NŌRDEN®

SERVICE MANUAL
MVME 18 AND 20 SEER AIR HANDLER UNIT

MODELS:

MVME-024-180
MVME-036-180
MVME-048-180
MVME-060-180

Refrigerant R-410A

Rev 1.0

Part 1
General Information

1 Indoor and Outdoor Unit Matching Table 2

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1 Indoor Units

Table 1-1.1: Indoor units

Series	Capa	Indoor units
18 SEER Cooling Only	24	MVME-024-180
	36	MVME-036-180
	48	MVME-048-180
	60	MVME-060-180

2 External Appearance



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1 Specifications

Indoor Units

MVME-024-180/ MVME-036-180 / MVME-048-180 / MVME-060-180

Model			MVME-024-180	MVME-036-180	MVME-048-180	MVME-060-180
Indoor motor	Type		ECM	ECM	ECM	ECM
	Rated HP		1/3	1/2	3/4	3/4
	Rated RPM	r/min	1050	1050	1050	1050
	FLA		1.0/0.84/0.78/0.69/0.57	1.96/1.38/1.04/0.84/0.74	3.16/2.53/2.02/1.47/1.05	3.16/2.53/2.02/1.47/1.05
Indoor fan	material		Metal	Metal	Metal	Metal
	Type		Centrifugal	Centrifugal	Centrifugal	Centrifugal
	Diameter	inch	10	10	10	10
	Height	inch	8	10	10	10
Indoor coil	Number of rows		4	4	4	5
	Tube outside dia.and type		Φ7×0.24×LWC			
	Fin spacing /thickness/type	mm/mm	1.5/0.095/Hydrophilic Aluminium			
	Tube pitch(a)x row pitch(b)	mm	21×13.37	21×13.37	21×13.37	21×13.37
Indoor limit value of static pressure and air flow		Pa/CFM	25/800	37.5/1120	50/1560	50/1700
Indoor sound level (sound power level)		dB(A)	53/47/44	54/49/46	55/52/49	56/54/51
Metering device	Throttle type		TXV	TXV	TXV	TXV
	Model number		TR6-3TON(067U3510)	TR6-3TON(067U3510)	TR6-4TON(067U3506)	TR6-5TON(067U3509)
Electrical Data	Voltage-Phase-Hz	V-Ph-Hz	208/230V-1Ph-60hz			
	Minimum Circuit Ampacity		1.3	2.5	4.0	4.0
	Max. Overcurrent Protection		2.25	4.41	7.11	7.11
	Min/Max Volts		187/253	187/253	187/253	187/253
Indoor unit	Dimension (W*H*D)	mm	500×1180×550	500×1180×550	560×1385×610	560×1385×610
		inch	19-5/8× 46-1/2× 21-5/8	19-5/8× 46-1/2× 21-5/8	22× 54-1/2×24	22× 54-1/2×24
	Packing (W*H*D)	mm	567×1197×644	567×1197×644	627×1402×704	627×1402×704
		inch	22-5/16× 47-1/8× 25-3/8	22-5/16× 47-1/8× 25-3/8	24-11/16× 55-3/16× 27-11/16	24-11/16× 55-3/16× 27-11/16
	Net/Gross weight	kg	54/60	55/62	73.5/81.5	77/85
		lbs	119/132	121/137	161/1	170/187
Refrigerant piping Liquid side/ Gas side		inch	3/8 3/4	3/8 3/4	3/8 3/4	3/8 3/4
Shipping per STD40HQ						

2.2 Indoor Units

MVME-024-180/ MVME-036-180 / MVME-048-180 / MVME-060-180

Figure 2-2.3: MVME-024-180/ MVME-036-180 / MVME-048-180 / MVME-060-180 dimensions (unit: mm)

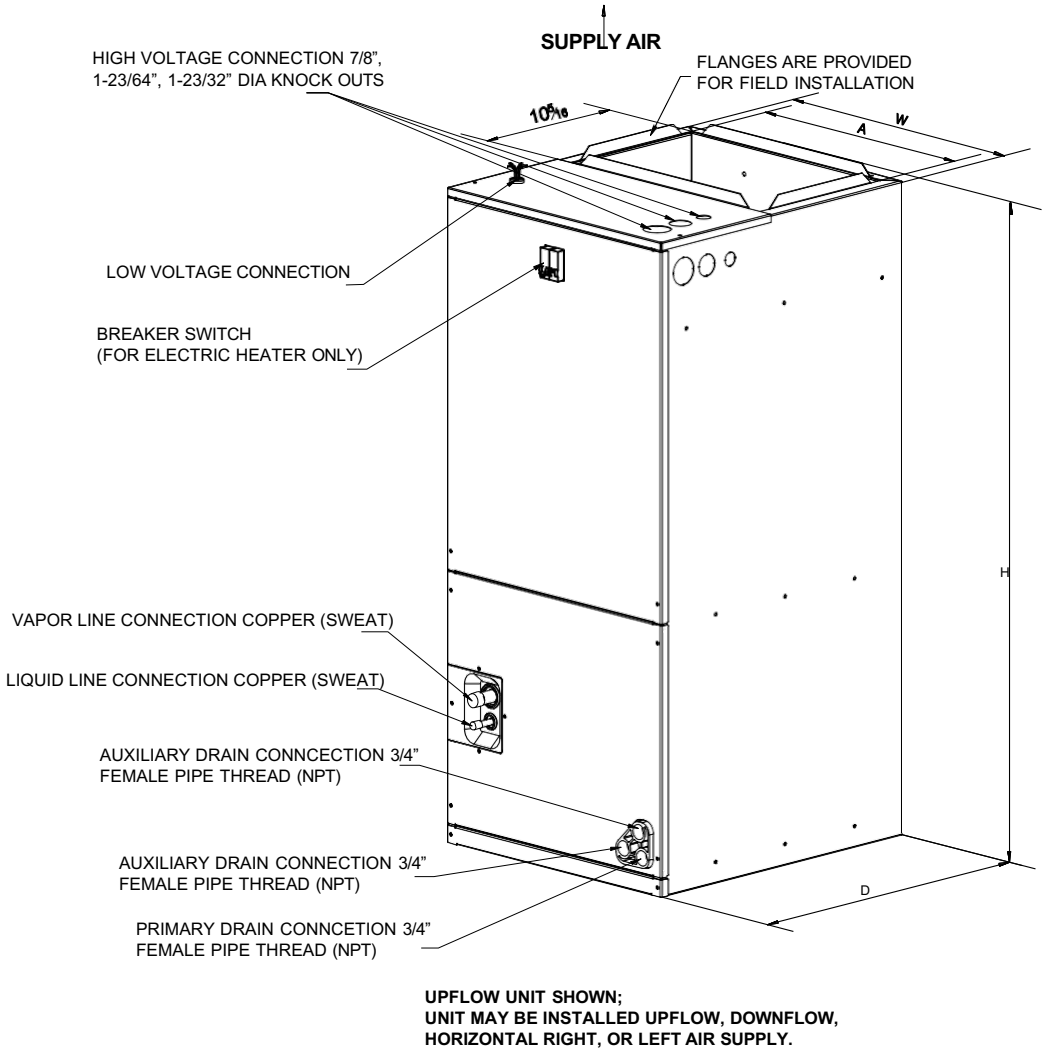


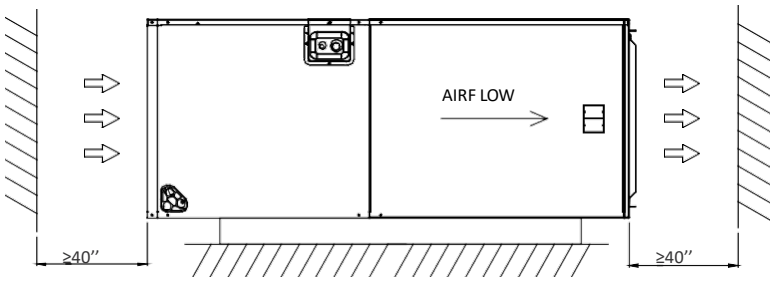
Table 2-2.2: Unit dimensions

Model name	Dimensions (mm)			
	"H" mm (in.)	"W" mm (in.)	"L" mm (in.)	Supply duct "A" mm (in.)
MVME-024-180	1180 (46-1/2)	500 (19-5/8)	550 (21-5/8)	456 (18)
MVME-036-180				
MVME-048-180	1385 (54-1/2)	560 (22)	610 (24)	496 (19-1/2)
MVME-060-180				

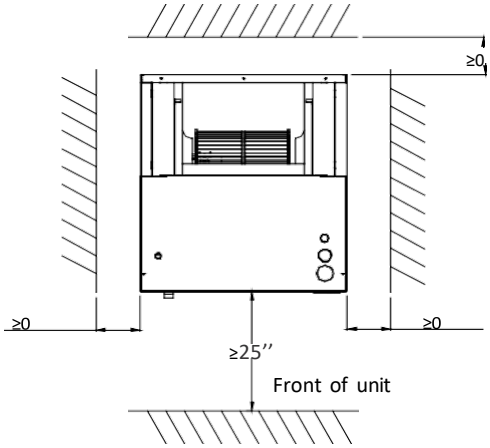
2 Installation Space Requirements

3.1 Indoor Units

Indoor units installation space requirements in the horizontal position



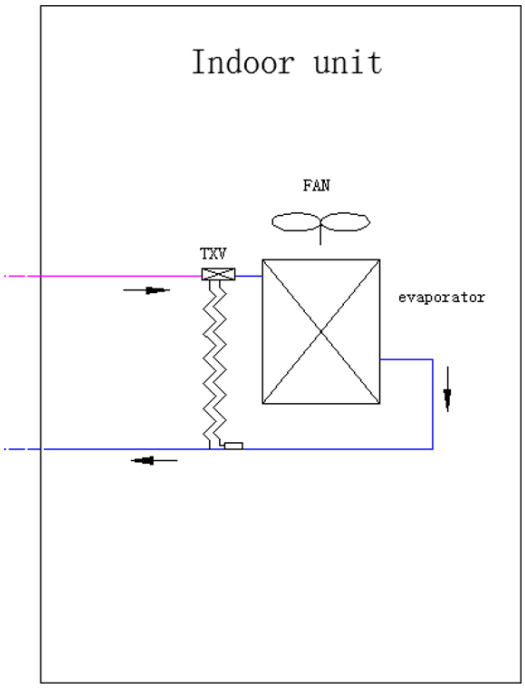
Indoor units installation space requirements in the vertical position



3 Piping Diagrams

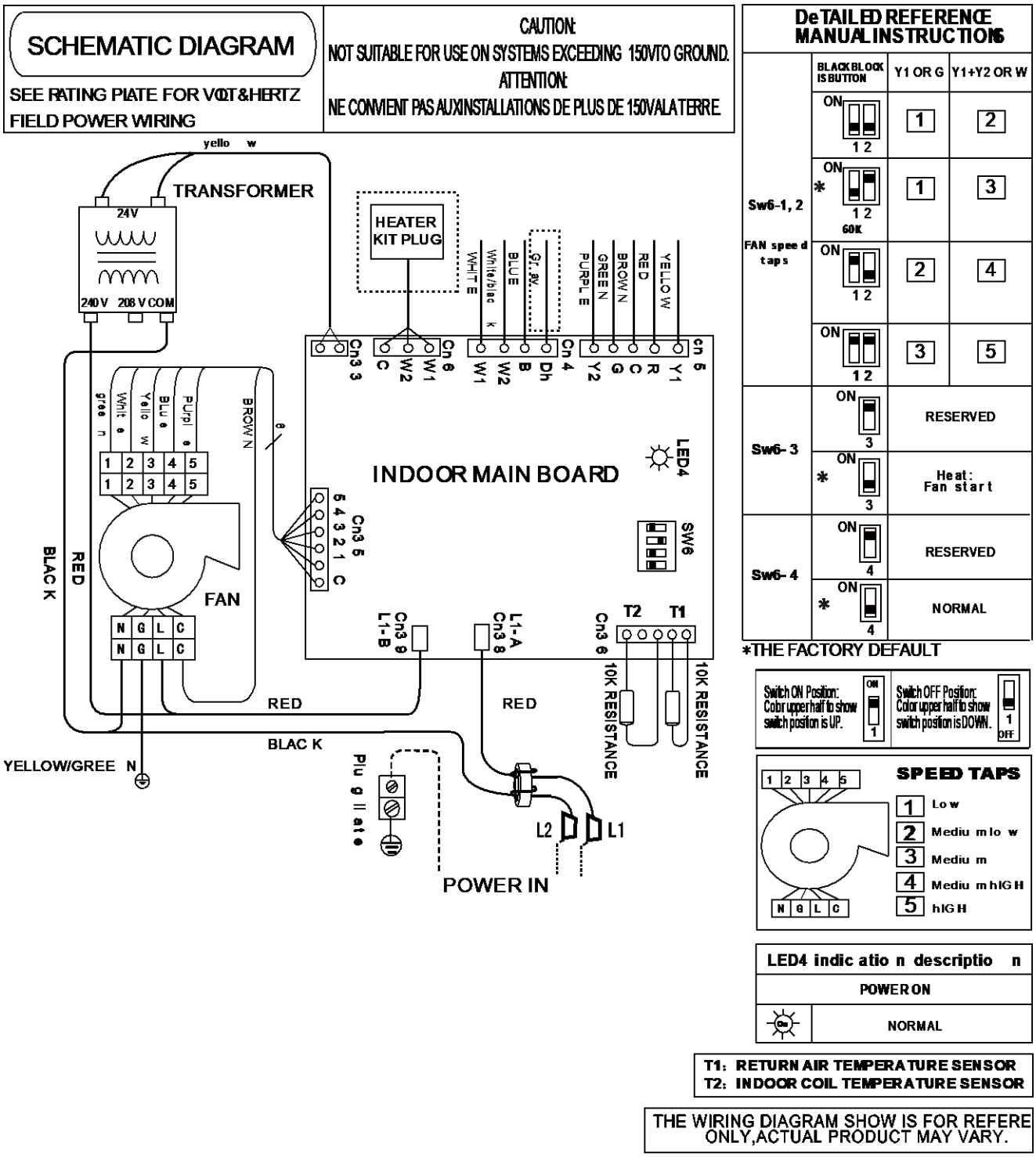
Figure 2-4.1: piping diagram

MVME-024-180/ MVME-036-180 / MVME-048-180 / MVME-060-180



5.2 Indoor Units

Figure 2-5.3: MVME-024-180/ MVME-036-180 / MVME-048-180/ MVME-060-180 wiring diagram



4 Capacity Tables

6.1 Cooling Capacity Tables

Table2-6.1: MVME-024-180 cooling capacity when matched with CDV-036-180¹ or CDV-036-200¹

Airflow	Outdoor DB	IWB	59				63				67				71			
		IDB	70	75	80	85	70	75	80	85	70	75	80	85	70	75	80	85
700	65	TC	17.2	17.3	17.3	17.4	20.3	20.4	20.5	20.7	23.4	23.5	23.6	23.7	*	27.4	27.5	27.6
		S/T	0.85	1.00	1.00	1.00	0.57	0.76	0.97	1.00	0.38	0.55	0.73	0.89	*	0.37	0.52	0.67
		KW	0.84	0.84	0.84	0.84	0.89	0.89	0.89	0.89	1.06	1.06	1.06	1.06	*	1.25	1.25	1.25
	75	TC	17.2	17.3	17.3	17.4	20.3	20.4	20.5	20.7	23.4	23.5	23.6	23.7	*	27.4	27.5	27.6
		S/T	0.85	1.00	1.00	1.00	0.57	0.76	0.97	1.00	0.38	0.55	0.73	0.89	*	0.37	0.52	0.67
		KW	1.01	1.01	1.01	1.01	1.08	1.08	1.08	1.08	1.31	1.31	1.31	1.31	*	1.54	1.54	1.54
	85	TC	17.2	17.3	17.3	17.4	20.3	20.4	20.5	20.7	23.4	23.5	23.6	23.7	*	27.4	27.5	27.6
		S/T	0.85	1.00	1.00	1.00	0.57	0.76	0.97	1.00	0.38	0.55	0.73	0.89	*	0.37	0.52	0.67
		KW	1.20	1.20	1.20	1.20	1.35	1.35	1.35	1.35	1.58	1.58	1.58	1.58	*	1.90	1.90	1.90
	95	TC	17.2	17.3	17.3	17.4	20.3	20.4	20.5	20.7	23.4	23.5	23.6	23.7	*	27.4	27.5	27.6
		S/T	0.85	1.00	1.00	1.00	0.57	0.76	0.97	1.00	0.38	0.55	0.73	0.89	*	0.37	0.52	0.67
		KW	1.33	1.33	1.33	1.33	1.62	1.62	1.62	1.62	1.90	1.90	1.90	1.90	*	2.24	2.24	2.24
	105	TC	17.2	17.3	17.3	17.4	20.3	20.4	20.5	20.7	22.9	23.0	23.1	23.2	*	24.2	24.3	24.4
		S/T	0.85	1.00	1.00	1.00	0.57	0.76	0.97	1.00	0.38	0.55	0.73	0.89	*	0.38	0.53	0.68
		KW	1.61	1.61	1.61	1.61	1.96	1.96	1.96	1.96	2.20	2.20	2.20	2.20	*	2.25	2.25	2.25
	115	TC	17.2	17.3	17.0	17.4	17.8	17.8	17.9	18.0	18.7	18.8	18.9	19.0	*	19.7	19.8	19.9
		S/T	0.85	1.00	1.00	1.00	0.60	0.82	1.00	1.00	0.42	0.62	0.81	0.99	*	0.39	0.58	0.81
		KW	1.88	1.88	1.88	1.88	1.94	1.94	1.94	1.94	2.00	2.00	2.00	2.00	*	2.05	2.05	2.05
800	65	TC	17.5	17.5	17.6	17.7	20.7	20.8	20.9	21.0	23.8	23.9	24.0	24.1	*	27.8	28.0	28.1
		S/T	0.89	1.00	1.00	1.00	0.60	0.80	1.00	1.00	0.40	0.59	0.77	0.94	*	0.39	0.55	0.71
		KW	0.84	0.84	0.84	0.84	0.90	0.90	0.90	0.90	1.08	1.08	1.08	1.08	*	1.27	1.27	1.27
	75	TC	17.5	17.5	17.6	17.7	20.7	20.8	20.9	21.0	23.8	23.9	24.0	24.1	*	27.8	28.0	28.1
		S/T	0.89	1.00	1.00	1.00	0.60	0.80	1.00	1.00	0.40	0.59	0.77	0.94	*	0.39	0.55	0.71
		KW	1.02	1.02	1.02	1.02	1.09	1.09	1.09	1.09	1.32	1.32	1.32	1.32	*	1.56	1.56	1.56
	85	TC	17.5	17.5	17.6	17.7	20.7	20.8	20.9	21.0	23.8	23.9	24.0	24.1	*	27.8	28.0	28.1
		S/T	0.89	1.00	1.00	1.00	0.60	0.80	1.00	1.00	0.40	0.59	0.77	0.94	*	0.39	0.55	0.71
		KW	1.21	1.21	1.21	1.21	1.36	1.36	1.36	1.36	1.59	1.59	1.59	1.59	*	1.92	1.92	1.92
	95	TC	17.5	17.5	17.6	17.7	20.7	20.8	20.9	21.0	23.8	23.9	24.0	24.1	*	27.8	28.0	28.1
		S/T	0.89	1.00	1.00	1.00	0.60	0.80	1.00	1.00	0.40	0.59	0.77	0.94	*	0.39	0.55	0.71
		KW	1.34	1.34	1.34	1.34	1.63	1.63	1.63	1.63	1.92	1.92	1.92	1.92	*	2.27	2.27	2.27
	105	TC	17.5	17.5	17.6	17.7	20.7	20.8	20.9	21.0	23.3	23.4	23.5	23.6	*	24.6	24.7	24.8
		S/T	0.89	1.00	1.00	1.00	0.60	0.80	1.00	1.00	0.40	0.59	0.77	0.94	*	0.40	0.56	0.72
		KW	1.63	1.63	1.63	1.63	1.98	1.98	1.98	1.98	2.23	2.23	2.23	2.23	*	2.27	2.27	2.27
	115	TC	17.5	17.5	17.3	17.7	18.1	18.1	18.2	18.3	19.0	19.1	19.2	19.3	*	20.1	20.2	20.3
		S/T	0.89	1.00	1.00	1.00	0.63	0.87	1.00	1.00	0.44	0.65	0.85	1.00	*	0.41	0.61	0.86
		KW	1.90	1.90	1.90	1.90	1.96	1.96	1.96	1.96	2.02	2.02	2.02	2.02	*	2.08	2.08	2.08
900	65	TC	17.7	17.8	17.9	18.0	21.0	21.1	21.2	21.4	24.2	24.3	24.4	24.5	*	28.3	28.4	28.6
		S/T	0.93	1.00	1.00	1.00	0.62	0.83	1.00	1.00	0.42	0.61	0.80	0.98	*	0.41	0.57	0.73
		KW	0.85	0.85	0.85	0.85	0.91	0.91	0.91	0.91	1.09	1.09	1.09	1.09	*	1.28	1.28	1.28
	75	TC	17.7	17.8	17.9	18.0	21.0	21.1	21.2	21.4	24.2	24.3	24.4	24.5	*	28.3	28.4	28.6
		S/T	0.93	1.00	1.00	1.00	0.62	0.83	1.00	1.00	0.42	0.61	0.80	0.98	*	0.41	0.57	0.73
		KW	1.03	1.03	1.03	1.03	1.11	1.11	1.11	1.11	1.34	1.34	1.34	1.34	*	1.57	1.57	1.57
	85	TC	17.7	17.8	17.9	18.0	21.0	21.1	21.2	21.4	24.2	24.3	24.4	24.5	*	28.3	28.4	28.6
		S/T	0.93	1.00	1.00	1.00	0.62	0.83	1.00	1.00	0.42	0.61	0.80	0.98	*	0.41	0.57	0.73
		KW	1.22	1.22	1.22	1.22	1.38	1.38	1.38	1.38	1.61	1.61	1.61	1.61	*	1.94	1.94	1.94
	95	TC	17.7	17.8	17.9	18.0	21.0	21.1	21.2	21.4	24.2	24.3	24.4	24.5	*	28.3	28.4	28.6
		S/T	0.93	1.00	1.00	1.00	0.62	0.83	1.00	1.00	0.42	0.61	0.80	0.98	*	0.41	0.57	0.73

		KW	1.36	1.36	1.36	1.36	1.65	1.65	1.65	1.65	1.94	1.94	1.94	1.94	*	2.29	2.29	2.29
	105	TC	17.7	17.8	17.9	18.0	21.0	21.1	21.2	21.4	23.7	23.8	23.9	24.0	*	25.0	25.1	25.3
		S/T	0.93	1.00	1.00	1.00	0.62	0.83	1.00	1.00	0.42	0.61	0.80	0.98	*	0.42	0.58	0.75
		KW	1.64	1.64	1.64	1.64	2.00	2.00	2.00	2.00	2.25	2.25	2.25	2.25	*	2.30	2.30	2.30
	115	TC	17.7	17.8	17.6	18.0	18.4	18.5	18.5	18.6	19.3	19.4	19.5	19.6	*	20.4	20.5	20.6
		S/T	0.93	1.00	1.00	1.00	0.66	0.90	1.00	1.00	0.46	0.67	0.89	1.00	*	0.42	0.64	0.89
		KW	1.91	1.91	1.91	1.91	1.98	1.98	1.98	1.98	2.04	2.04	2.04	2.04	*	2.10	2.10	2.10

Table 2-6.2: MVME-036-180 cooling capacity when matched with CDV-036-180 or CDV-036-200

Airflow	Outdoor DB	IWB	59				63				67				71			
		IDB	70	75	80	85	70	75	80	85	70	75	80	85	70	75	80	85
1000	65	TC	25.2	25.3	25.4	25.5	29.8	30.0	30.1	30.3	34.3	34.4	34.6	34.8	*	40.1	40.3	40.5
		S/T	0.84	1.00	1.00	1.00	0.56	0.75	0.95	1.00	0.37	0.55	0.72	0.88	*	0.37	0.51	0.66
		KW	1.26	1.26	1.26	1.26	1.34	1.34	1.34	1.34	1.60	1.60	1.60	1.60	*	1.89	1.89	1.89
	75	TC	25.2	25.3	25.4	25.5	29.8	30.0	30.1	30.3	34.3	34.4	34.6	34.8	*	40.1	40.3	40.5
		S/T	0.84	1.00	1.00	1.00	0.56	0.75	0.95	1.00	0.37	0.55	0.72	0.88	*	0.37	0.51	0.66
		KW	1.52	1.52	1.52	1.52	1.63	1.63	1.63	1.63	1.97	1.97	1.97	1.97	*	2.32	2.32	2.32
	85	TC	25.2	25.3	25.4	25.5	29.8	30.0	30.1	30.3	34.3	34.4	34.6	34.8	*	40.1	40.3	40.5
		S/T	0.84	1.00	1.00	1.00	0.56	0.75	0.95	1.00	0.37	0.55	0.72	0.88	*	0.37	0.51	0.66
		KW	1.80	1.80	1.80	1.80	2.03	2.03	2.03	2.03	2.37	2.37	2.37	2.37	*	2.86	2.86	2.86
	95	TC	25.2	25.3	25.4	25.5	29.8	30.0	30.1	30.3	34.3	34.4	34.6	34.8	*	40.1	40.3	40.5
		S/T	0.84	1.00	1.00	1.00	0.56	0.75	0.95	1.00	0.37	0.55	0.72	0.88	*	0.37	0.51	0.66
		KW	2.00	2.00	2.00	2.00	2.43	2.43	2.43	2.43	2.86	2.86	2.86	2.86	*	3.47	3.47	3.47
	105	TC	25.2	25.3	25.4	25.5	29.8	30.0	30.1	30.3	34.3	34.4	34.6	34.8	*	37.2	37.4	37.6
		S/T	0.84	1.00	1.00	1.00	0.56	0.75	0.95	1.00	0.37	0.55	0.72	0.88	*	0.37	0.52	0.67
		KW	2.60	2.60	2.60	2.60	2.92	2.92	2.92	2.92	3.60	3.60	3.60	3.60	*	3.80	3.80	3.80
	115	TC	25.2	25.3	25.4	25.5	26.0	26.2	26.3	26.4	27.4	27.5	27.7	27.8	*	29.3	29.4	29.6
		S/T	0.84	1.00	1.00	1.00	0.59	0.81	1.00	1.00	0.42	0.61	0.80	0.98	*	0.38	0.57	0.80
		KW	2.95	2.95	2.95	2.95	3.00	3.00	3.00	3.00	3.09	3.09	3.09	3.09	*	3.20	3.20	3.20
1180	65	TC	25.6	25.7	25.9	26.0	30.3	30.5	30.6	30.8	34.8	35.0	35.2	35.4	*	40.8	41.0	41.2
		S/T	0.88	1.00	1.00	1.00	0.59	0.79	1.00	1.00	0.40	0.58	0.76	0.93	*	0.39	0.54	0.70
		KW	1.27	1.27	1.27	1.27	1.36	1.36	1.36	1.36	1.62	1.62	1.62	1.62	*	1.91	1.91	1.91
	75	TC	25.6	25.7	25.9	26.0	30.3	30.5	30.6	30.8	34.8	35.0	35.2	35.4	*	40.8	41.0	41.2
		S/T	0.88	1.00	1.00	1.00	0.59	0.79	1.00	1.00	0.40	0.58	0.76	0.93	*	0.39	0.54	0.70
		KW	1.53	1.53	1.53	1.53	1.65	1.65	1.65	1.65	1.99	1.99	1.99	1.99	*	2.34	2.34	2.34
	85	TC	25.6	25.7	25.9	26.0	30.3	30.5	30.6	30.8	34.8	35.0	35.2	35.4	*	40.8	41.0	41.2
		S/T	0.88	1.00	1.00	1.00	0.59	0.79	1.00	1.00	0.40	0.58	0.76	0.93	*	0.39	0.54	0.70
		KW	1.82	1.82	1.82	1.82	2.05	2.05	2.05	2.05	2.40	2.40	2.40	2.40	*	2.89	2.89	2.89
	95	TC	25.6	25.7	25.9	26.0	30.3	30.5	30.6	30.8	34.8	35.0	35.2	35.4	*	40.8	41.0	41.2
		S/T	0.88	1.00	1.00	1.00	0.59	0.79	1.00	1.00	0.40	0.58	0.76	0.93	*	0.39	0.54	0.70
		KW	2.02	2.02	2.02	2.02	2.46	2.46	2.46	2.46	2.89	2.89	2.89	2.89	*	3.51	3.51	3.51
	105	TC	25.6	25.7	25.9	26.0	30.3	30.5	30.6	30.8	34.8	35.0	35.2	35.4	*	37.8	38.0	38.2
		S/T	0.88	1.00	1.00	1.00	0.59	0.79	1.00	1.00	0.40	0.58	0.76	0.93	*	0.40	0.55	0.71
		KW	2.63	2.63	2.63	2.63	2.95	2.95	2.95	2.95	3.64	3.64	3.64	3.64	*	3.84	3.84	3.84
	115	TC	25.6	25.7	25.9	26.0	26.5	26.6	26.8	26.9	27.9	28.0	28.2	28.3	*	29.8	29.9	30.1
		S/T	0.88	1.00	1.00	1.00	0.62	0.86	1.00	1.00	0.44	0.64	0.84	1.00	*	0.40	0.60	0.85
		KW	2.98	2.98	2.98	2.98	3.03	3.03	3.03	3.03	3.12	3.12	3.12	3.12	*	3.24	3.24	3.24
1320	65	TC	26.0	26.2	26.3	26.4	30.9	31.0	31.2	31.3	35.4	35.6	35.8	36.0	*	41.5	41.7	41.9
		S/T	0.92	1.00	1.00	1.00	0.62	0.82	1.00	1.00	0.41	0.60	0.79	0.96	*	0.40	0.56	0.73
		KW	1.28	1.28	1.28	1.28	1.37	1.37	1.37	1.37	1.64	1.64	1.64	1.64	*	1.93	1.93	1.93
	75	TC	26.0	26.2	26.3	26.4	30.9	31.0	31.2	31.3	35.4	35.6	35.8	36.0	*	41.5	41.7	41.9
		S/T	0.92	1.00	1.00	1.00	0.62	0.82	1.00	1.00	0.41	0.60	0.79	0.96	*	0.40	0.56	0.73
		KW	1.55	1.55	1.55	1.55	1.66	1.66	1.66	1.66	2.01	2.01	2.01	2.01	*	2.37	2.37	2.37
	85	TC	26.0	26.2	26.3	26.4	30.9	31.0	31.2	31.3	35.4	35.6	35.8	36.0	*	41.5	41.7	41.9
		S/T	0.92	1.00	1.00	1.00	0.62	0.82	1.00	1.00	0.41	0.60	0.79	0.96	*	0.40	0.56	0.73

		KW	1.84	1.84	1.84	1.84	2.07	2.07	2.07	2.07	2.42	2.42	2.42	2.42	*	2.92	2.92	2.92
	95	TC	26.0	26.2	26.3	26.4	30.9	31.0	31.2	31.3	35.4	35.6	35.8	36.0	*	41.5	41.7	41.9
		S/T	0.92	1.00	1.00	1.00	0.62	0.82	1.00	1.00	0.41	0.60	0.79	0.96	*	0.40	0.56	0.73
		KW	2.04	2.04	2.04	2.04	2.48	2.48	2.48	2.48	2.92	2.92	2.92	2.92	*	3.55	3.55	3.55
	105	TC	26.0	26.2	26.3	26.4	30.9	31.0	31.2	31.3	35.4	35.6	35.8	36.0	*	38.5	38.7	38.9
		S/T	0.92	1.00	1.00	1.00	0.62	0.82	1.00	1.00	0.41	0.60	0.79	0.96	*	0.41	0.58	0.74
		KW	2.66	2.66	2.66	2.66	2.98	2.98	2.98	2.98	3.68	3.68	3.68	3.68	*	3.88	3.88	3.88
	115	TC	26.0	26.2	26.3	26.4	26.9	27.1	27.2	27.3	28.4	28.5	28.6	28.8	*	30.3	30.4	30.6
		S/T	0.92	1.00	1.00	1.00	0.65	0.89	1.00	1.00	0.46	0.67	0.88	1.00	*	0.42	0.63	0.88
		KW	3.01	3.01	3.01	3.01	3.07	3.07	3.07	3.07	3.15	3.15	3.15	3.15	*	3.27	3.27	3.27

Table 2-6.3: MVME-048-180 cooling capacity when matched with CDV-060-180² or CDV-060-200²

Airflow	Outdoor DB	IWB	59				63				67				71			
		IDB	70	75	80	85	70	75	80	85	70	75	80	85	70	75	80	85
1360	65	TC	34.3	34.5	34.7	34.8	40.7	40.9	41.1	41.3	46.7	47.0	47.2	47.4	*	54.7	55.0	55.3
		S/T	0.84	1.00	1.00	1.00	0.56	0.75	0.95	1.00	0.37	0.55	0.72	0.88	*	0.37	0.51	0.66
		KW	1.67	1.67	1.67	1.67	1.78	1.78	1.78	1.78	2.12	2.12	2.12	2.12	*	2.50	2.50	2.50
	75	TC	34.3	34.5	34.7	34.8	40.7	40.9	41.1	41.3	46.7	47.0	47.2	47.4	*	54.7	55.0	55.3
		S/T	0.84	1.00	1.00	1.00	0.56	0.75	0.95	1.00	0.37	0.55	0.72	0.88	*	0.37	0.51	0.66
		KW	2.01	2.01	2.01	2.01	2.16	2.16	2.16	2.16	2.62	2.62	2.62	2.62	*	3.07	3.07	3.07
	85	TC	34.3	34.5	34.7	34.8	40.7	40.9	41.1	41.3	46.7	47.0	47.2	47.4	*	54.7	55.0	55.3
		S/T	0.84	1.00	1.00	1.00	0.56	0.75	0.95	1.00	0.37	0.55	0.72	0.88	*	0.37	0.51	0.66
		KW	2.39	2.39	2.39	2.39	2.69	2.69	2.69	2.69	3.15	3.15	3.15	3.15	*	3.79	3.79	3.79
	95	TC	34.3	34.5	34.7	34.8	40.7	40.9	41.1	41.3	46.7	47.0	47.2	47.4	*	54.7	55.0	55.3
		S/T	0.84	1.00	1.00	1.00	0.56	0.75	0.95	1.00	0.37	0.55	0.72	0.88	*	0.37	0.51	0.66
		KW	2.65	2.65	2.65	2.65	3.22	3.22	3.22	3.22	3.79	3.79	3.79	3.79	*	4.60	4.60	4.60
	105	TC	34.3	34.5	34.7	34.8	40.7	40.9	41.1	41.3	46.7	47.0	47.2	47.4	*	50.7	51.0	51.2
		S/T	0.84	1.00	1.00	1.00	0.56	0.75	0.95	1.00	0.37	0.55	0.72	0.88	*	0.37	0.52	0.67
		KW	3.45	3.45	3.45	3.45	3.87	3.87	3.87	3.87	4.78	4.78	4.78	4.78	*	5.04	5.04	5.04
	115	TC	34.3	34.5	34.7	34.8	35.5	35.7	35.9	36.1	37.4	37.6	37.8	37.9	*	39.9	40.1	40.3
		S/T	0.84	1.00	1.00	1.00	0.59	0.81	1.00	1.00	0.42	0.61	0.80	0.98	*	0.38	0.57	0.80
		KW	3.90	3.90	3.90	3.90	3.98	3.98	3.98	3.98	4.09	4.09	4.09	4.09	*	4.24	4.24	4.24
1560	65	TC	34.9	35.1	35.3	35.4	41.4	41.6	41.8	42.0	47.5	47.8	48.0	48.2	*	55.7	55.9	56.2
		S/T	0.87	1.00	1.00	1.00	0.59	0.78	0.99	1.00	0.39	0.57	0.75	0.92	*	0.38	0.54	0.69
		KW	1.69	1.69	1.69	1.69	1.80	1.80	1.80	1.80	2.15	2.15	2.15	2.15	*	2.53	2.53	2.53
	75	TC	34.9	35.1	35.3	35.4	41.4	41.6	41.8	42.0	47.5	47.8	48.0	48.2	*	55.7	55.9	56.2
		S/T	0.87	1.00	1.00	1.00	0.59	0.78	0.99	1.00	0.39	0.57	0.75	0.92	*	0.38	0.54	0.69
		KW	2.04	2.04	2.04	2.04	2.19	2.19	2.19	2.19	2.65	2.65	2.65	2.65	*	3.11	3.11	3.11
	85	TC	34.9	35.1	35.3	35.4	41.4	41.6	41.8	42.0	47.5	47.8	48.0	48.2	*	55.7	55.9	56.2
		S/T	0.87	1.00	1.00	1.00	0.59	0.78	0.99	1.00	0.39	0.57	0.75	0.92	*	0.38	0.54	0.69
		KW	2.42	2.42	2.42	2.42	2.73	2.73	2.73	2.73	3.19	3.19	3.19	3.19	*	3.84	3.84	3.84
	95	TC	34.9	35.1	35.3	35.4	41.4	41.6	41.8	42.0	47.5	47.8	48.0	48.2	*	55.7	55.9	56.2
		S/T	0.87	1.00	1.00	1.00	0.59	0.78	0.99	1.00	0.39	0.57	0.75	0.92	*	0.38	0.54	0.69
		KW	2.69	2.69	2.69	2.69	3.26	3.26	3.26	3.26	3.84	3.84	3.84	3.84	*	4.67	4.67	4.67
	105	TC	34.9	35.1	35.3	35.4	41.4	41.6	41.8	42.0	47.5	47.8	48.0	48.2	*	51.6	51.8	52.1
		S/T	0.87	1.00	1.00	1.00	0.59	0.78	0.99	1.00	0.39	0.57	0.75	0.92	*	0.39	0.55	0.70
		KW	3.49	3.49	3.49	3.49	3.92	3.92	3.92	3.92	4.84	4.84	4.84	4.84	*	5.11	5.11	5.11
	115	TC	34.9	35.1	35.3	35.4	36.1	36.3	36.5	36.7	38.0	38.2	38.4	38.6	*	40.6	40.8	41.0
		S/T	0.87	1.00	1.00	1.00	0.62	0.84	1.00	1.00	0.43	0.63	0.83	1.00	*	0.40	0.60	0.83
		KW	3.96	3.96	3.96	3.96	4.03	4.03	4.03	4.03	4.15	4.15	4.15	4.15	*	4.30	4.30	4.30
1760	65	TC	35.5	35.7	35.9	36.0	42.1	42.3	42.5	42.7	48.3	48.6	48.8	49.0	*	56.6	56.9	57.2
		S/T	0.90	1.00	1.00	1.00	0.61	0.81	1.00	1.00	0.41	0.59	0.78	0.95	*	0.40	0.56	0.72
		KW	1.71	1.71	1.71	1.71	1.83	1.83	1.83	1.83	2.18	2.18	2.18	2.18	*	2.57	2.57	2.57
	75	TC	35.5	35.7	35.9	36.0	42.1	42.3	42.5	42.7	48.3	48.6	48.8	49.0	*	56.6	56.9	57.2

		S/T	0.90	1.00	1.00	1.00	0.61	0.81	1.00	1.00	0.41	0.59	0.78	0.95	*	0.40	0.56	0.72
		KW	2.06	2.06	2.06	2.06	2.22	2.22	2.22	2.22	2.68	2.68	2.68	2.68	*	3.15	3.15	3.15
	85	TC	35.5	35.7	35.9	36.0	42.1	42.3	42.5	42.7	48.3	48.6	48.8	49.0	*	56.6	56.9	57.2
		S/T	0.90	1.00	1.00	1.00	0.61	0.81	1.00	1.00	0.41	0.59	0.78	0.95	*	0.40	0.56	0.72
		KW	2.45	2.45	2.45	2.45	2.76	2.76	2.76	2.76	3.23	3.23	3.23	3.23	*	3.89	3.89	3.89
	95	TC	35.5	35.7	35.9	36.0	42.1	42.3	42.5	42.7	48.3	48.6	48.8	49.0	*	56.6	56.9	57.2
		S/T	0.90	1.00	1.00	1.00	0.61	0.81	1.00	1.00	0.41	0.59	0.78	0.95	*	0.40	0.56	0.72
		KW	2.72	2.72	2.72	2.72	3.31	3.31	3.31	3.31	3.89	3.89	3.89	3.89	*	4.73	4.73	4.73
	105	TC	35.5	35.7	35.9	36.0	42.1	42.3	42.5	42.7	48.3	48.6	48.8	49.0	*	52.4	52.7	53.0
		S/T	0.90	1.00	1.00	1.00	0.61	0.81	1.00	1.00	0.41	0.59	0.78	0.95	*	0.41	0.57	0.73
		KW	3.54	3.54	3.54	3.54	3.97	3.97	3.97	3.97	4.90	4.90	4.90	4.90	*	5.17	5.17	5.17
	115	TC	35.5	35.7	35.9	36.0	36.7	36.9	37.1	37.3	38.7	38.8	39.0	39.2	*	41.3	41.5	41.7
		S/T	0.90	1.00	1.00	1.00	0.64	0.88	1.00	1.00	0.45	0.66	0.87	1.00	*	0.41	0.62	0.87
		KW	4.01	4.01	4.01	4.01	4.08	4.08	4.08	4.08	4.20	4.20	4.20	4.20	*	4.36	4.36	4.36

Table 2-6.4: MVME-060-180 cooling capacity when matched with CDV-060-180 or CDV-060-200

Airflow	Outdoor DB	IWB	59				63				67				71			
		IDB	70	75	80	85	70	75	80	85	70	75	80	85	70	75	80	85
1500	65	TC	41.5	41.7	41.9	42.2	49.2	49.5	49.7	50.0	56.5	56.8	57.1	57.4	*	66.2	66.5	66.9
		S/T	0.80	1.00	1.00	1.00	0.54	0.72	0.91	1.00	0.36	0.52	0.69	0.84	*	0.35	0.49	0.63
		KW	2.16	2.16	2.16	2.16	2.31	2.31	2.31	2.31	2.75	2.75	2.75	2.75	*	3.24	3.24	3.24
	75	TC	41.5	41.7	41.9	42.2	49.2	49.5	49.7	50.0	56.5	56.8	57.1	57.4	*	66.2	66.5	66.9
		S/T	0.80	1.00	1.00	1.00	0.54	0.72	0.91	1.00	0.36	0.52	0.69	0.84	*	0.35	0.49	0.63
		KW	2.60	2.60	2.60	2.60	2.80	2.80	2.80	2.80	3.39	3.39	3.39	3.39	*	3.98	3.98	3.98
	85	TC	41.5	41.7	41.9	42.2	49.2	49.5	49.7	50.0	56.5	56.8	57.1	57.4	*	66.2	66.5	66.9
		S/T	0.80	1.00	1.00	1.00	0.54	0.72	0.91	1.00	0.36	0.52	0.69	0.84	*	0.35	0.49	0.63
		KW	3.09	3.09	3.09	3.09	3.49	3.49	3.49	3.49	4.08	4.08	4.08	4.08	*	4.91	4.91	4.91
	95	TC	41.5	41.7	41.9	42.2	49.2	49.5	49.7	50.0	56.5	56.8	57.1	57.4	*	66.2	66.5	66.9
		S/T	0.80	1.00	1.00	1.00	0.54	0.72	0.91	1.00	0.36	0.52	0.69	0.84	*	0.35	0.49	0.63
		KW	3.44	3.44	3.44	3.44	4.17	4.17	4.17	4.17	4.91	4.91	4.91	4.91	*	5.79	5.79	5.79
	105	TC	41.5	41.7	41.9	42.2	49.2	49.5	49.7	50.0	55.4	55.7	56.0	56.2	*	58.5	58.8	59.1
		S/T	0.80	1.00	1.00	1.00	0.54	0.72	0.91	1.00	0.36	0.52	0.69	0.84	*	0.36	0.50	0.65
		KW	4.16	4.16	4.16	4.16	5.07	5.07	5.07	5.07	5.70	5.70	5.70	5.70	*	5.81	5.81	5.81
	115	TC	41.5	41.7	41.1	42.2	43.0	43.2	43.4	43.6	45.2	45.5	45.7	45.9	*	47.7	48.0	48.2
		S/T	0.80	1.00	1.00	1.00	0.57	0.78	0.96	1.00	0.40	0.58	0.77	0.93	*	0.37	0.55	0.77
		KW	4.85	4.85	4.85	4.85	5.00	5.00	5.00	5.00	5.16	5.16	5.16	5.16	*	5.31	5.31	5.31
1700	65	TC	42.2	42.4	42.6	42.8	50.0	50.2	50.5	50.8	57.4	57.7	58.0	58.3	*	67.2	67.6	67.9
		S/T	0.84	1.00	1.00	1.00	0.56	0.75	0.95	1.00	0.37	0.55	0.72	0.88	*	0.37	0.51	0.66
		KW	2.18	2.18	2.18	2.18	2.33	2.33	2.33	2.33	2.78	2.78	2.78	2.78	*	3.27	3.27	3.27
	75	TC	42.2	42.4	42.6	42.8	50.0	50.2	50.5	50.8	57.4	57.7	58.0	58.3	*	67.2	67.6	67.9
		S/T	0.84	1.00	1.00	1.00	0.56	0.75	0.95	1.00	0.37	0.55	0.72	0.88	*	0.37	0.51	0.66
		KW	2.63	2.63	2.63	2.63	2.83	2.83	2.83	2.83	3.42	3.42	3.42	3.42	*	4.02	4.02	4.02
	85	TC	42.2	42.4	42.6	42.8	50.0	50.2	50.5	50.8	57.4	57.7	58.0	58.3	*	67.2	67.6	67.9
		S/T	0.84	1.00	1.00	1.00	0.56	0.75	0.95	1.00	0.37	0.55	0.72	0.88	*	0.37	0.51	0.66
		KW	3.12	3.12	3.12	3.12	3.52	3.52	3.52	3.52	4.12	4.12	4.12	4.12	*	4.96	4.96	4.96
	95	TC	42.2	42.4	42.6	42.8	50.0	50.2	50.5	50.8	57.4	57.7	58.0	58.3	*	67.2	67.6	67.9
		S/T	0.84	1.00	1.00	1.00	0.56	0.75	0.95	1.00	0.37	0.55	0.72	0.88	*	0.37	0.51	0.66
		KW	3.47	3.47	3.47	3.47	4.22	4.22	4.22	4.22	4.96	4.96	4.96	4.96	*	5.85	5.85	5.85
	105	TC	42.2	42.4	42.6	42.8	50.0	50.2	50.5	50.8	56.3	56.6	56.8	57.1	*	59.4	59.7	60.0
		S/T	0.84	1.00	1.00	1.00	0.56	0.75	0.95	1.00	0.37	0.55	0.72	0.88	*	0.37	0.52	0.67
		KW	4.20	4.20	4.20	4.20	5.12	5.12	5.12	5.12	5.75	5.75	5.75	5.75	*	5.87	5.87	5.87
	115	TC	42.2	42.4	41.8	42.8	43.6	43.9	44.1	44.3	45.9	46.2	46.4	46.6	*	48.5	48.7	49.0
		S/T	0.84	1.00	1.00	1.00	0.59	0.81	1.00	1.00	0.42	0.61	0.80	0.98	*	0.38	0.57	0.80
		KW	4.90	4.90	4.90	4.90	5.05	5.05	5.05	5.05	5.21	5.21	5.21	5.21	*	5.36	5.36	5.36

1900	65	TC	42.8	43.1	43.3	43.5	50.8	51.0	51.3	51.5	58.3	58.6	58.9	59.2	*	68.3	68.6	69.0
		S/T	0.87	1.00	1.00	1.00	0.59	0.78	0.99	1.00	0.39	0.57	0.75	0.92	*	0.38	0.54	0.69
		KW	2.20	2.20	2.20	2.20	2.35	2.35	2.35	2.35	2.81	2.81	2.81	2.81	*	3.31	3.31	3.31
	75	TC	42.8	43.1	43.3	43.5	50.8	51.0	51.3	51.5	58.3	58.6	58.9	59.2	*	68.3	68.6	69.0
		S/T	0.87	1.00	1.00	1.00	0.59	0.78	0.99	1.00	0.39	0.57	0.75	0.92	*	0.38	0.54	0.69
		KW	2.66	2.66	2.66	2.66	2.86	2.86	2.86	2.86	3.46	3.46	3.46	3.46	*	4.06	4.06	4.06
	85	TC	42.8	43.1	43.3	43.5	50.8	51.0	51.3	51.5	58.3	58.6	58.9	59.2	*	68.3	68.6	69.0
		S/T	0.87	1.00	1.00	1.00	0.59	0.78	0.99	1.00	0.39	0.57	0.75	0.92	*	0.38	0.54	0.69
		KW	3.16	3.16	3.16	3.16	3.56	3.56	3.56	3.56	4.16	4.16	4.16	4.16	*	5.01	5.01	5.01
	95	TC	42.8	43.1	43.3	43.5	50.8	51.0	51.3	51.5	58.3	58.6	58.9	59.2	*	68.3	68.6	69.0
		S/T	0.87	1.00	1.00	1.00	0.59	0.78	0.99	1.00	0.39	0.57	0.75	0.92	*	0.38	0.54	0.69
		KW	3.51	3.51	3.51	3.51	4.26	4.26	4.26	4.26	5.01	5.01	5.01	5.01	*	5.91	5.91	5.91
	105	TC	42.8	43.1	43.3	43.5	50.8	51.0	51.3	51.5	57.1	57.4	57.7	58.0	*	60.4	60.7	61.0
		S/T	0.87	1.00	1.00	1.00	0.59	0.78	0.99	1.00	0.39	0.57	0.75	0.92	*	0.39	0.55	0.70
		KW	4.24	4.24	4.24	4.24	5.17	5.17	5.17	5.17	5.81	5.81	5.81	5.81	*	5.93	5.93	5.93
	115	TC	42.8	43.1	42.4	43.5	44.3	44.5	44.8	45.0	46.6	46.9	47.1	47.4	*	49.2	49.5	49.7
		S/T	0.87	1.00	1.00	1.00	0.62	0.84	1.00	1.00	0.43	0.63	0.83	1.00	*	0.40	0.60	0.83
		KW	4.94	4.94	4.94	4.94	5.10	5.10	5.10	5.10	5.26	5.26	5.26	5.26	*	5.42	5.42	5.42

Notes:

[1] When the DIP switch is set for 24.000 BTU capacity.
[2] When the DIP switch is set for 48.000 BTU capacity.

Part 3
Field Settings

1 Thermostat **15**

3 Thermostat

3.1 Control wiring

Figure 4-3.1: 3H and 2C type

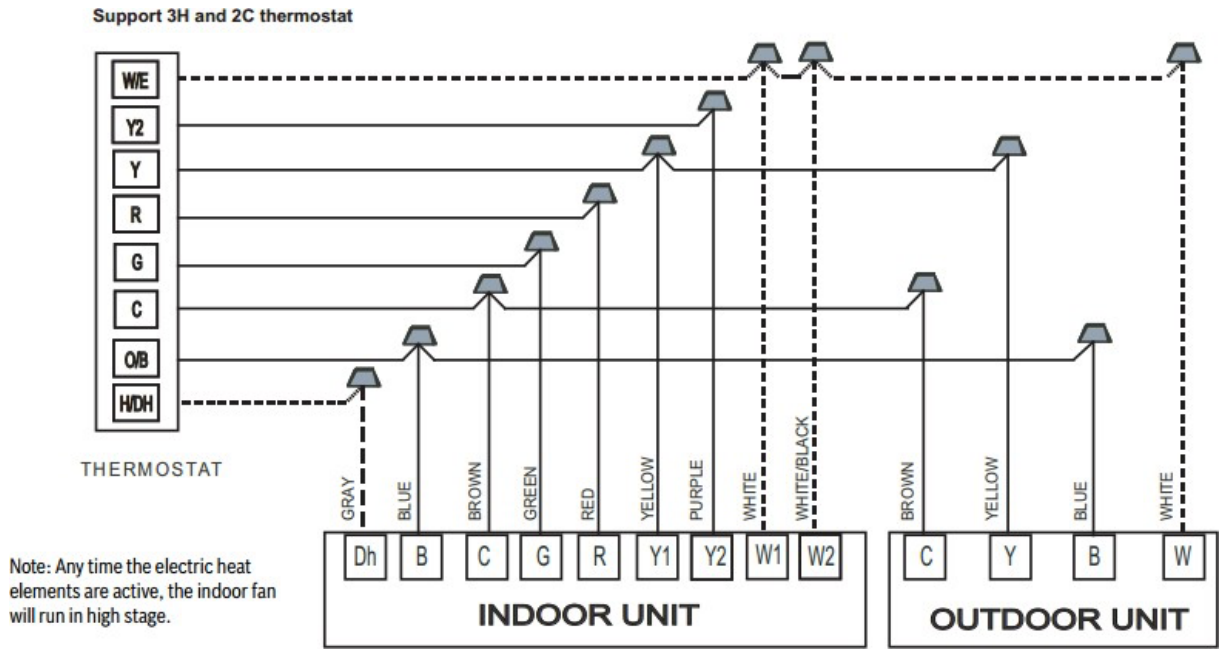


Figure 4-3.2: 4H and 2C type

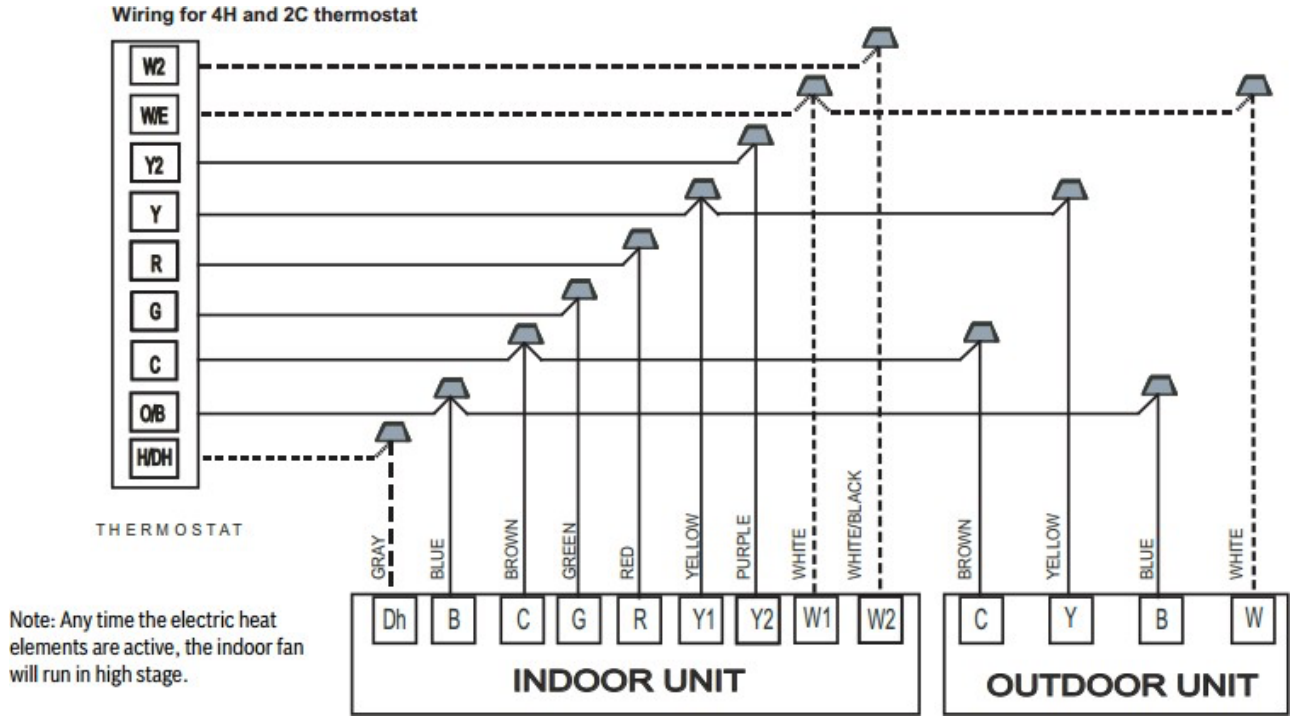


Figure 4-3.3: 3H and 1C type

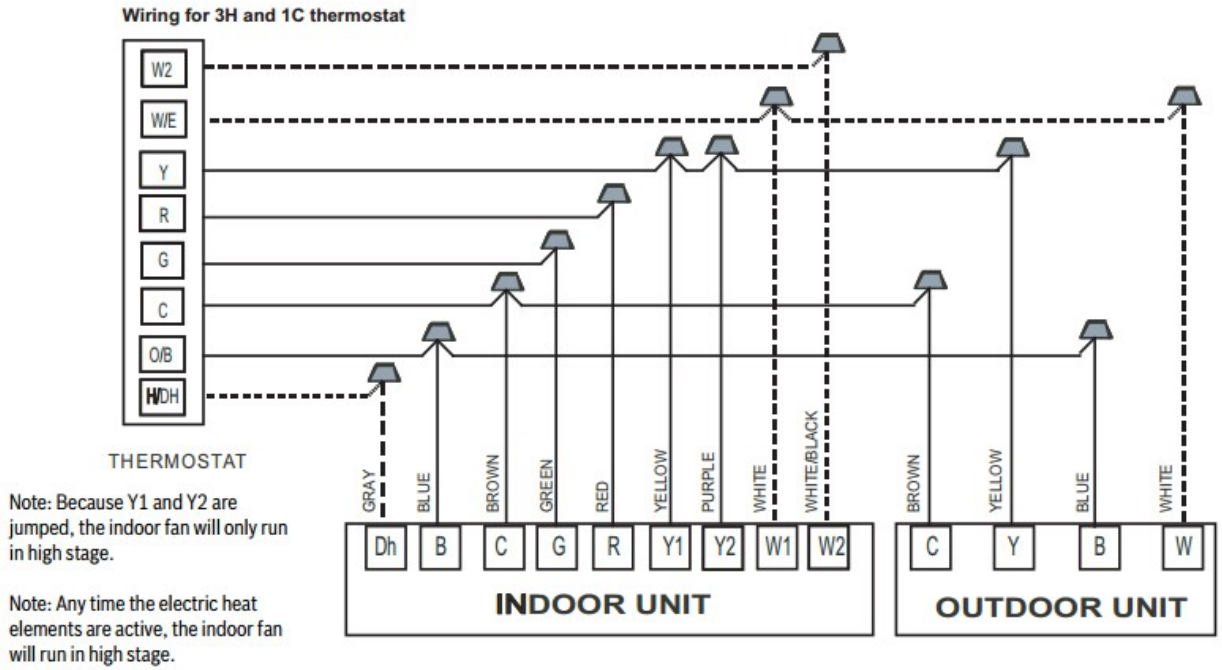


Figure 4-3.4: 2H and 2C type

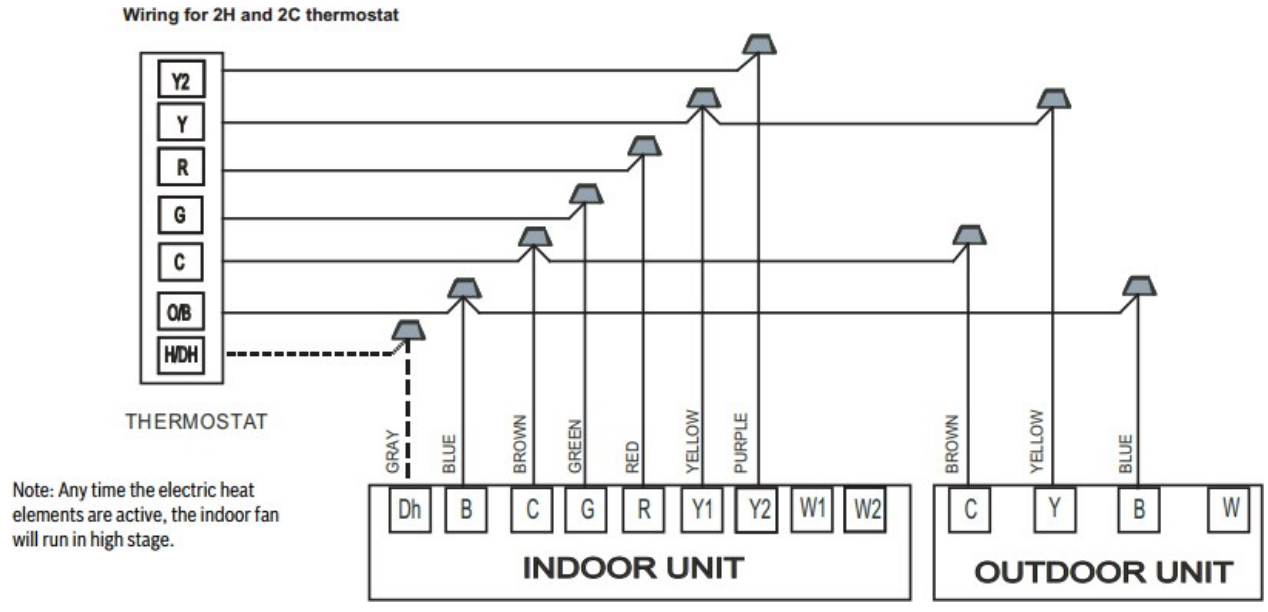


Figure 4-3.5: 2H and 1C type

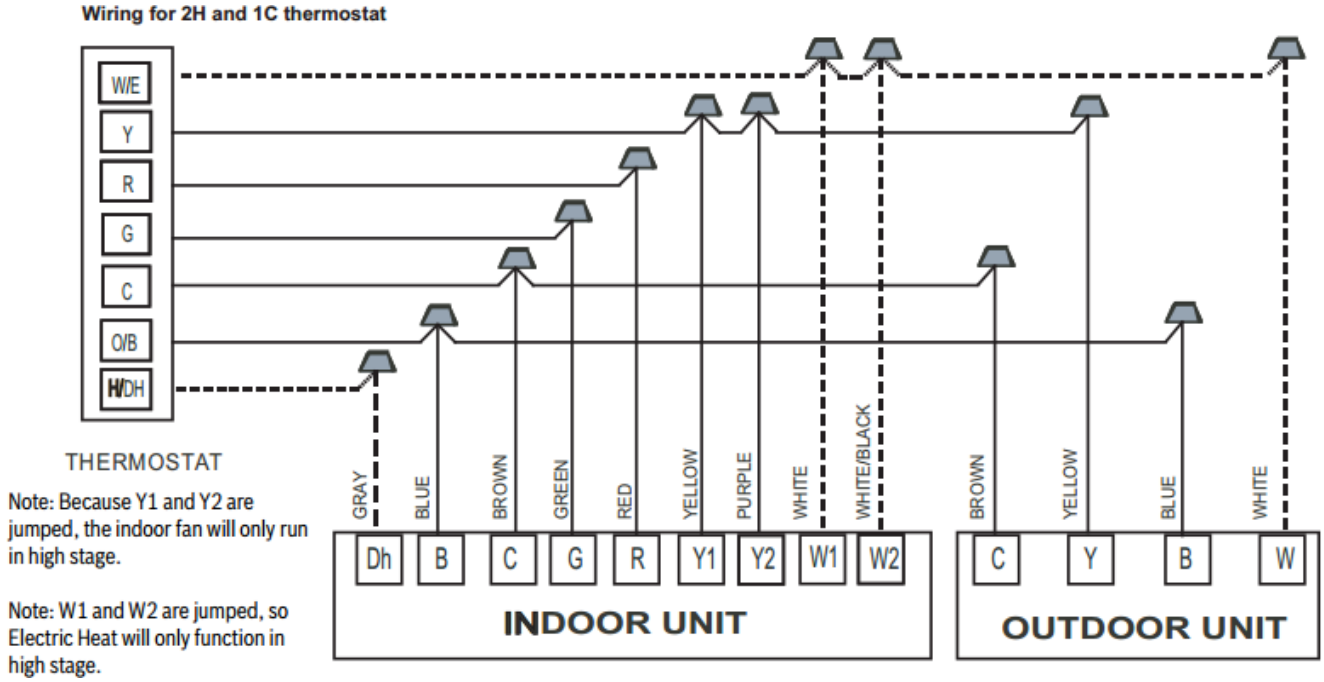
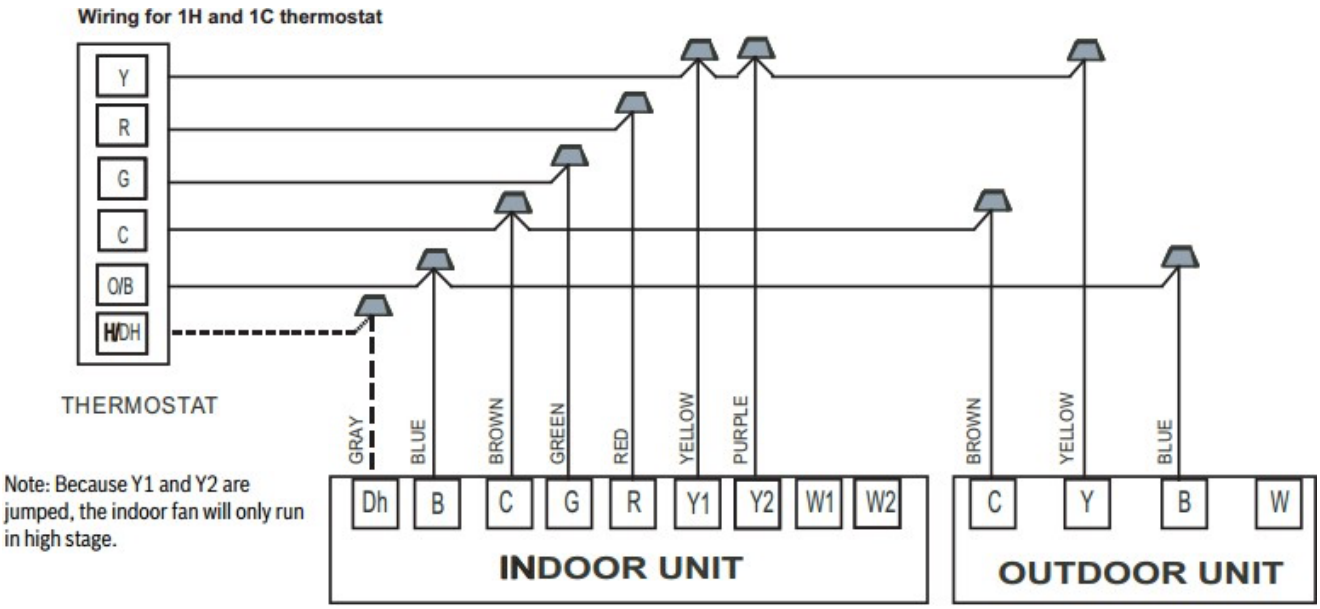


Figure 4-3.4: 1H and 1C type

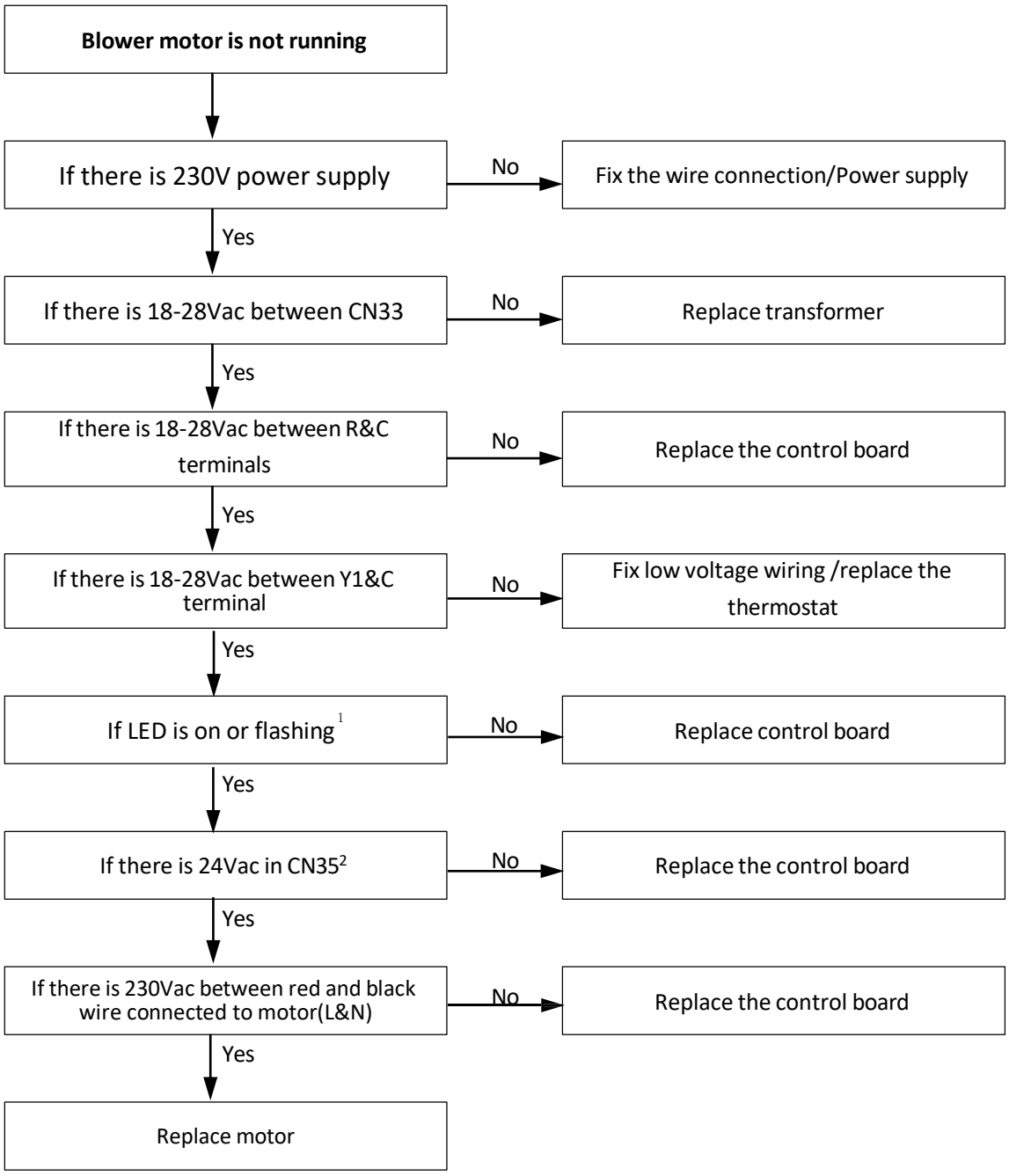


Part 4

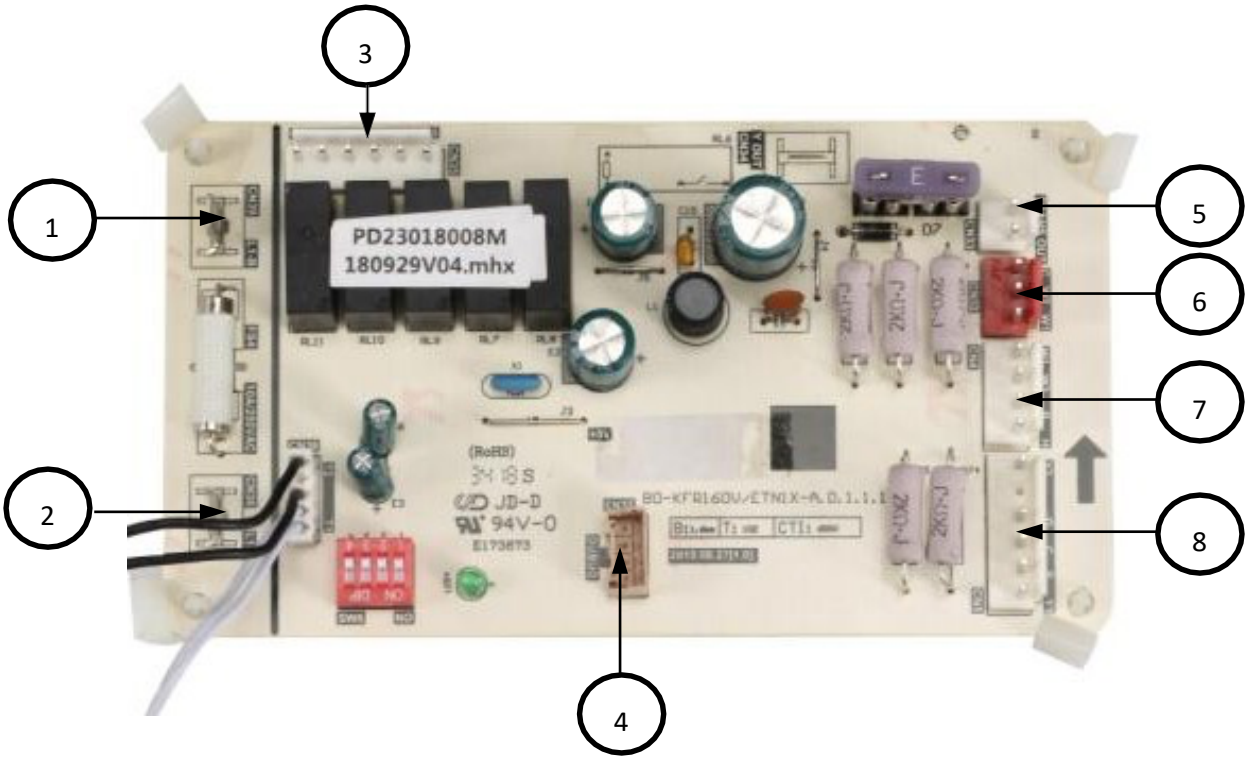
Troubleshooting

1 Check for indoor blower motor..... 19

1 Check for indoor blower motor



Notes:
1. LED is flashing the anti-cold air function is on, no action is needed.
2. There are several wires and terminals. It depends on the speed the blower motor is runing, refer to wiring diagram to find speed setting and measure wiring voltage.



No.	Port code	Content	Port voltage
1	CN39	Fan motor power input	0V or 230V AC
2	CN38	Fan motor power input	0V or 230V AC
3	CN35	Fan speed control	0V or 24V AC
4	CN37	Reserved （debug）	/
5	CN33	Power input of main board	0V or 24V AC
6	CN6	Electric heater signal input	0V or 24V AC
7	CN4	Signals input （W1, W2，Dh，B）	0V or 24V AC
8	CN5	Signals input （Y1,Y2,R,C，G）	0V or 24V AC

NOTE - Due to Nōrden's ongoing commitment to quality, specifications, ratings, and dimensions are subject to change without notice and without incurring liability.