

PERFORMANCE DATA

Code No.	C-SBS120H38Q
Power Source	3-PH 50Hz 380V
Condensing Temp.(°C)	30, 35, 40.5, 45, 50, 54.4, 60, 65
Suction Gas Superheat(K)	11.1
Sub Cooled(K)	4
Compressor Cooling	Gas Injection
Refrigerant	R407C

Test Conditions are Mid point.

Heating Capacity (W)

		Evaporating Temp. (°C)							
		-30	-20	-15	-10	0	7.2	10	12
Condensing Temp. (°C)	30	4,900	6,530	7,540	8,710	11,600	14,270	15,460	16,380
	35	5,160	6,790	7,790	8,940	11,760	14,330	15,480	16,360
	40.5	5,450	7,080	8,070	9,190	11,940	14,410	15,500	16,330
	45.0	5,710	7,330	8,310	9,410	12,090	14,470	15,520	16,320
	50.0	6,010	7,620	8,580	9,660	12,250	14,540	15,540	16,300
	54.4	6,280	7,880	8,820	9,880	12,400	14,600	15,560	16,280
	60.0		8,220	9,150	10,180	12,590	14,680	15,580	16,260
	65.0			9,450	10,440	12,760	14,750	15,600	16,240

Input (W)

		Evaporating Temp. (°C)							
		-30	-20	-15	-10	0	7.2	10	12
Condensing Temp. (°C)	30	2,230	2,170	2,140	2,110	2,050	2,000	1,990	1,970
	35	2,450	2,390	2,370	2,340	2,280	2,240	2,230	2,220
	40.5	2,730	2,690	2,660	2,640	2,590	2,560	2,550	2,540
	45.0	3,000	2,960	2,940	2,920	2,890	2,860	2,850	2,840
	50.0	3,320	3,300	3,290	3,270	3,250	3,230	3,230	3,220
	54.4	3,630	3,620	3,620	3,610	3,610	3,600	3,600	3,600
	60.0		4,080	4,080	4,090	4,110	4,120	4,120	4,120
	65.0			4,530	4,560	4,600	4,630	4,640	4,650

Current (A)

		Evaporating Temp. (°C)							
		-30	-20	-15	-10	0	7.2	10	12
Condensing Temp. (°C)	30	4.7	4.6	4.6	4.6	4.5	4.4	4.4	4.4
	35	5.1	5.0	4.9	4.9	4.8	4.8	4.8	4.7
	40.5	5.5	5.4	5.4	5.3	5.3	5.2	5.2	5.2
	45.0	5.8	5.8	5.8	5.7	5.7	5.6	5.6	5.6
	50.0	6.3	6.2	6.2	6.2	6.2	6.1	6.1	6.1
	54.4	6.7	6.7	6.6	6.6	6.6	6.6	6.6	6.6
	60.0		7.2	7.2	7.2	7.2	7.2	7.2	7.2
	65.0			7.8	7.8	7.8	7.9	7.9	7.9

MassFlow(kg/h)

		Evaporating Temp. (°C)							
		-30	-20	-15	-10	0	7.2	10	12
Condensing Temp. (°C)	30	95.2	120.1	139.0	183.1	216.2	239.1	263.3	281.4
	35	96.4	120.6	139.0	182.0	214.6	237.1	260.9	278.8
	40.5	97.5	121.0	138.9	181.2	213.3	235.4	259.0	276.6
	45.0	98.6	121.4	138.8	180.2	211.8	233.6	256.8	274.3
	50.0	99.7	121.7	138.8	179.4	210.4	232.0	255.0	272.3
	54.4	101.1	122.2	138.7	178.2	208.7	230.0	252.6	269.7
	60.0		122.6	138.5	177.2	207.2	228.1	250.6	267.5
	65.0			138.4	176.5	206.2	227.0	249.3	266.2

EER

		Evaporating Temp. (°C)							
		-30	-20	-15	-10	0	7.2	10	12
Condensing Temp. (°C)	30	2.20	3.01	3.52	4.13	5.66	7.14	7.77	8.31
	35	2.11	2.84	3.29	3.82	5.16	6.40	6.94	7.37
	40.5	2.00	2.63	3.03	3.48	4.61	5.63	6.08	6.43
	45.0	1.90	2.48	2.83	3.22	4.18	5.06	5.45	5.75
	50.0	1.81	2.31	2.61	2.95	3.77	4.50	4.81	5.06
	54.4	1.73	2.18	2.44	2.74	3.43	4.06	4.32	4.52
	60.0		2.01	2.24	2.49	3.06	3.56	3.78	3.95
	65.0			2.09	2.29	2.77	3.19	3.36	3.49

Coefficients of Polynomial Formula

	Heating Capacity (W)	Input (W)	Current (A)	MassFlow (kg/h)
C1	1.082728E+04	1.453170E+03	3.003556E+00	2.360479E+02
C2	3.920646E+02	-2.837457E+00	-8.470396E-03	6.929407E+00
C3	2.477067E+01	-4.426806E+00	2.756756E-02	-7.555019E-01
C4	5.826763E+00	-8.447092E-03	7.994833E-06	3.318743E-03
C5	-1.762270E+00	-2.938840E-01	-1.411419E-04	-8.310962E-02
C6	7.055314E-02	8.097865E-01	7.148352E-04	4.985669E-03
C7	2.668766E-02	5.099385E-05	-9.252157E-08	-1.400290E-03
C8	-4.455882E-02	2.285141E-04	-1.874072E-07	-5.950565E-04
C9	-4.910998E-03	6.125197E-03	4.779484E-06	5.924018E-04
C10	4.747737E-08	6.898865E-08	1.163404E-10	-2.262064E-09

Note: The polynomial coefficients subject to change without notice.

$$X = C1 + C2*(S) + C3*D + C4*(S^2) + C5*(S*D) + C6*(D^2) + C7*(S^3) + C8*(D*S^2) + C9*(S*D^2) + C10*(D^3)$$

X—CAPACITY(W) OR POWER(W) OR CURRENT(A)

S—EVAPORATING TEMP, °C

D—CONDENSING TEMP, °C