

MODEL: PA89M1C-4DZDE

R410A 1Φ — 220 V ~ 50 Hz

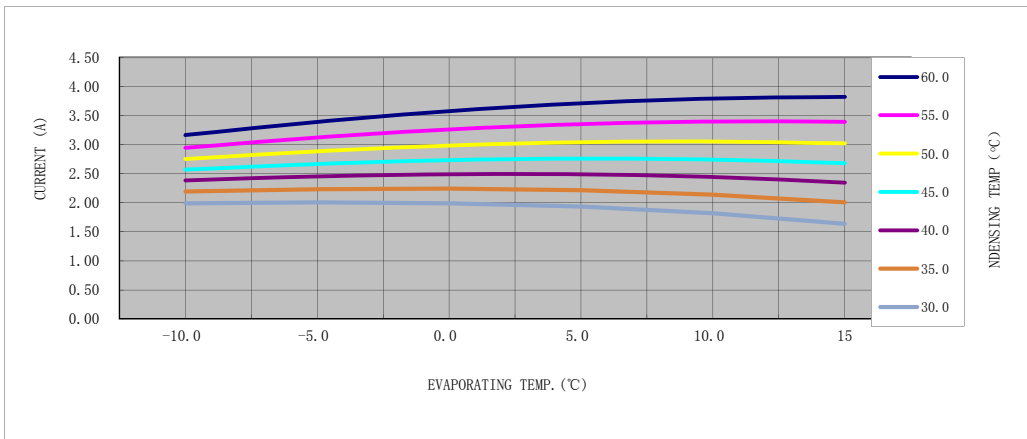
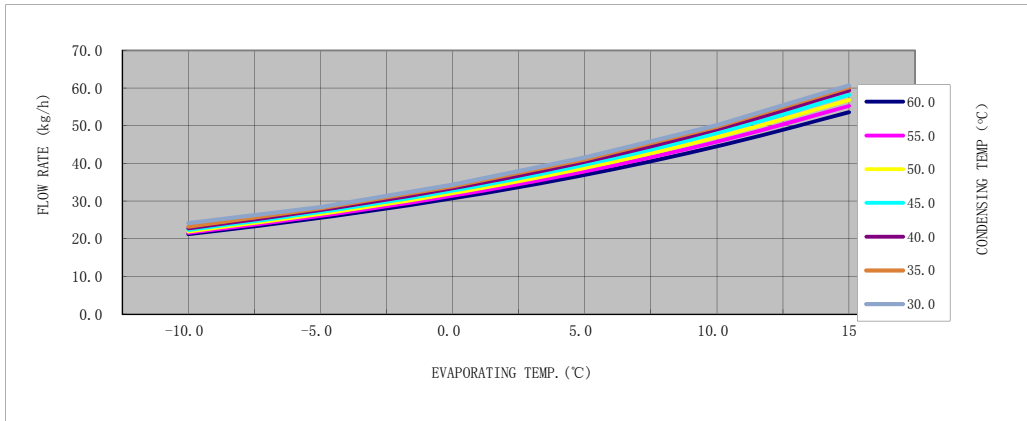
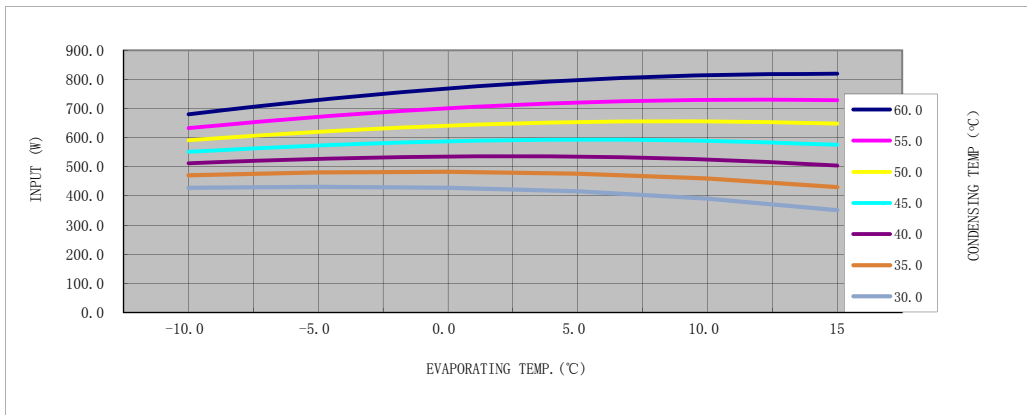
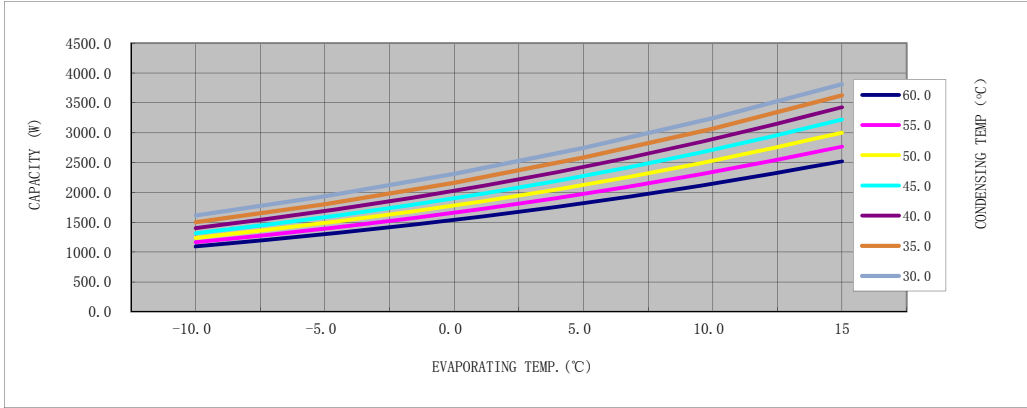
RETURN GAS TEMP. — 35 °C

SUBCOOLING — 8.3 °C

AMBIENT TEMP. — 35 °C

RUNNING CAPACITOR — 25 μF

PERFORMANCE CURVE (ASHRAE)



1、Rated condition data

Model	Displacement	Frequency	Power supply	Running capacitor	Capacity	Input power	Flow rate	Current
	cc	Hz	V	uF	W	W	kg/h	A
PA89M1C-4DZDE	8.9	50	220	25	2151.0	714.0	42.8	3.32

2、Data under different condition

Capacity(W)		Evaporating Temp.(°C)					
		-10.0	-5.0	0.0	5.0	10.0	15
Condensing Temp.(°C)	60.0	1093.6	1298.9	1539.1	1819.9	2144.5	2520.0
	55.0	1164.7	1392.5	1660.4	1974.7	2340.0	2766.5
	50.0	1237.1	1486.3	1780.0	2125.2	2529.1	2999.6
	45.0	1315.2	1583.3	1901.2	2275.4	2712.1	3219.1
	40.0	1400.6	1687.7	2027.6	2426.5	2890.3	3426.3
	35.0	1498.3	1803.3	2162.9	2582.1	3067.0	3623.4
	30.0	1612.5	1934.6	2311.4	2747.4	3246.5	3812.8

Input Power(W)		Evaporating Temp.(°C)					
		-10.0	-5.0	0.0	5.0	10.0	15
Condensing Temp.(°C)	60.0	680.5	729.7	769.1	797.7	814.7	819.7
	55.0	632.9	671.3	700.8	720.6	730.0	728.3
	50.0	590.7	620.2	641.3	653.6	656.1	648.3
	45.0	551.5	573.2	587.4	592.9	589.4	575.5
	40.0	512.1	527.2	535.0	534.8	524.9	503.8
	35.0	470.9	480.4	482.5	476.1	459.5	430.3
	30.0	427.7	431.7	428.2	415.4	390.7	351.1

Flow Rate(kg/h)		Evaporating Temp.(°C)					
		-10.0	-5.0	0.0	5.0	10.0	15
Condensing Temp.(°C)	60.0	21.2	25.5	30.7	37.0	44.5	53.6
	55.0	21.5	26.0	31.4	37.9	45.7	55.3
	50.0	21.9	26.5	32.1	38.8	46.9	56.8
	45.0	22.4	27.1	32.8	39.7	48.1	58.2
	40.0	22.8	27.6	33.4	40.5	49.0	59.4
	35.0	23.2	28.0	34.0	41.1	49.8	60.2
	30.0	24.2	28.4	34.4	41.6	50.2	60.7

Current(A)		Evaporating Temp.(°C)					
		-10.0	-5.0	0.0	5.0	10.0	15
Condensing Temp.(°C)	60.0	3.16	3.39	3.57	3.71	3.79	3.82
	55.0	2.94	3.12	3.26	3.35	3.40	3.39
	50.0	2.75	2.89	2.98	3.04	3.05	3.02
	45.0	2.57	2.67	2.73	2.76	2.74	2.68
	40.0	2.38	2.45	2.49	2.49	2.44	2.35
	35.0	2.19	2.23	2.24	2.21	2.14	2.00
	30.0	1.99	2.01	1.99	1.93	1.82	1.64

3、Ten coefficient method

$$z = p_1 + p_2 * x + p_3 * y + p_4 * x^2 + p_5 * x * y + p_6 * y^2 + p_7 * x^3 + p_8 * x^2 * y + p_9 * x * y^2 + p_{10} * y^3$$

x——Evaporating Temp.(°C); y——Condensing Temp.(°C)

	Capacity(W)	Input Power(W)	Flow Rate(kg/h)	Current(A)
P1	3.52277461E+03	-1.70186266E+02	3.34076825E+01	-7.68185430E-01
P2	8.15089723E+01	-7.55343941E+00	1.00574653E+00	-3.26810976E-02
P3	-5.52829555E+01	3.14904627E+01	1.70187792E-01	1.44406177E-01
P4	1.63808003E+00	-1.70844608E-01	3.28967925E-02	-7.91430196E-04
P5	4.37229896E-01	1.50595274E-01	1.63364558E-02	5.83840592E-04
P6	6.11801258E-01	-5.08399919E-01	-5.63503037E-03	-2.30892842E-03
P7	7.99024003E-03	-1.63269874E-03	3.08675285E-04	-7.56023233E-06
P8	-1.27941393E-02	-2.93113211E-04	-1.87538596E-04	-1.05282570E-06
P9	-1.56931668E-02	1.44596859E-03	-2.37958789E-04	8.04575910E-06
P10	-4.04597364E-03	4.06734199E-03	3.41126462E-05	1.84444420E-05