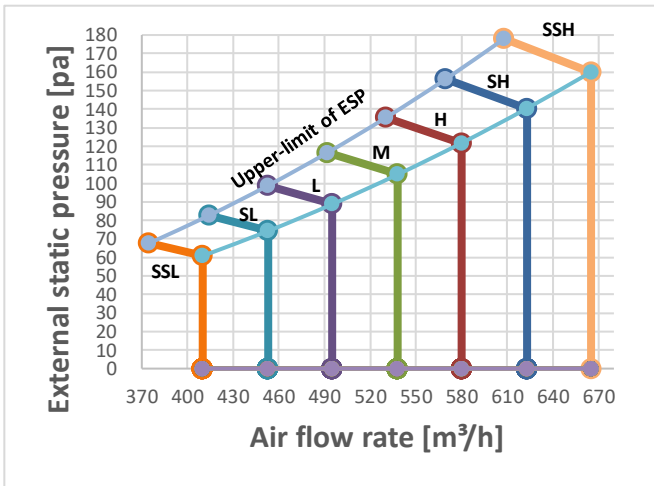


Figure 9.6: VELP019T0A-DCV056

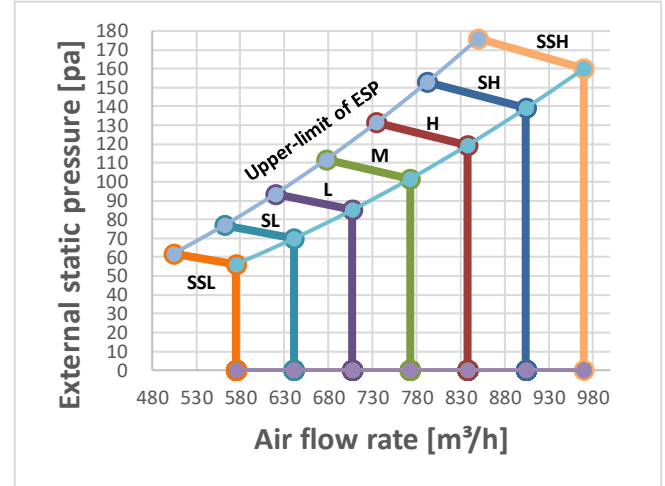


Figure 9.7: VEMPO24T0A-DCV071

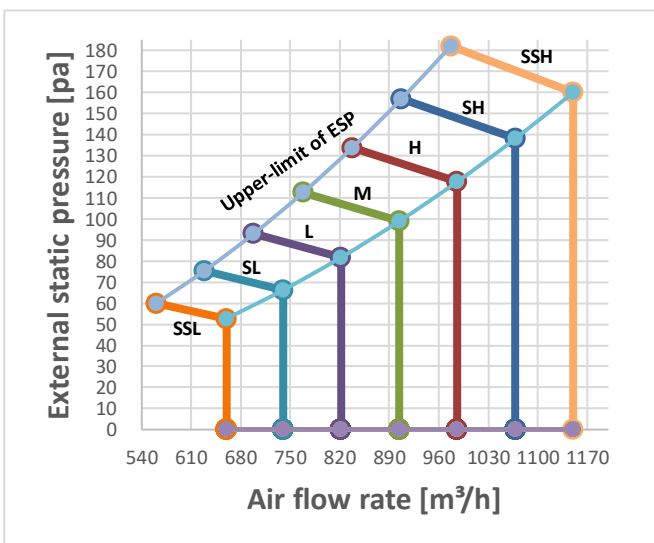
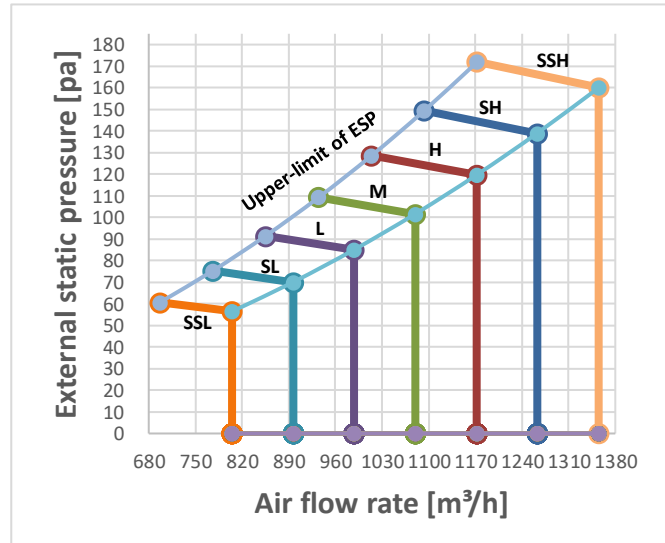


Figure 9.8: VEMPO27T0A-DCV080



OMEGA Indoor Units

Figure 9.9: VEMP031T0A-DCV090

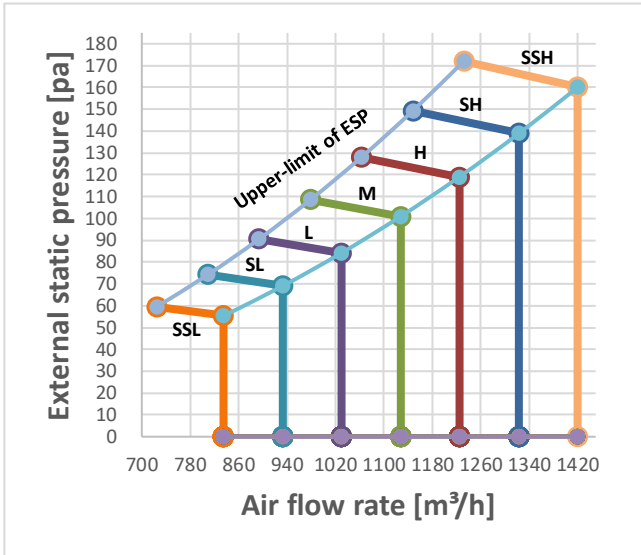


Figure 9.10: VEMP038T0A-DCV112

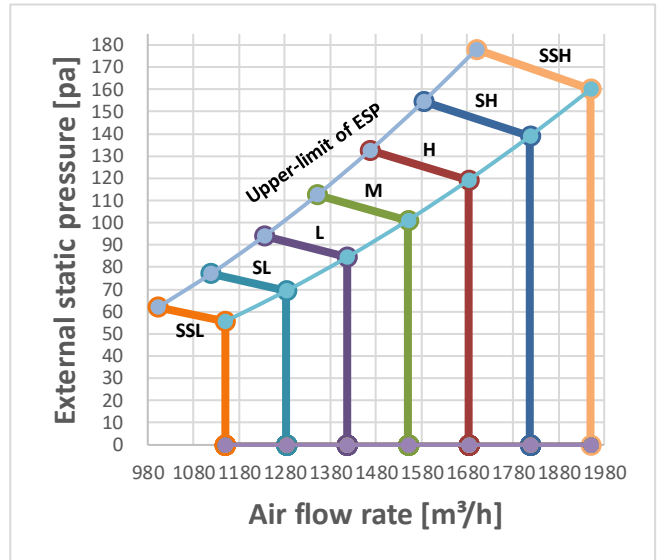


Figure 9.11: VEMP048T0A-DCV140

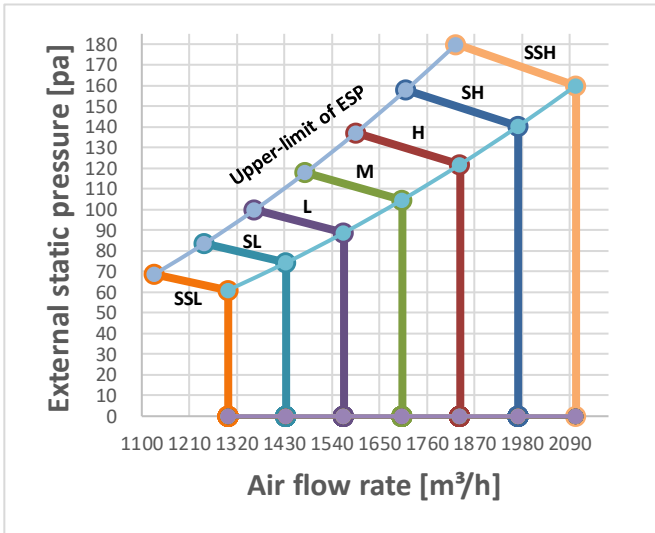
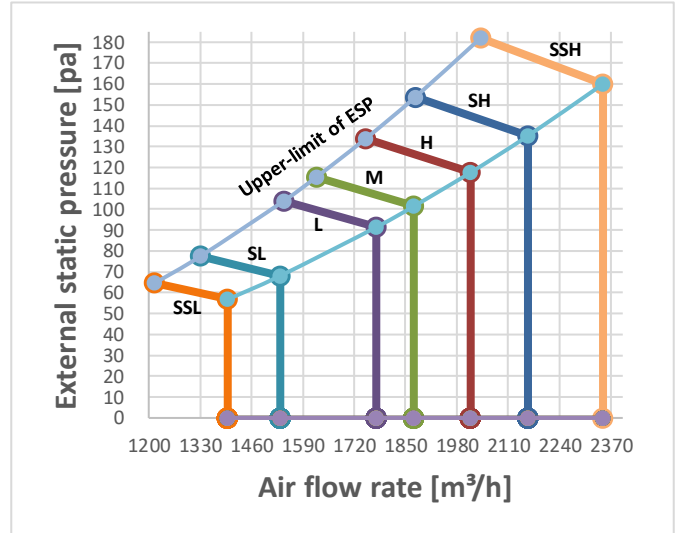


Figure 9.12: VEMP060T0A-DCV160



9.2.2 How to Read the Diagram (Constant Airflow mode)

The vertical axis is the External Static Pressure (Pa) while the horizontal axis represents the Air Flow (m³/h). The characteristic curve for the “SSH”, “SH”, “H”, “M”, “L”, “SL” and “SSL” fan speed control.

For MIH140T2HN18, in “H” windshield, when the external static pressure is less than 122 Pa, the air flow keeps 1837 m³/h, but when the external static pressure is greater than 122 Pa, the air flow begins to decline, and the allowable maximum external static pressure is 137 Pa.

9.3 Constant Speed mode

9.3.1 Set external static pressure parameters

① In the main interface, press "☰" + "↵" for 3 seconds at the same time, and the main interface will display "CC". Press the "▲" and "▼" to select the indoor unit ("n00-n63" is displayed, and the last two digits are the indoor unit addresses). Press the "↵" to enter the parameter setting interface, and "n00" will be displayed.

② When "n00" is displayed, press the "↵" to enter the static pressure setting. Use the "▲" and "▼" keys to adjust to the demand parameter values, and press the "↵" to confirm.

③ Press the "⌚" button to return to the previous menu and exit the parameter setting. Parameter setting will also exit after 60 s of no operation

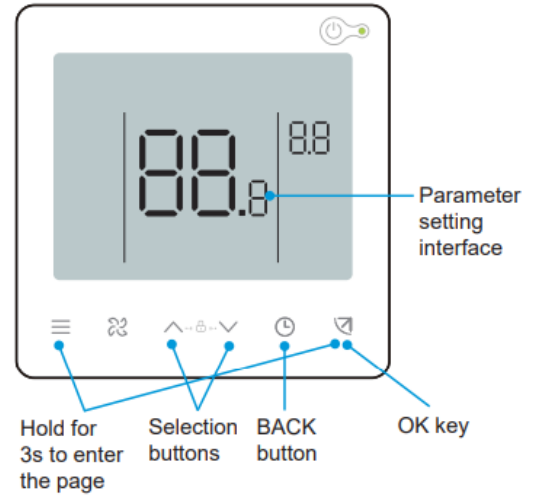


Table 9.1: External static pressure setting (VELP006(008,010,012,015,019) VEMP024)

First level menu	Second level menu	Description	Default
N00	00/01/02/03/04/05/~ /19	Static pressure level	1.5-7.1kW: 06 8.0-11.2kW: 07 14.0-16.0kW: 08

Level	00	01	02	03	04	05	06	07	08	09	10
Static pressure(Pa)	0	5	10	15	20	25	30	40	50	60	70

Level	11	12	13	14	15	16	17	18	19
Static pressure(Pa)	80	90	100	110	120	130	140	150	160

Notes:

- The above is only an example of 86S wired controller. If you choose other controllers, please refer to their manuals for setting.

9.3.2 Fan performance diagram

Figure 9.13: VELP006T0A-DCV015

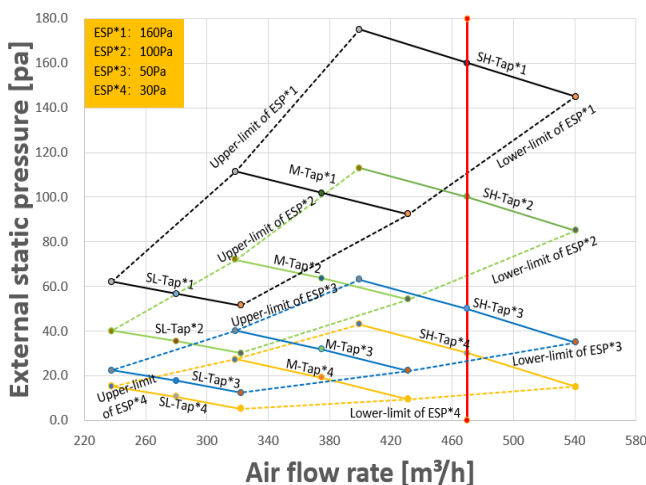


Figure 9.14: VELP008T0A-DCV022

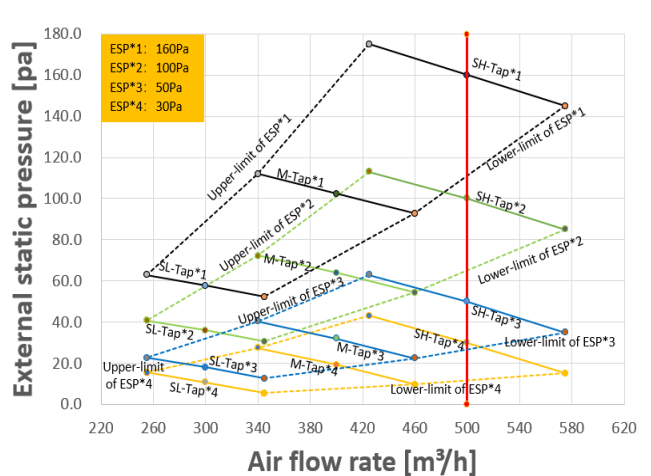


Figure 9.15: VELP010T0A-DCV028

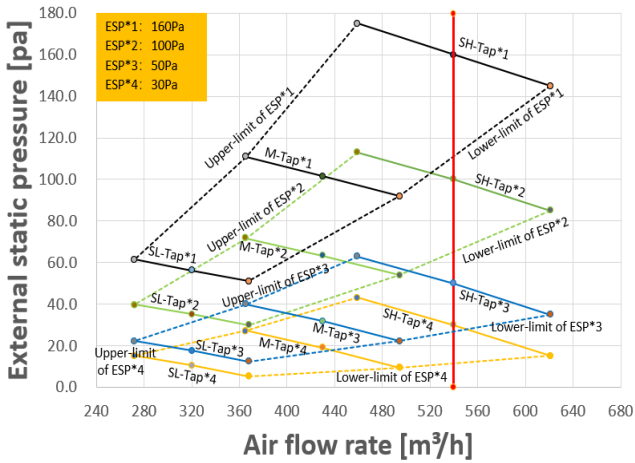


Figure 9.16: VELP012T0A-DCV036

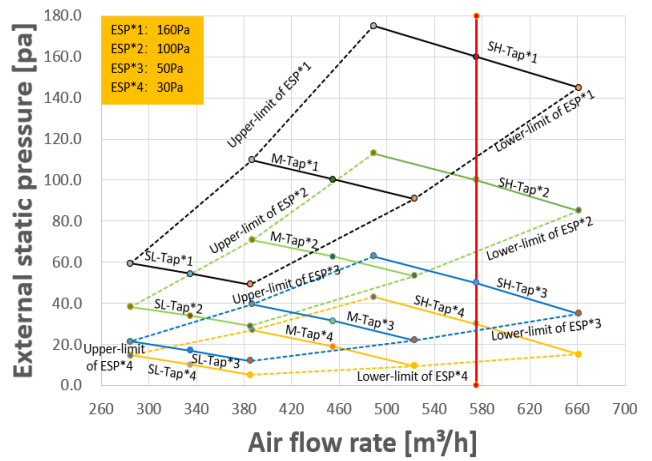


Figure 9.17: VELP015T0A-DCV045

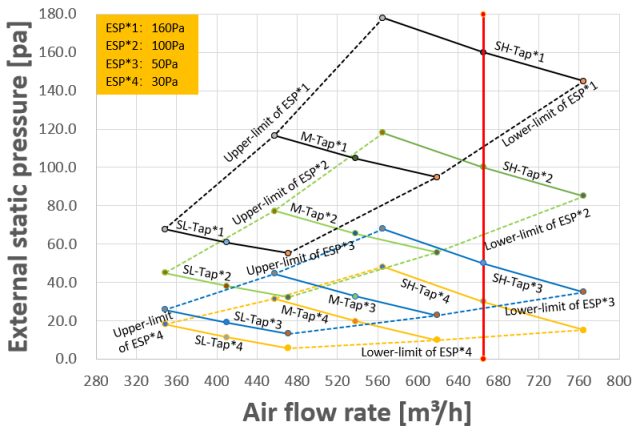


Figure 9.18: VELP019T0A-DCV056

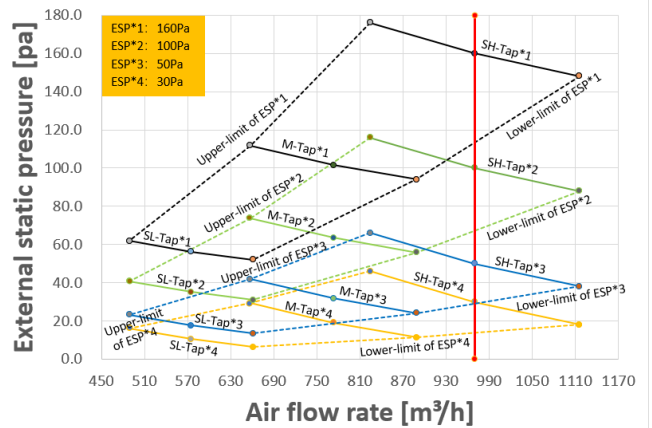


Figure 9.19: VEMPO24T0A-DCV071

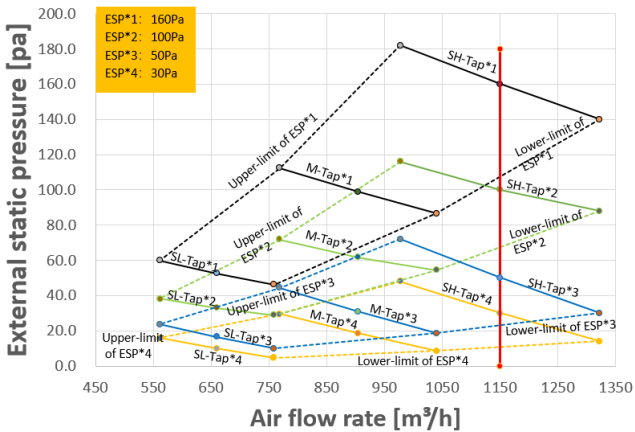


Figure 9.20: VEMPO27T0A-DCV080

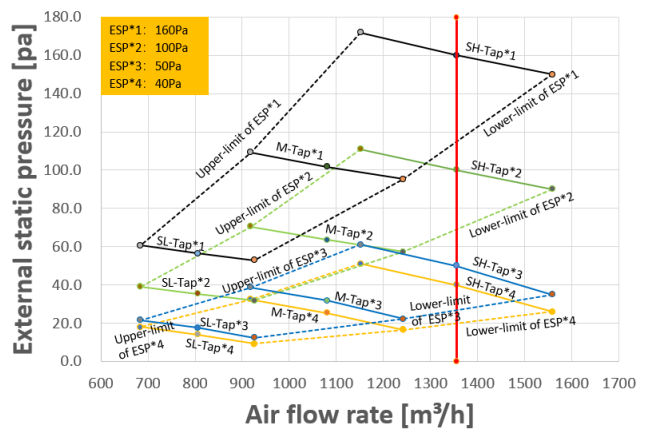


Figure 9.21: VEMP031T0A-DCV090

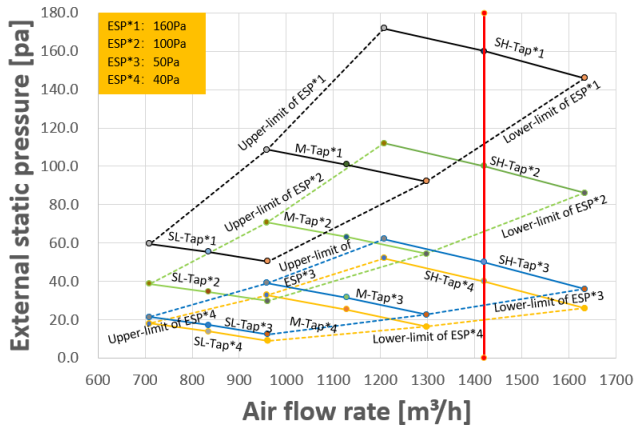


Figure 9.22: VEMP038T0A-DCV112

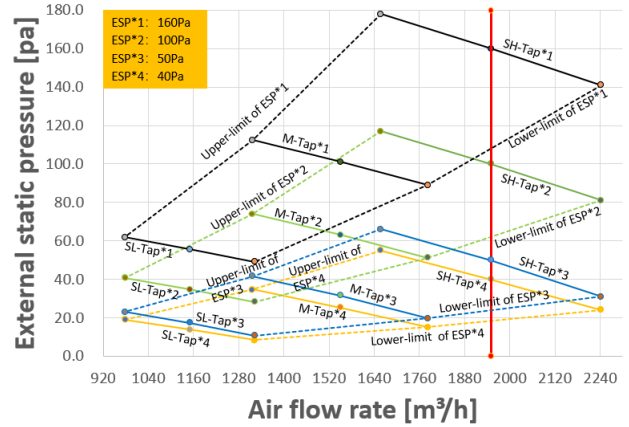


Figure 9.23: VEMP048T0A-DCV140

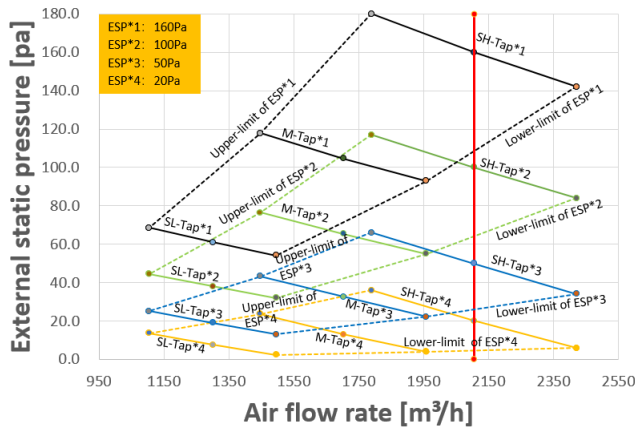
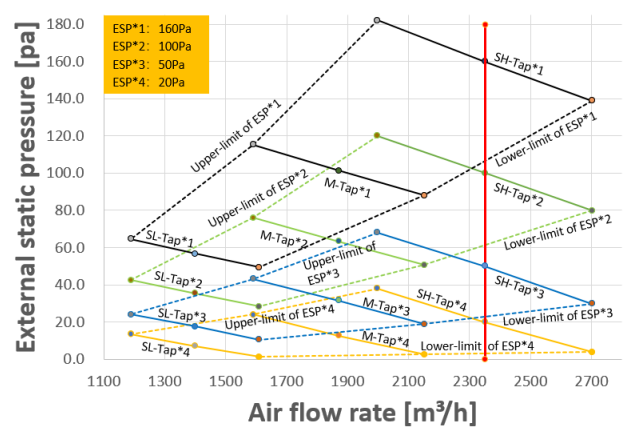


Figure 9.24: VEMP060T0A-DCV160



9.3.3 How to Read the Diagram (Constant Speed mode)

The vertical axis is the External Static Pressure (Pa) while the horizontal axis represents the Air Flow (m^3/h). The characteristic curve for the “SH”, “M” and “SL” fan speed control.

The Air Flow decreases with the increase of the external static pressure. For MIH140T2HN18, in “SH” windshield and “50Pa” setting static pressure, when the external static pressure is 50Pa, the air flow is 2105 m^3/h , and the allowable external static pressure range is 34 to 66.



OMEGA
ENVIRONMENTAL
TECHNOLOGIES LLC.

17702 Mitchell North, #101
Irvine, CA. 92614 .USA
Tel: 714 795 2830
Fax: 714 966 1646
info@otecomega.com
www.otecomega.com

OTECTM
AIR CONDITIONING

Showroom & Technology Center
11380 Interchange Circle North
Miramar, FL 33025 .USA
Tel: 305 901 1270
Fax: 954 212 8280
info@otecomega.com
www.otecomega.com

VELP(MP)T0A-TM1D0823