

Model
GS21MLX

Sales code:
107B0509

Compressor Data

Refrigerant(s)	R404A / R452A
Refr. charge - tech. limit	2000g / 70.55oz
Weight	22.20 kg / 48.94lbs
Displacement	21.20 cm3 / 1.29cu.in
Compressors on pallet	48



General – Configurations With GS21MLX

-	Conf. 1	Conf. 2
Motor configuration	CSCR	CSCR
Power supply (nominal)	208-230 V/60 Hz	208-230 V/60 Hz
Number of phases	1	1
Voltage range	187-254 V	187-254 V
Approvals	UL	UL
Starting torque	HST	HST
Refrigerant	R404A	R452A
Application	MBP	MBP
Hot gas defrost	OK	OK
Long interval pull down	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

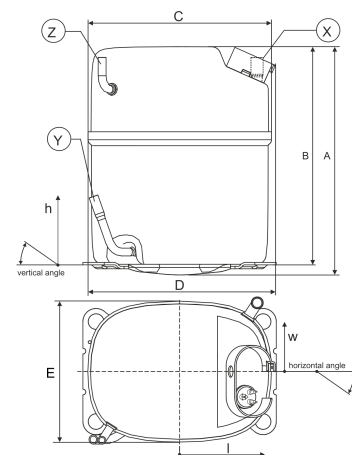
Oil type	POE	Motor protection	internal
Oil viscosity	32,5cSt	Winding resistance main	1.5 Ohm
Oil quantity	902 / 30.50fl.oz	Winding resistance aux	5.8 Ohm
Free gas volume comp.	3,540 cm ³ / 119.70fl.oz	Max. discharge temp.	130°C / 266°F

Compressor Dimensions

Housing

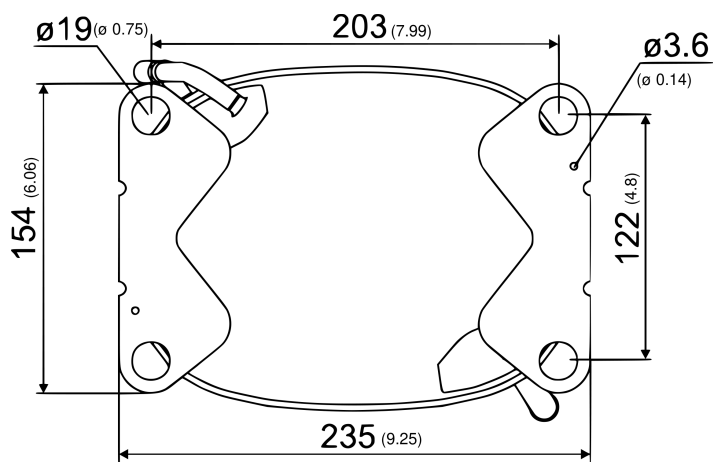
A Height	279mm / 10.98in
B Height	267mm / 10.51in
C Length shell	224mm / 8.82in
D Length w. cover	232mm / 9.13in
E Width	173mm / 6.81in

[Find 3D Model here](#)

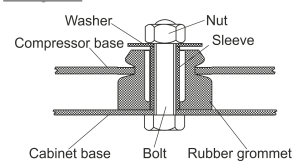


Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 12.75–13.05 / 0.50–0.51in	øi 9.63–9.73 / 0.38–0.38in	øi 6.4–6.6 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	90°	71°	90°
Position l/h/w [mm]	-94.5/234/-84 / -3.72/9.21/-3.31in	-105/84/-84 / -4.13/3.31/-3.31in	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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Motor configuration	CSCR
Power supply (nominal)	208-230 V/60 Hz 1~
Refrigerant	R404A
Application	MBP
Voltage range	187-254 V
Starting torque	HST
Approvals	UL
Starting device type	relay
Run capacitor	20 µF
Start capacitor	100 µF
LRA (locked rotor amps / 4s/ U(N))	46 A
RLA (rated load amps / 1s/ U(N))	11 A
Cut in current (U(N))	46 A

Ambient/ machine room temperatures minimum /maximum

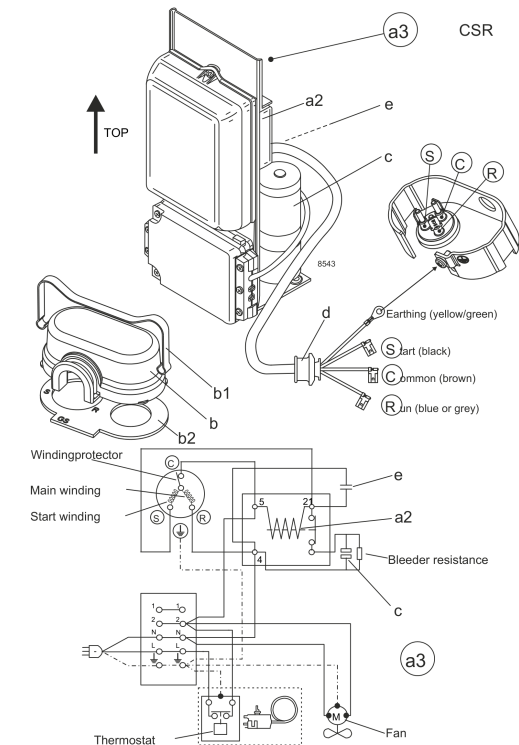
Ambient temperature range: 10 - 43°C / 50 - 109°F

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)

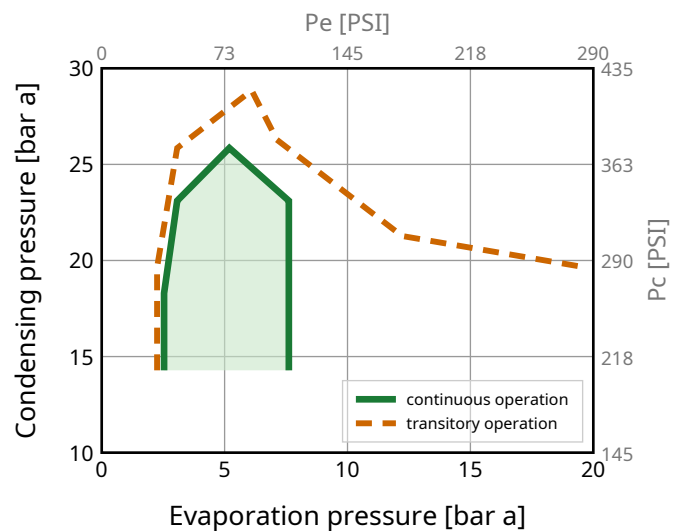
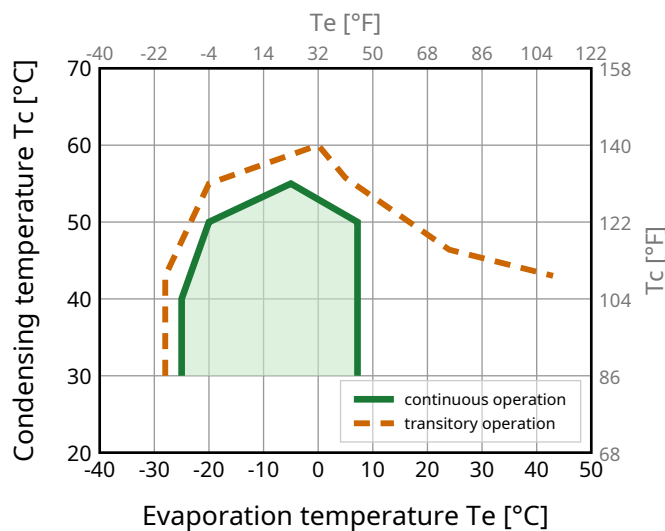
a3 GS starter kit (600mm) 117-7073

b cover 107B9101

b2 gasket 107B9100

b1 clamp 107B9104

Operation Pressure Range



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Configuration 1

Sales code:
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Standard Conditions

R404A, 230 V/60 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	2512	8572	2160	1.86	6.34	1353	6.21	69.01	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	1873	6390	1611	1.47	5.01	1277	5.90	59.86	CECOMAF MBP
-10 14	45 113	20 68	45 113	2269	7742	1951	1.93	6.57	1178	5.48	68.22	EN12900 MBP
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	2337	7974	2010	1.82	6.20	1286	5.94	76.15	ARI540 MBP
-10 14	45 113	32 89.6	45 113	2407	8213	2070	2.04	6.97	1178	5.48	66.18	opt MBP 1
-25 -13	45 113	32 89.6	45 113	1181	4029	1016	1.36	4.64	869	4.15	31.78	opt MBP 2

Performance Tables

R404A, 230 V/60 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]
-25	-13	1181	4029	1016	1.36	4.64	869	4.15	31.78
-20	-4	1533	5232	1319	1.57	5.37	975	4.61	41.52
-15	5	1938	6614	1667	1.80	6.14	1078	5.05	52.86
-10	14	2407	8213	2070	2.04	6.97	1178	5.48	66.18
-5	23	2950	10065	2537	2.31	7.88	1277	5.89	81.89
0	32	3578	12208	3077	2.60	8.88	1375	6.29	100.47
5	41	4302	14678	3700	2.92	9.96	1473	6.67	122.45
7.2	45	4654	15878	4002	3.07	10.47	1517	6.84	133.35

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

-25	-13	900	3069	774	1.03	3.52	871	4.27	28.05
-20	-4	1185	4042	1019	1.17	4.00	1012	4.83	37.20
-15	5	1505	5136	1295	1.31	4.48	1147	5.37	47.66
-10	14	1873	6390	1611	1.47	5.01	1277	5.90	59.86
-5	23	2298	7839	1976	1.64	5.59	1402	6.41	74.27
0	32	2791	9522	2400	1.83	6.24	1525	6.90	91.42
5	41	3363	11474	2892	2.04	6.98	1644	7.38	111.92
7.2	45	3642	12428	3132	2.15	7.33	1696	7.59	122.18

Model
GS21MLX

Configuration 2

Sales code:
107B0509

Configuration

Motor configuration	CSCR
Power supply (nominal)	208-230 V/60 Hz 1~
Refrigerant	R452A
Application	MBP
Voltage range	187-254 V
Starting torque	HST
Approvals	UL
Starting device type	relay
Run capacitor	20 μF
Start capacitor	100 μF
LRA (locked rotor amps / 4s/ U(N))	46 A
RLA (rated load amps / 1s/ U(N))	11 A
Cut in current (U(N))	46 A

Ambient/ machine room temperatures minimum /maximum

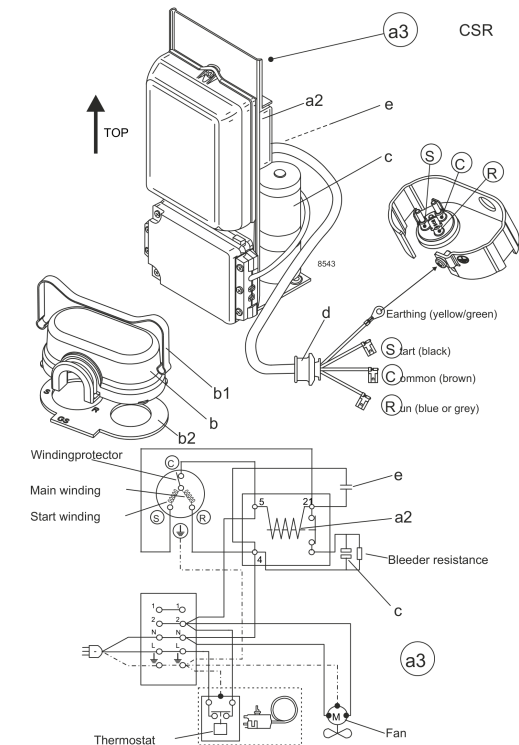
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Electrical Accessories / Wiring Diagram



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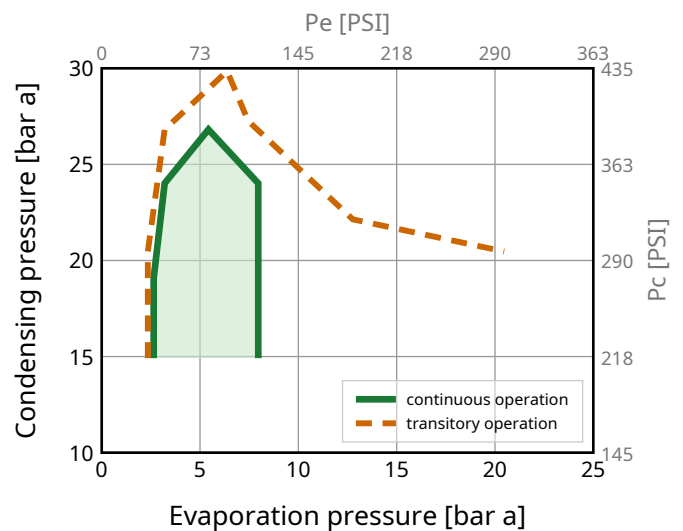
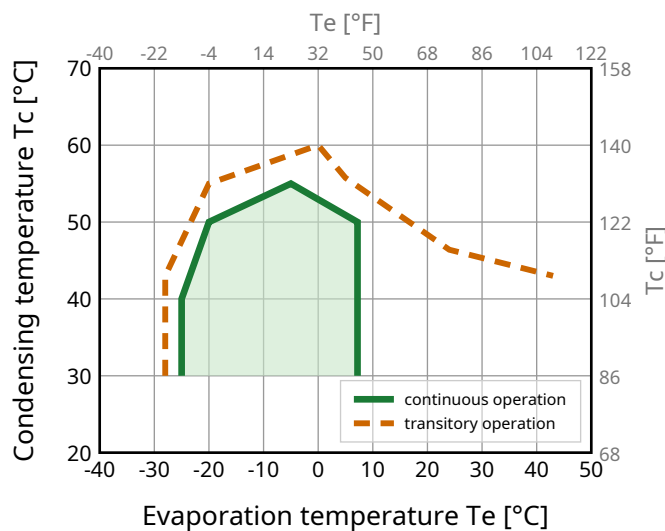
a3 GS starter kit (600mm) 117-7073

b cover 107B9101

b2 gasket 107B9100

b1 clamp 107B9104

Operation Pressure Range



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Configuration 2

Sales code:
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Standard Conditions

R452A, 230 V/60 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	2384	8134	2050	1.86	6.36	1278	5.91	68.00	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	1776	6061	1528	1.48	5.05	1201	5.59	58.71	CECOMAF MBP
-10 14	45 113	20 68	45 113	2143	7311	1843	1.93	6.58	1111	5.22	66.84	EN12900 MBP
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	2222	7580	1911	1.83	6.23	1216	5.65	74.98	ARI540 MBP
-10 14	45 113	32 89.6	45 113	2271	7748	1953	2.04	6.97	1111	5.22	64.83	opt MBP 1
-25 -13	45 113	32 89.6	45 113	1088	3712	936	1.35	4.62	804	3.96	30.41	opt MBP 2

Performance Tables

R452A, 230 V/60 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]
-25	-13	1088	3712	936	1.35	4.62	804	3.96	30.41
-20	-4	1426	4864	1226	1.57	5.35	908	4.39	40.09
-15	5	1816	6197	1562	1.80	6.13	1010	4.81	51.44
-10	14	2271	7748	1953	2.04	6.97	1111	5.22	64.83
-5	23	2800	9554	2408	2.31	7.89	1211	5.63	80.72
0	32	3415	11651	2937	2.60	8.88	1312	6.04	99.57
5	41	4126	14079	3549	2.92	9.96	1414	6.46	121.94
7.2	45	4473	15261	3847	3.06	10.45	1460	6.65	133.06

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

-25	-13	829	2828	713	1.03	3.52	802	3.96	26.74
-20	-4	1104	3768	950	1.18	4.01	940	4.52	35.86
-15	5	1416	4832	1218	1.32	4.51	1072	5.06	46.37
-10	14	1776	6061	1528	1.48	5.05	1201	5.59	58.71
-5	23	2195	7489	1888	1.65	5.64	1328	6.11	73.36
0	32	2683	9155	2308	1.85	6.30	1453	6.62	90.87
5	41	3252	11095	2797	2.06	7.03	1578	7.14	111.87
7.2	45	3530	12046	3036	2.16	7.38	1633	7.36	122.40