

Model
GS34MFX

Sales code:
107B0701

Compressor Data

Refrigerant(s)	R134a / R513A
Refr. charge - tech. limit	2000g / 70.55oz
Weight	20.00 kg / 44.09lbs
Displacement	33.80 cm3 / 2.06cu.in
Compressors on pallet	48



General – Configurations With GS34MFX

-	Conf. 1	Conf. 2	Conf. 3
Motor configuration	CSCR	CSCR	CSCR
Power supply (nominal)	220-240 V/50 Hz	220-240 V/50 Hz	220-240 V/50 Hz
Number of phases	1	1	1
Voltage range	198-254 V	198-254 V	198-254 V
Approvals	VDE	VDE	-
Starting torque	HST	HST	HST
Refrigerant	R134a	R513A	R1234yf
Application	MBP	MBP	MBP
Hot gas defrost	OK	OK	OK
Long interval pull down	OK	OK	OK

Application Notes

- Cover, clamp, gasket: pre-assembled to compressor.
- Provision for PE Grounding is located at the PE Stamp on the compressor

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Compressor Design

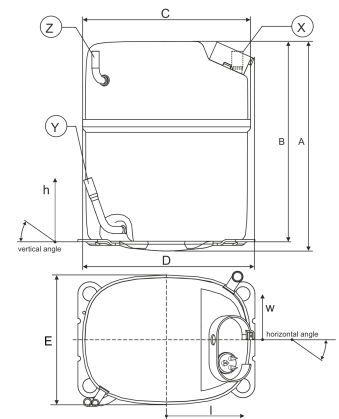
Oil type	POE	Winding resistance main	3.000 Ohm
Oil viscosity	32,5cSt	Winding resistance aux	5.20 Ohm
Oil quantity	902 / 30.50fl.oz	Max. winding temp.	135 °C
Free gas volume comp.	3,350 cm3 / 113.28fl.oz	Max. discharge temp.	130°C / 266°F
Motor protection	internal		

Compressor Dimensions

Housing

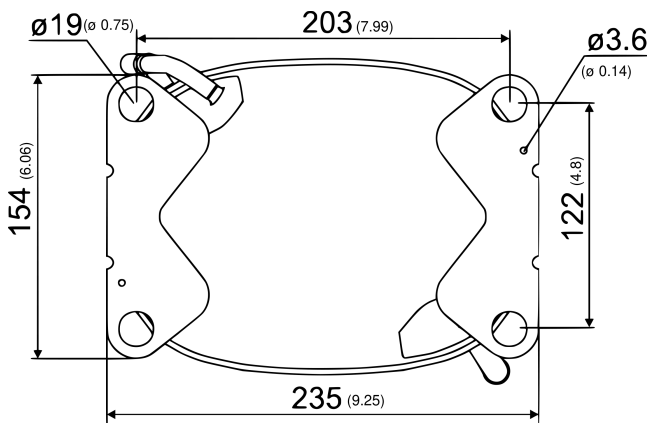
A Height	259mm / 10.20in
B Height	247mm / 9.72in
C Length shell	224mm / 8.82in
D Length w. cover	232mm / 9.13in
E Width	173mm / 6.81in

[Find 3D Model here](#)

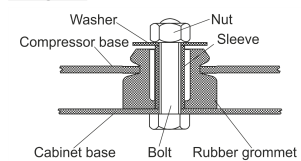


Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 12.75–13.05 / 0.50–0.51in	øi 8.15–8.25 / 0.32–0.32in	øi 6.4–6.6 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	90°	71°	90°
Position l/h/w [mm]	-94.5/234/-84 / -3.72/9.21/-3.31in	-105/84/-84 / -4.13/3.31/-3.31in	94.5/234/84 / 3.72/9.21/3.31in
Straight tube l. [mm]	18 / 0.71in	22.5 / 0.89in	15 / 0.59in

Mounting Accessories



Bolt joint



Dimensions in mm [in]

	one comp.	multi pack
Bolt joint M8 ø19mm	107B9150	-

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Configuration 1

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Configuration

Motor configuration	CSCR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R134a
Application	MBP
Voltage range	198-254 V
Starting torque	HST
Approvals	VDE
Starting device type	relay
Run capacitor	20 µF
Start capacitor	100 µF
LRA (locked rotor amps / 4s/ U(N))	26 A
RLA (rated load amps / 1s/ U(N))	4.8 A
Cut in current (U(N))	26 A

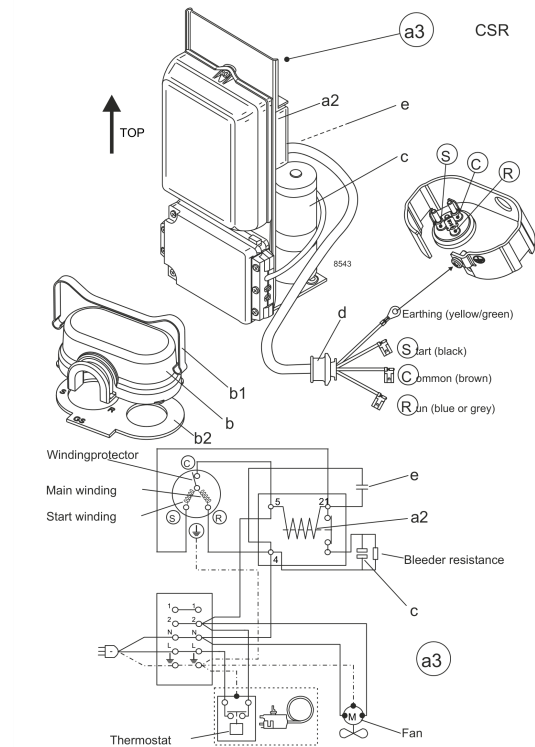
Ambient/ machine room temperatures minimum /maximum

Ambient temperature range: 10 - 43°C / 50 - 109°F
Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram

[View full size](#)

Components (cover, clamp, gasket: pre assembled)

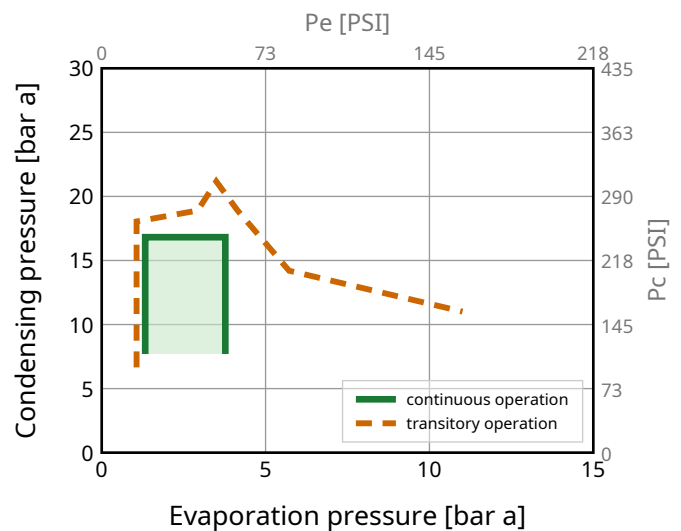
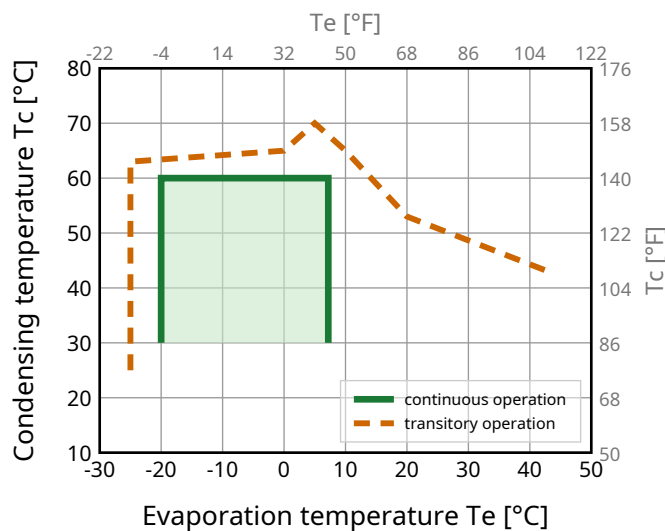
a3 GS starter kit (600mm) 117-7056

b cover 107B9101

b2 gasket 107B9100

b1 clamp 107B9104

Operation Pressure Range



Model
GS34MFX

Configuration 1

Sales code:
107B0701

Standard Conditions

R134a, 220 V/50 Hz, CSCR, fan 3m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	m	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-6.7 20	54.4 129.9	35 95	46.1 115	1883	6424	1619	1.79	6.11	1052	5.12	41.00	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	1454	4961	1250	1.48	5.06	980	4.79	35.05	CECOMAF MBP
-10 14	45 113	20 68	45 113	1648	5624	1418	1.81	6.19	909	4.59	38.44	EN12900 MBP
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	1796	6127	1544	1.79	6.11	1003	4.99	44.13	ARI540 MBP
-10 14	45 113	32 89.6	45 113	1709	5830	1470	1.88	6.41	909	4.59	37.32	opt MBP
-23.3 -10	45 113	32.2 90	32.2 90	954	3256	821	1.44	4.93	661	3.54	18.51	opt LBP

Performance Tables

R134a, 220 V/50 Hz, CSCR, fan 3m/s

pc= 45/113 | RGT= 20/68 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	m
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-20	-4	998	3405	858	1.38	4.72	722	3.78	23.07
-15	5	1296	4422	1115	1.59	5.43	815	4.16	30.08
-10	14	1648	5624	1418	1.81	6.19	909	4.59	38.44
-5	23	2064	7041	1775	2.05	6.99	1008	5.06	48.40
0	32	2550	8700	2193	2.29	7.80	1115	5.58	60.21
5	41	3115	10630	2679	2.52	8.61	1234	6.13	74.17
7.2	45	3392	11572	2917	2.63	8.96	1291	6.39	81.08

pc= 55/131 | RGT= 20/68 | Tliq= 55/131 | °C/°F

-20	-4	815	2782	701	1.10	3.75	742	3.86	20.93
-15	5	1081	3687	929	1.25	4.28	862	4.30	27.87
-10	14	1392	4751	1198	1.42	4.85	980	4.79	36.10
-5	23	1759	6002	1513	1.60	5.47	1098	5.31	45.90
0	32	2188	7467	1882	1.79	6.12	1220	5.88	57.54
5	41	2689	9176	2313	1.99	6.80	1349	6.49	71.35
7.2	45	2934	10012	2523	2.08	7.10	1409	6.78	78.21

Model
GS34MFX

Configuration 2

Sales code:
107B0701

Configuration

Motor configuration	CSCR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R513A
Application	MBP
Voltage range	198-254 V
Starting torque	HST
Approvals	VDE
Starting device type	relay
Run capacitor	20 µF
Start capacitor	100 µF
LRA (locked rotor amps / 4s/ U(N))	26 A
RLA (rated load amps / 1s/ U(N))	4.8 A
Cut in current (U(N))	26 A

Ambient/ machine room temperatures minimum /maximum

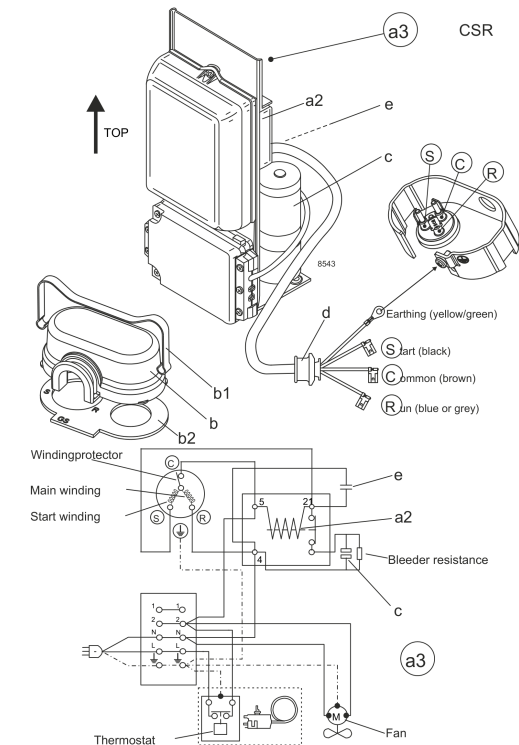
Ambient temperature range: 10 - 43°C / 50 - 109°F

Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



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Components (cover, clamp, gasket: pre assembled)

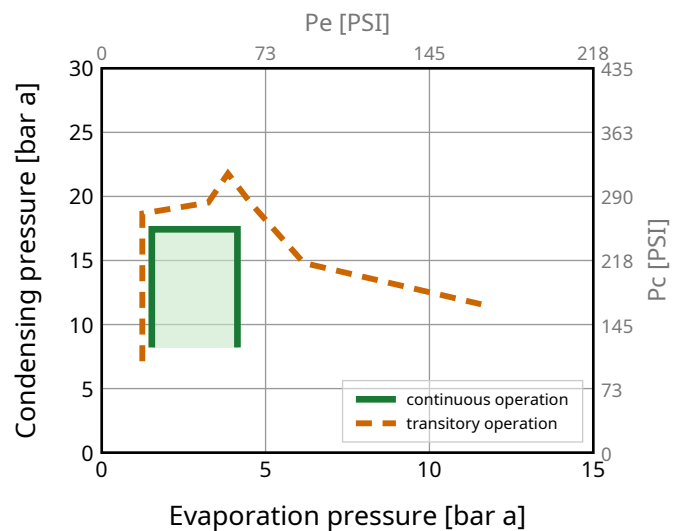
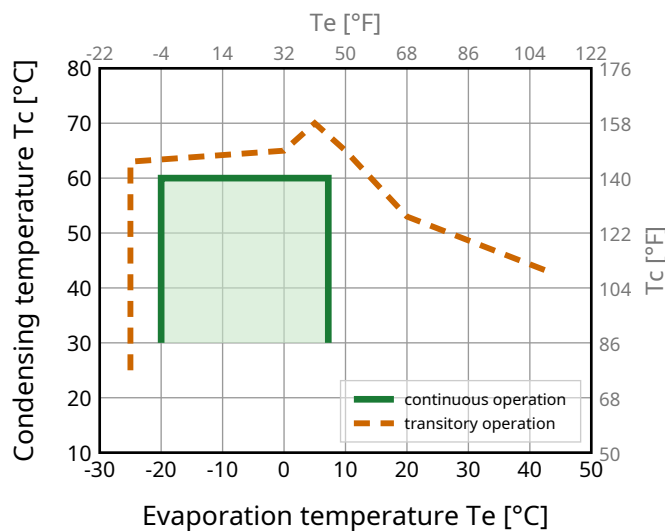
a3 GS starter kit (600mm) 117-7056

b cover 107B9101

b2 gasket 107B9100

b1 clamp 107B9104

Operation Pressure Range



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GS34MFX

Configuration 2

Sales code:
107B0701

Standard Conditions

R513A, 220 V/50 Hz, CSCR, fan 3m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	m	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-6.7 20	54.4 129.9	35 95	46.1 115	2002	6830	1722	1.77	6.04	1130	5.59	49.91	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	1530	5221	1316	1.45	4.94	1057	5.28	42.94	CECOMAF MBP
-10 14	45 113	20 68	45 113	1734	5918	1492	1.78	6.06	976	4.93	46.96	EN12900 MBP
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	1864	6360	1603	1.73	5.91	1075	5.35	53.67	ARI540 MBP
-10 14	45 113	32 89.6	45 113	1821	6215	1566	1.87	6.37	976	4.93	45.59	opt MBP
-23.3 -10	45 113	32.2 90	32.2 90	1063	3628	914	1.47	5.01	724	3.84	23.27	opt LBP

Performance Tables

R513A, 220 V/50 Hz, CSCR, fan 3m/s

pc= 45/113 | RGT= 20/68 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	m
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-20	-4	1073	3661	923	1.36	4.65	787	4.12	28.75
-15	5	1377	4699	1184	1.56	5.33	881	4.52	37.08
-10	14	1734	5918	1492	1.78	6.06	976	4.93	46.96
-5	23	2152	7341	1850	2.00	6.82	1076	5.36	58.65
0	32	2636	8994	2267	2.22	7.58	1186	5.83	72.43
5	41	3195	10900	2747	2.44	8.33	1309	6.36	88.63
7.2	45	3466	11826	2981	2.53	8.64	1369	6.62	96.62

pc= 55/131 | RGT= 20/68 | Tliq= 55/131 | °C/°F

-20	-4	866	2956	745	1.06	3.63	814	4.23	26.25
-15	5	1133	3865	974	1.21	4.13	937	4.76	34.50
-10	14	1443	4922	1241	1.36	4.66	1057	5.28	44.22
-5	23	1804	6154	1551	1.53	5.22	1178	5.79	55.71
0	32	2223	7584	1911	1.71	5.82	1303	6.33	69.28
5	41	2707	9236	2328	1.88	6.42	1438	6.91	85.29
7.2	45	2942	10040	2531	1.96	6.69	1501	7.18	93.22

Model
GS34MFX

Configuration 3

Sales code:
107B0701

Configuration

Motor configuration	CSCR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R1234yf
Application	MBP
Voltage range	198-254 V
Starting torque	HST
Approvals	VDE
Starting device type	relay
Run capacitor	20 µF
Start capacitor	100 µF
LRA (locked rotor amps / 4s/ U(N))	26 A
RLA (rated load amps / 1s/ U(N))	4.8 A
Cut in current (U(N))	26 A

Ambient/ machine room temperatures minimum /maximum

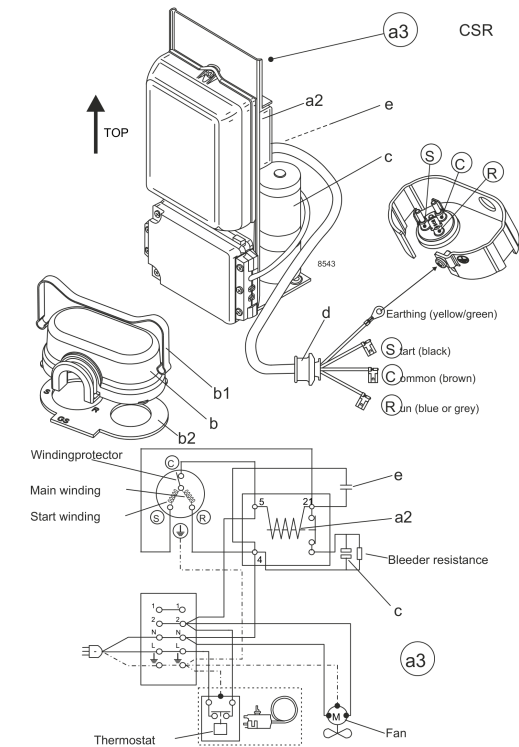
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Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



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Components (cover, clamp, gasket: pre assembled)

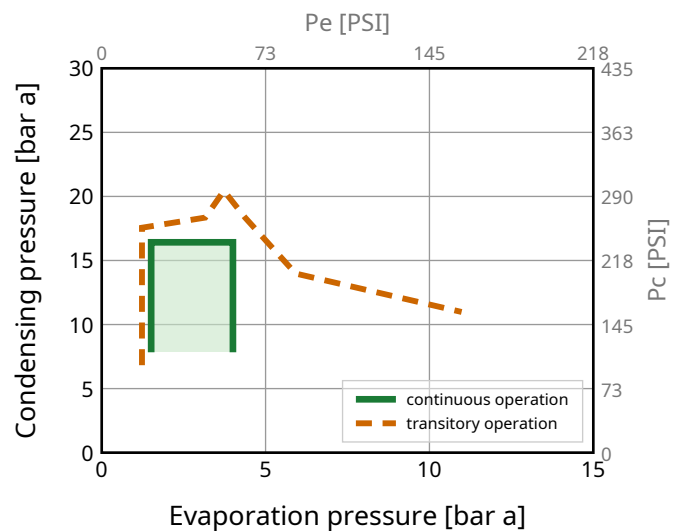
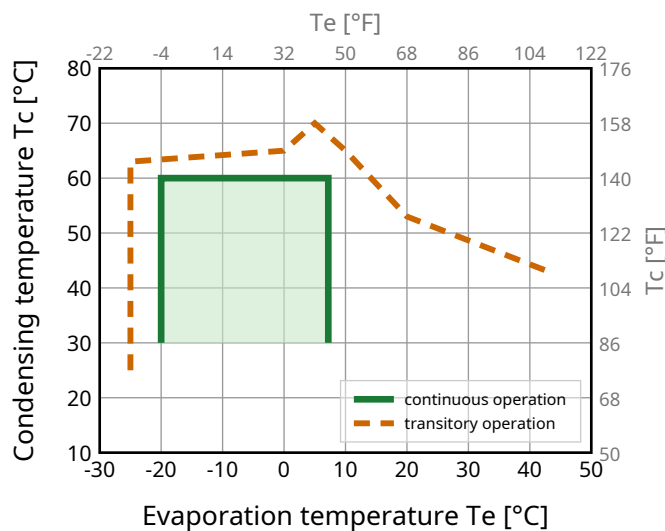
a3 GS starter kit (600mm) 117-7056

b cover 107B9101

b2 gasket 107B9100

b1 clamp 107B9104

Operation Pressure Range



Model
GS34MFX

Configuration 3

Sales code:
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Standard Conditions

R1234yf, 220 V/50 Hz, CSCR, fan 3m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	m	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-6.7 20	54.4 129.9	35 95	46.1 115	1821	6214	1566	1.72	5.85	1062	5.88	49.19	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	1386	4728	1192	1.39	4.74	998	5.60	42.53	CECOMAF MBP
-10 14	45 113	20 68	45 113	1578	5382	1357	1.71	5.82	924	5.28	46.76	EN12900 MBP
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	1676	5717	1441	1.66	5.65	1012	5.66	53.09	ARI540 MBP
-10 14	45 113	32 89.6	45 113	1670	5699	1437	1.81	6.17	924	5.28	45.36	opt MBP
-23.3 -10	45 113	32.2 90	32.2 90	1005	3429	864	1.45	4.93	695	4.21	23.67	opt LBP

Performance Tables

R1234yf, 220 V/50 Hz, CSCR, fan 3m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	m
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-20	-4	1049	3578	902	1.39	4.75	754	4.50	28.23
-15	5	1336	4557	1149	1.59	5.43	839	4.90	36.10
-10	14	1670	5699	1437	1.81	6.17	924	5.28	45.36
-5	23	2060	7028	1771	2.04	6.94	1012	5.66	56.24
0	32	2511	8567	2159	2.27	7.73	1108	6.06	69.00
5	41	3030	10340	2606	2.49	8.51	1216	6.51	83.93
7.2	45	3283	11201	2823	2.59	8.84	1268	6.72	91.27

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

-20	-4	844	2880	726	1.09	3.71	777	4.59	25.66
-15	5	1096	3738	942	1.23	4.20	890	5.12	33.44
-10	14	1386	4728	1192	1.39	4.74	998	5.60	42.53
-5	23	1722	5875	1481	1.56	5.32	1104	6.05	53.18
0	32	2111	7203	1816	1.74	5.94	1212	6.50	65.69
5	41	2560	8736	2202	1.93	6.59	1327	6.97	80.37
7.2	45	2779	9483	2390	2.01	6.87	1380	7.18	87.61