

OMEGA Full DC Modular VRF Outdoor Unit

SUBMITTAL DATA

220~240V/3/50-60Hz

Job: _____
 Location: _____
 Schedule No.: _____
 System Designation: _____

Engineer: _____
 Architect: _____
 Date: _____
 For: Reference Approval Review Construction

FEATURES

- Auto-Refrigerant Charge
- Refrigerant Cooling PCB
- Auto Dust-Clean Function
- Real-Time Refrigerant Volume Monitoring
- Automatic Address Setting
- Automatic Fault Detection



1- Specifications

1 Specifications

VMEP008(9,10)N4A

Table 2-1.1: VMEP008(9,10)N4A specifications

HP			8	10	12
Model name			VMEP008N4A-D13V224	VMEP009N4A-D16V280	VMEP010N4A-D20V335
Power supply		V/Ph/Hz	220V 3Ph~50/60HZ		
Cooling ¹	Capacity	kW	22.4	28.0	33.5
		kBtu/h	76.5	95.6	114.4
	Power input	kW	5.25	7.10	8.90
	EER		4.27	3.94	3.76
Connected indoor unit	Total capacity		50-130%		
	Maximum quantity		13	16	20
Compressor	Type		DC inverter		
	Quantity		1		
	Oil type		FV 50s		
	Start-up method		Soft start		
Fan	Type		DC		
	Quantity		1		
	Motor output	kW	0.56		
	ESP	Pa(in.wg)	20(0.08) default;60(0.24) customization option		
	Airflow rate	m ³ /h(CFM)	10400(6121)		10800(6357)
	Drive type		Direct		
Refrigerant	Type		R410A		
	Factory charge	kg(lbs)	8(17.6)		
Pipe connections ²	Liquid pipe	mm(inch)	Φ12.7(1/2)		Φ12.7(1/2)
	Gas pipe	mm(inch)	Φ25.4(1)		Φ28.6(1-1/8)
Sound pressure level ³		dB(A)	57	58	60
Net dimensions (W×H×D)	mm		960×1615×765		
	inch		37-13/16×63-9/16×30-1/8		
Packed dimensions (W×H×D)	mm		1025×1790×830		
	inch		40-3/8×70-1/2×32-11/16		
Net weight	kg		193		
	lbs		425		
Gross weight	kg		209		
	lbs		461		
Ambient temp.	Cooling	°C (°F)	-5 (23) to 55 (131)		

Notes:

- Indoor air temperature 27°C DB, 19°C WB; outdoor air temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
- Diameters given are those of the unit's accessories.
- Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

1- Specifications

VMEP012(14,16,18)N4A

Table 2-1.2: VMEP012(14,16,18)N4A specifications

HP			14	16	18	20
Model name			VMEP012N4A-D23V400	VMEP014N4A-D26V450	VMEP016N4A-D29V500	VMEP018N4A-D33V560
Power supply		V/Ph/Hz	220V 3Ph~50/60HZ			
Cooling ¹	Capacity	kW	40.0	45.0	50.0	56.0
		kBtu/h	136.6	153.7	170.8	191.3
	Power input	kW	10.3	12.00	13.70	16.50
	EER		3.88	3.75	3.65	3.39
Connected indoor unit	Total capacity		50-130%			
	Maximum quantity		23	26	29	33
Compressor	Type		DC inverter			
	Quantity		1		2	
	Oil type		FV 50s			
	Start-up method		Soft start			
Fan	Type		DC			
	Quantity		1		2	
	Motor output	kW	0.75		0.56×2	
	ESP	Pa(in.wg)	20(0.08) default;60(0.24) customization option			
	Airflow rate	m ³ /h(CFM)	11600(6828)		12000(7063)	12200(7181)
	Drive type		Direct			
Refrigerant	Type		R410A			
	Factory charge	kg	11(24.3)		13(28.7)	
Pipe connections ²	Liquid pipe	mm	Φ15.9(5/8)			Φ15.9(5/8)
	Gas pipe	mm	Φ31.8(1-1/4)			Φ31.8(1-1/4)
Sound pressure level ³		dB(A)	60	61	62	63
Net dimensions (W×H×D)	mm		960×1615×765		1250×1615×765	
	inch		37-13/16×63-9/16×30-1/8		49-1/4×63-9/16×30-1/8	
Packed dimensions (W×H×D)	mm		1025×1790×830		1305×1790×820	
	inch		40-3/8×70-1/2×32-11/16		51-3/8×70-1/2×32-1/4	
Net weight	kg		200		296	
	lbs		441		653	
Gross weight	kg		216		313	
	lbs		476		690	
Ambient temp.	Cooling	°C (°F)	-5 (23) to 55 (131)			

Notes:

- Indoor air temperature 27°C DB, 19°C WB; outdoor air temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
- Diameters given are those of the unit's accessories.
- Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

1- Specifications

VMEP020(22,24)N4A

Table 2-1.3: VMEP020(22,24)N4A specifications

HP			22	24	26
Model name			VMEP020N4A-D36V615	VMEP022N4A-D39V670	VMEP024N4A-D43V730
Power supply		V/Ph/Hz	220V 3Ph~50/60HZ		
Cooling ¹	Capacity	kW	61.5	67.0	73.0
		kBtu/h	210.0	228.8	249.3
	Power input	kW	19.65	20.10	22.20
	EER		3.13	3.33	3.29
Connected indoor unit	Total capacity		50-130%		
	Maximum quantity		36	39	43
Compressor	Type		DC inverter		
	Quantity		2		
	Oil type		FV 50s		
	Start-up method		Soft start		
Fan	Type		DC		
	Quantity		2		
	Motor output	kW	0.56×2		
	ESP	Pa(in.wg)	20(0.08) default;60(0.24) customization option		
	Airflow rate	m ³ /h(CFM)	12200(7181)	19600(11536)	
	Drive type		Direct		
Refrigerant	Type		R410A		
	Factory charge	kg(lbs)	13(28.7)	19(41.9)	
Pipe connections ²	Liquid pipe	mm(inch)	Φ15.9(5/8)	Φ19.1(3/4)	Φ19.1(3/4)
	Gas pipe	mm(inch)	Φ31.8(1-1/4)	Φ31.8(1-1/4)	Φ34.9(1-3/8)
Sound pressure level ³		dB(A)	63	64	
Net dimensions (W×H×D)	mm		1250×1615×765	1585×1615×765	
	inch		49-1/4×63-9/16×30-1/8	62-3/8×63-9/16×30-1/8	
Packed dimensions (W×H×D)	mm		1305×1790×820	1650×1810×840	
	inch		51-3/8×70-1/2×32-1/4	64-15/160×71-1/4×33-1/16	
Net weight	kg		296	352	
	lbs		653	776	
Gross weight	kg		313	376	
	lbs		690	829	
Ambient temp.	Cooling	°C (°F)	-5 (23) to 55 (131)		

Notes:

1. Indoor air temperature 27°C DB, 19°C WB; outdoor air temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Diameters given are those of the unit's accessories.
3. Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

1- Specifications

VMEP026(28)N4A

Table 2-1.4: VMEP026(28)N4A specifications

HP			28	30
Model name			VMEP026N4A-D46V785	VMEP028N4A-D50V850
Power supply		V/Ph/Hz	220V 3Ph~50/60HZ	
Cooling ¹	Capacity	kW	78.5	85.0
		kBtu/h	268.1	290.3
	Power input	kW	24.18	27.51
	EER			3.25
Connected indoor unit	Total capacity		50-130%	
	Maximum quantity		46	50
Compressor	Type		DC inverter	
	Quantity		2	
	Oil type		FV 50s	
	Start-up method		Soft start	
Fan	Type		DC	
	Quantity		2	
	Motor output	kW	0.56×2	
	ESP	Pa(in.wg)	20(0.08) default;60(0.24) customization option	
	Airflow rate	m ³ /h(CFM)	20600(12125)	
	Drive type		Direct	
Refrigerant	Type		R410A	
	Factory charge	kg	19(41.9)	
Pipe connections ²	Liquid pipe	mm(inch)	Φ19.1(3/4)	Φ19.1(3/4)
	Gas pipe	mm(inch)	Φ34.9(1-3/8)	Φ34.9(1-3/8)
Sound pressure level ³		dB(A)	64	
Net dimensions (W×H×D)	mm		1585×1615×765	
	inch		62-3/8×63-9/16×30-1/8	
Packed dimensions (W×H×D)	mm		1650×1810×840	
	inch		64-15/160×71-1/4×33-1/16	
Net weight	kg		352	
	lbs		776	
Gross weight	kg		376	
	lbs		829	
Ambient temp.	Cooling	°C (°F)	-5 (23) to 55 (131)	

Notes:

- Indoor air temperature 27°C DB, 19°C WB; outdoor air temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
- Diameters given are those of the unit's accessories.
- Sound pressure level is measured at a position 1m in front of the unit and 1.3m above the floor in a semi-anechoic chamber.

DIMENSIONAL DRAWINGS - (MM)

2.1 Single Units

VMEP007(9,10,12,14)N4A

Figure 2-2.1: VMEP007(9,10,12,14)N4A dimensions (unit: mm)

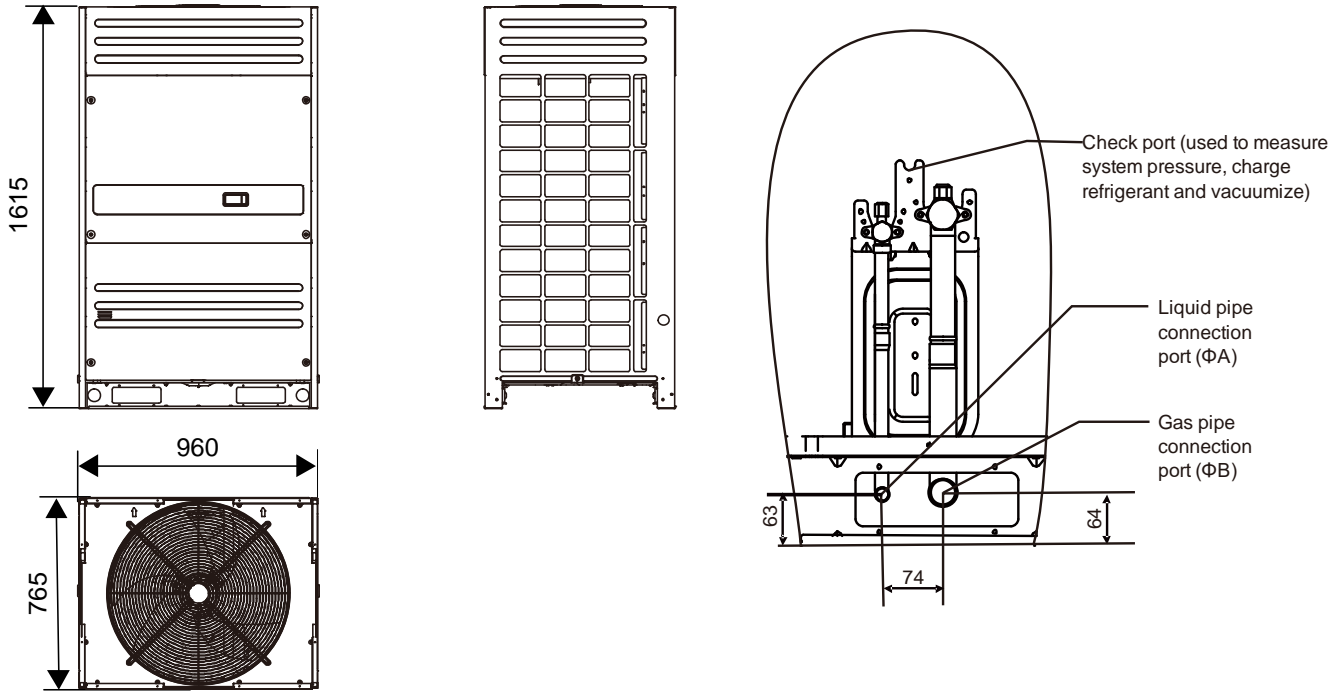


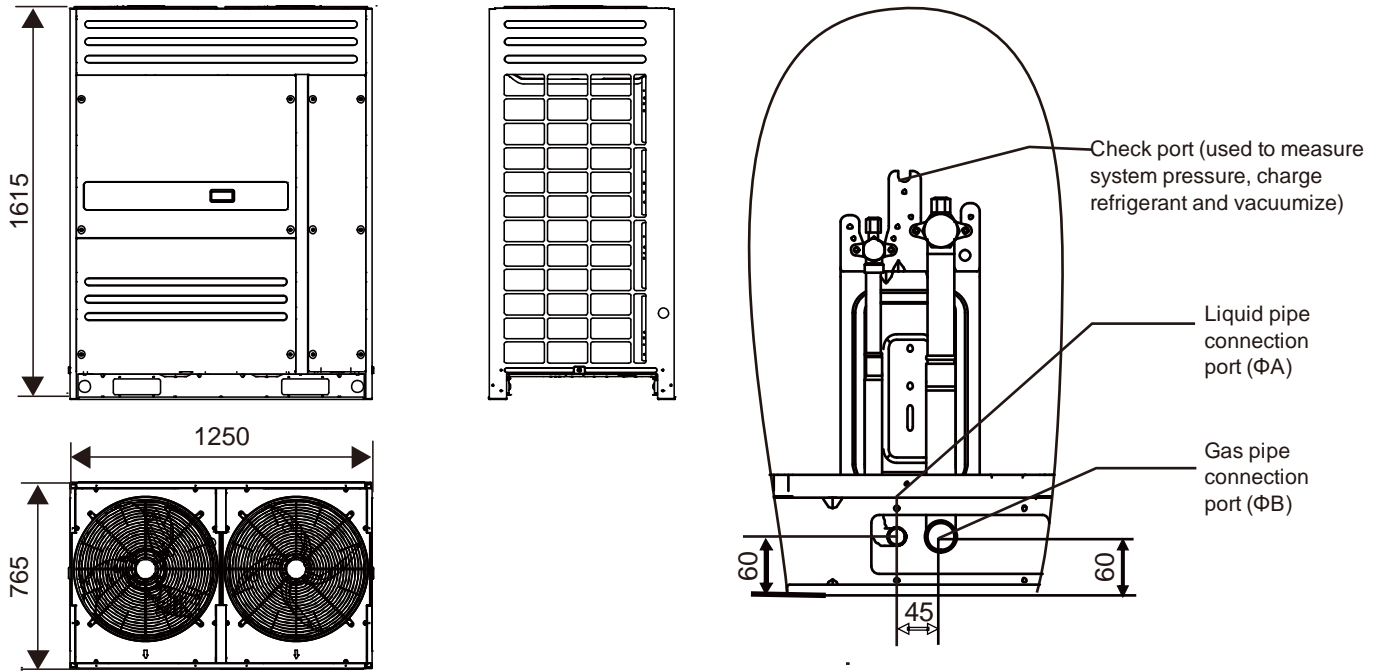
Table 2-2.1: 8/10/12/14/16HP connection piping diameter (unit: mm)

Size	8-10HP	12HP	14-16HP
A	Φ12.7	Φ15.9	Φ15.9
B	Φ25.4	Φ28.6	Φ31.8

DIMENSIONAL DRAWINGS - (MM)

VMEP016(18,20)N4A

Figure 2-2.2 VMEP016(18,20)N4A dimensions (unit: mm)



Detail R

Table 2-2.2: 18/20/22HP connection piping diameter (unit: mm)

Size	18-22HP
A	Φ19.1
B	Φ31.8

DIMENSIONAL DRAWINGS - (MM)

VMEP022(24,26,28)N4A

Figure 2-2.3: VMEP022(24,26,28)N4A dimensions (unit: mm)

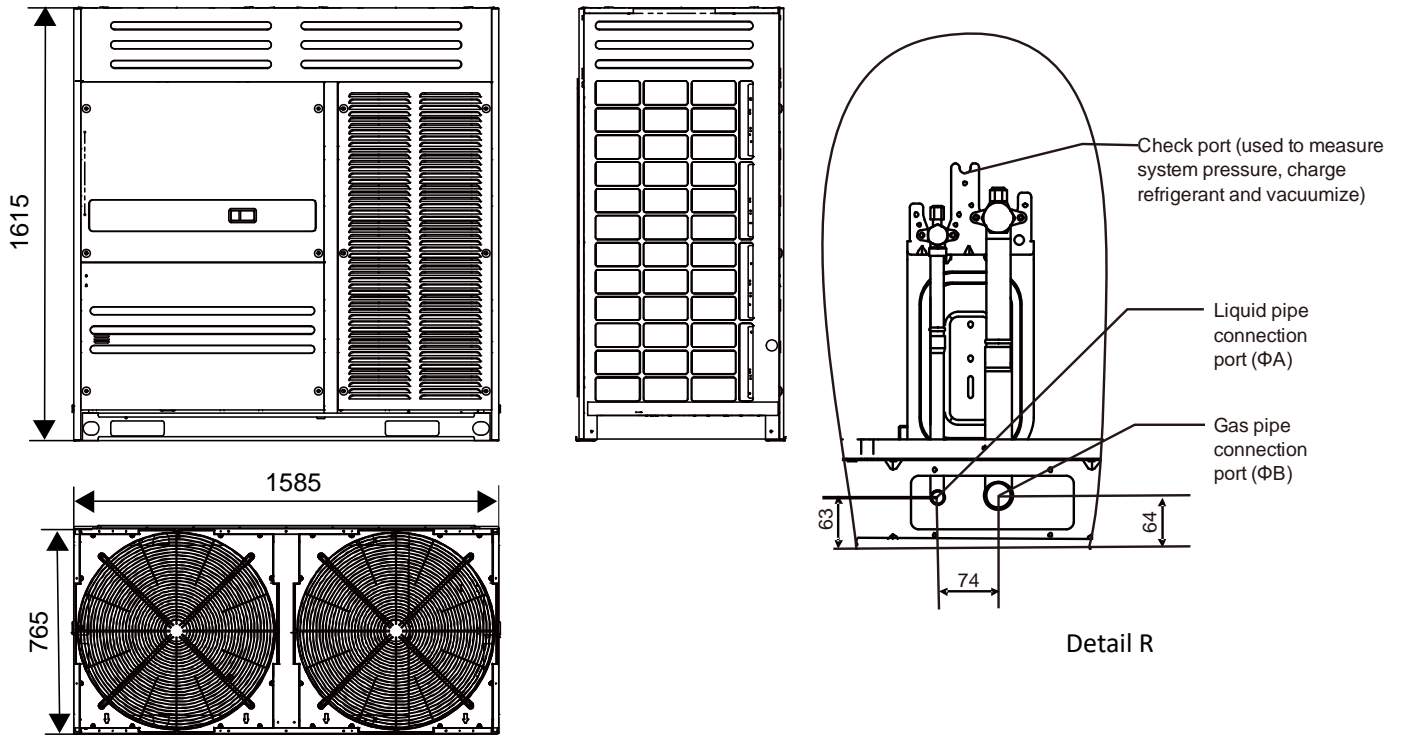


Table 2-2.3: 24/26/28/30HP connection piping diameter (unit: mm)

Size	24HP	26HP	28-30HP
A	Φ19.1	Φ22.2	Φ22.2
B	Φ31.8	Φ31.8	Φ38.1

3- Electrical Characteristics

Electrical Characteristics

Table 2-6.1: Outdoor unit electrical characteristics

Model			Power Supply ¹							Compressor		OFM		
Capacity	Modules		Hz	Volts	Min		MCA ₂	TOCA ₃	MFA ⁴	MSC ₅	RLA ⁶	kW	FLA	
					volt	volt								
VMPE007N4A			50/60H	220	198	242	42.5	48.8	50	/	34.68	0.56	3.8	
VMPE009N4A			50/60H	220	198	242	42.8	48.8	50	/	36.23	0.56	3.8	
VMPE010N4A			50/60H	220	198	242	43	49.4	50	/	38.65	0.56	4.4	
VMPE012N4A			50/60H	220	198	242	47	54.8	63	/	43.85	0.75	5.8	
VMPE014N4A			50/60H	220	198	242	47.5	54.8	63	/	44.23	0.75	5.8	
VMPE016N4A			50/60H	220	198	242	85.5	98	100	/	37.4+37.2	0.56+0.56	8	
VMPE018N4A			50/60H	220	198	242	86	98.5	100	/	37.9+37.7	0.56+0.56	8.5	
VMPE020N4A			50/60H	220	198	242	86.5	98.5	100	/	38.6+38.4	0.56+0.56	8.5	
VMPE022N4A			50/60H	220	198	242	91	107.	100	/	37.7+37.5	0.56+0.56	9.2	
VMPE024N4A			50/60H	220	198	242	91.5	107.	100	/	43.0+42.8	0.56+0.56	9.2	
VMPE026N4A			50/60H	220	198	242	92	108	100	/	46.0+45.8	0.56+0.56	10	
VMPE028N4A			50/60H	220	198	242	92.5	108	100	/	46.7+46.5	0.56+0.56	10	
VMPE029N4A	16H	16H	50/60H	220	198	242	95	109.	63+63	/	44.23+44.23	0.75*2	11.	
VMPE030N4A	12H	22H	50/60H	220	198	242	129.	147.	50+100	/	38.65+38.6+38.4	0.56*3	12.	
VMPE032N4A	16H	20H	50/60H	220	198	242	133.	153.	63+100	/	44.23+37.9+37.7	0.75+0.52*2	14.	
VMPE034N4A	16H	22H	50/60H	220	198	242	134	153.	63+100	/	44.23+38.6+38.4	0.75+0.52*2	14.	
VMPE036N4A	16H	24H	50/60H	220	198	242	138.	162	63+100	/	44.23+37.7+37.5	0.75+0.52*2	15	
VMPE038N4A	16H	26H	50/60H	220	198	242	139	162	63+100	/	44.23+43.0+42.8	0.75+0.52*2	15	
VMPE040N4A	16H	28H	50/60H	220	198	242	139.	162.	63+100	/	44.23+46.0+45.8	0.75+0.52*2	15.	
VMPE042N4A	16H	30H	50/60H	220	198	242	140	162.	63+100	/	44.23+46.7+46.5	0.75+0.52*2	15.	
VMPE044N4A	22H	26H	50/60H	220	198	242	178	205.	100+100	/	38.6+38.4+43.0+42.8	0.56*4	17.	
VMPE046N4A	22H	28H	50/60H	220	198	242	178.	206.	100+100	/	38.6+38.4+46.0+45.8	0.56*4	18.	
VMPE048N4A	22H	30H	50/60H	220	198	242	179	206.	100+100	/	38.6+38.4+46.7+46.5	0.56*4	18.	
VMPE050N4A	26H	28H	50/60H	220	198	242	183.	215.	100+100	/	43.0+42.8+46.0+45.8	0.56*4	19.	
VMPE052N4A	28H	28H	50/60H	220	198	242	184	216	100+100	/	46.0+45.8+46.0+45.8	0.56*4	20	
VMPE054N4A	28H	30H	50/60H	220	198	242	184.	216	100+100	/	46.0+45.8+46.7+46.5	0.56*4	20	
VMPE056N4A	30H	30H	50/60H	220	198	242	185	216	100+100	/	46.7+46.5+46.7+46.5	0.56*4	20	
VMPE058N4A	16H	16H	30H	50/60H	220	198	242	187.	217.	63+63+100	/	44.23+44.23+46.7+46.5	0.75*2+0.56	21.
VMPE060N4A	16H	22H	26H	50/60H	220	198	242	225.	260.	63+100+10	/	44.23+38.6+38.4+43.0+42.8	0.75+0.56*4	23.
VMPE062N4A	16H	22H	28H	50/60H	220	198	242	226	261.	63+100+10	/	44.23+38.6+38.4+46.0+45.8	0.75+0.56*4	24.
VMPE064N4A	16H	22H	30H	50/60H	220	198	242	226.	261.	63+100+10	/	44.23+38.6+38.4+46.7+46.5	0.75+0.56*4	24.
VMPE066N4A	16H	26H	28H	50/60H	220	198	242	231	270	63+100+10	/	44.23+43.0+42.8+46.0+45.8	0.75+0.56*4	25
VMPE068N4A	16H	28H	28H	50/60H	220	198	242	231.	270.	63+100+10	/	44.23+46.0+45.8+46.0+45.8	0.75+0.56*4	25.
VMPE070N4A	16H	28H	30H	50/60H	220	198	242	232	270.	63+100+10	/	44.23+46.0+45.8+46.7+46.5	0.75+0.56*4	25.
VMPE072N4A	16H	30H	30H	50/60H	220	198	242	232.	270.	63+100+10	/	44.23+46.7+46.5+46.7+46.5	0.75+0.56*4	25.
VMPE074N4A	22H	28H	28H	50/60H	220	198	242	270.	314.	100+100+1	/	38.6+38.4+46.0+45.8+46.0+	0.56*6	28.
VMPE076N4A	22H	28H	30H	50/60H	220	198	242	271	314.	100+100+1	/	38.6+38.4+46.0+45.8+46.7+	0.56*6	28.
VMPE078N4A	22H	30H	30H	50/60H	220	198	242	271.	314.	100+100+1	/	38.6+38.4+46.7+46.5+46.7+	0.56*6	28.
VMPE080N4A	28H	28H	28H	50/60H	220	198	242	276	324	100+100+1	/	46.0+45.8+46.0+45.8+46.0+	0.56*6	30
VMPE082N4A	28H	28H	30H	50/60H	220	198	242	276.	324	100+100+1	/	46.0+45.8+46.0+45.8+46.7+	0.56*6	30
VMPE084N4A	28H	30H	30H	50/60H	220	198	242	277	324	100+100+1	/	46.0+45.8+46.7+45.5+46.7+	0.56*6	30
VMPE086N4A	30H	30H	30H	50/60H	220	198	242	277.	324	100+100+1	/	46.7+46.5+46.7+46.5+46.7+	0.56*6	30

Abbreviations:

MCA: Minimum Circuit Amps; TOCA: Total Over-current Amps; MFA: Maximum Fuse Amps; MSC: Maximum Starting Current (A); RLA: Rated Load Amps; FLA: Full Load Amps

Notes:

- Units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits. Maximum allowable voltage variation between phases is 2%.
- Select wire size based on the value of MCA.
- TOCA indicates the total overcurrent amps value of each OC set.
- MFA is used to select overcurrent circuit breakers and residual-current circuit breakers.
- MSC indicates the maximum current on compressor start-up in amps.
- RLA is based on the following conditions: indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB.