Single
Packs

Single Pack GS21MLX 220-240V 50Hz CSCR

Single pack code number: **195B4631**

Position	Title	Code	Amount
1	Compressor GS21MLX	107B0502	1
2	GS starting device (600mm)	117-7070	1
3	Bolt joint for one compressor | M8 | ø19mm	107B9150	1
Below electrical equipment is pre-assembled on the compressor:			
4	Cover	107B9101	1
5	Cover clamp	107B9104	1
6	Cover gasket	107B9100	1

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Model
GS21MLX

Sales code:
107B0502

Compressor Data

Refrigerant(s)	**R404A / R452A**
Refr. charge - tech. limit	**2000g / 70.55oz**
Weight	**19.10 kg / 42.11lbs**
Displacement	**21.20 cm3 / 1.29cu.in**
Compressors on pallet	**48**

General – Configurations With GS21MLX

–	Conf. 1	Conf. 2	Conf. 3	Conf. 4
Motor configuration	CSCR	CSCR	CSCR	CSCR
Power supply (nominal)	220-240 V/50 Hz	220-240 V/50 Hz	220-240 V/50 Hz	220-240 V/50 Hz
Number of phases	1	1	1	1
Voltage range	198-254 V	198-254 V	198-254 V	198-254 V
Approvals	VDE, CCC	VDE, CCC	–	–
Starting torque	HST	HST	HST	HST
Refrigerant	R404A	R452A	R448A	R449A
Application	MBP	MBP	MBP	MBP
Hot gas defrost	OK	OK	OK	OK
Long interval pull down	OK	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

Model
GS21MLX

Sales code:
107B0502

Compressor Design

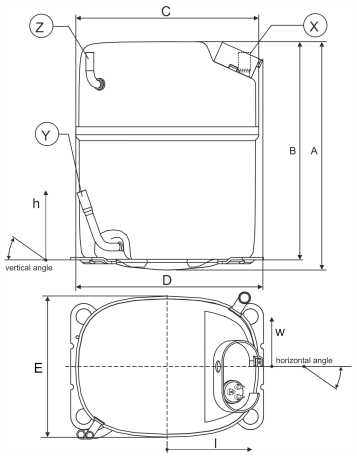
Oil type	**POE**	Motor protection	**internal**
Oil viscosity	**32,5cSt**	Winding resistance main	**2.5 Ohm**
Oil quantity	**902 / 30.50fl.oz**	Winding resistance aux	**6.7 Ohm**
Free gas volume comp.	**3,350 cm3 / 113.28fl.oz**	Max. discharge temp.	**120°C / 248°F**

Compressor Dimensions

Housing

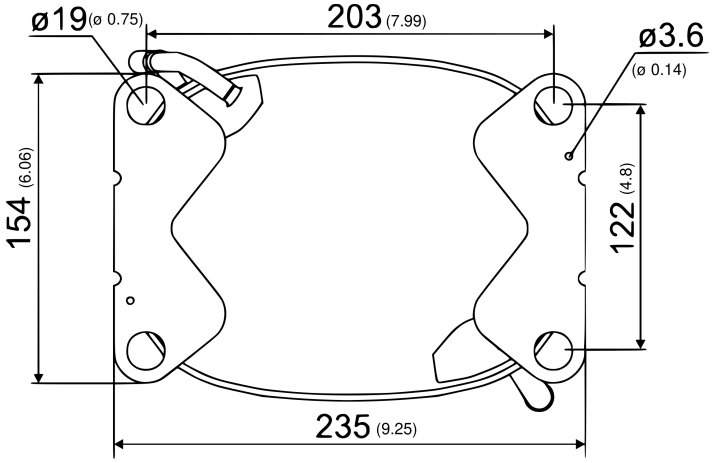
A Height	**259mm / 10.20in**
B Height	**247mm / 9.72in**
C Length shell	**224mm / 8.82in**
D Length w. cover	**232mm / 9.13in**
E Width	**173mm / 6.81in**

Find 3D Model here



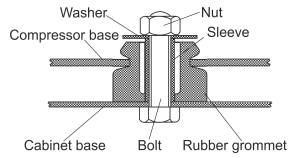
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 12.75–13.05 / 0.50–0.51in	øi 8.15–8.25 / 0.32–0.32in	øi 6.4–6.6 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	90°	71°	90°
Position l/h/w [mm]	-94.5/234/-84 / -3.72/9.21/-3.31in	-105/84/-84 / -4.13/3.31/-3.31in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



Dimensions in mm [in]

Bolt joint



	one comp.	multi pack
Bolt joint | M8 | ø19mm	107B9150	–

Model
GS21MLX Configuration 1

Sales code:
107B0502

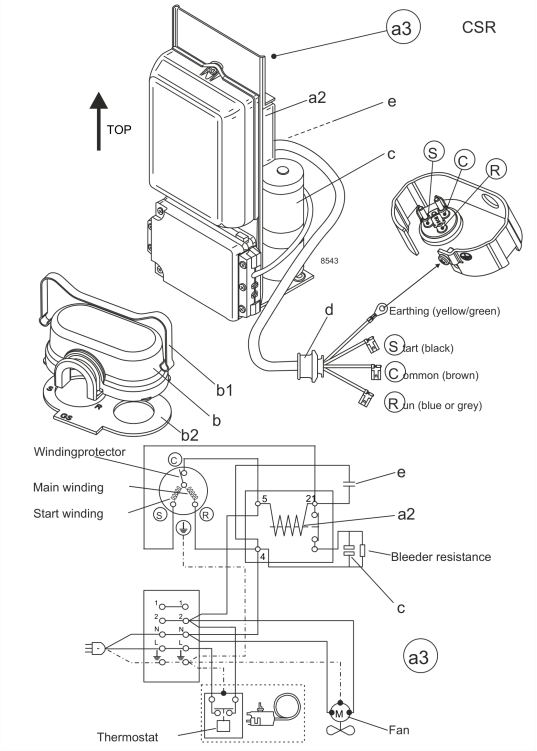
Configuration

Motor configuration	**CSCR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R404A**
Application	**MBP**
Voltage range	**198-254 V**
Starting torque	**HST**
Approvals	**VDE, CCC**
Starting device type	**relay**
Run capacitor	**20 µF**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**24 A**
RLA (rated load amps / 1s/ U(N))	**4.7 A**
Cut in current (U(N))	**24 A**

Ambient/ machine room temperatures minimum /maximum
Ambient temperature range: 10 - 38°C / 50 - 100°F
Machine room temp. compressor: 10 - 43°C / 50 - 109°F

System Cooling
fan 3m/s

Electrical Accessories / Wiring Diagram



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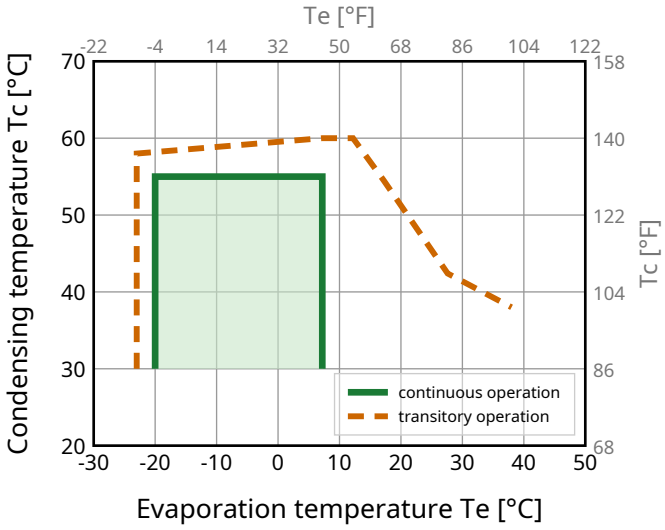
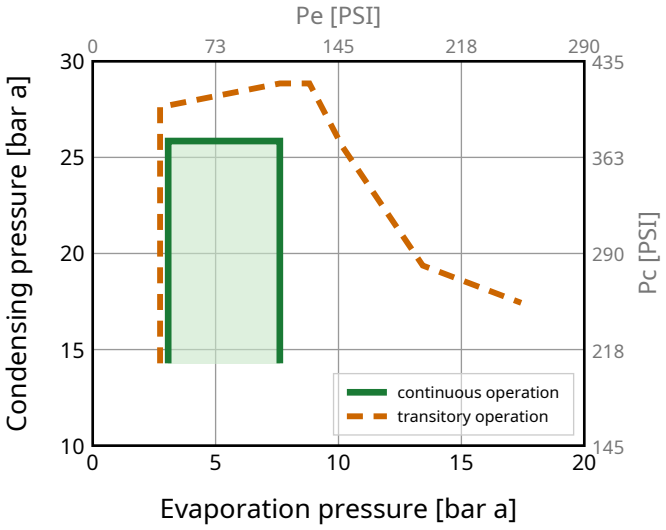
Components (cover, clamp, gasket: pre assembled)
a3 GS starter kit (600mm) 117-7070
b cover 107B9101
b2 gasket 107B9100
b1 clamp 107B9104

Operation Pressure Range





Model
GS21MLX Configuration 1

Sales code:
107B0502

Standard Conditions

R404A, 220 V/50 Hz, CSCR, fan 3m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°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	**1982**	6764	1705	**1.79**	6.10	1108	5.20	54.46	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**1466**	5002	1261	**1.40**	4.78	1046	4.91	46.85	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**1748**	5963	1503	**1.81**	6.18	965	4.56	52.55	**EN12900 MBP**
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	**1825**	6226	1569	**1.73**	5.91	1053	4.98	59.46	**ARI540 MBP**
-10 14	45 113	32 89.6	45 113	**1856**	6332	1596	**1.92**	6.56	965	4.56	51.02	**opt MBP 1**
-25 -13	45 113	32 89.6	45 113	**895**	3055	770	**1.27**	4.34	704	3.40	24.10	**opt MBP 2**

Performance Tables

R404A, 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	ṁ
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-20	-4	**1096**	3739	942	**1.38**	4.69	797	3.79	32.33
-15	5	**1394**	4755	1199	**1.58**	5.39	883	4.17	41.48
-10	14	**1748**	5963	1503	**1.81**	6.18	965	4.56	52.55
-5	23	**2164**	7384	1861	**2.07**	7.06	1046	4.95	65.87
0	32	**2650**	9041	2279	**2.35**	8.02	1128	5.34	81.84
5	41	**3211**	10955	2761	**2.65**	9.03	1212	5.74	100.91
7.2	45	**3483**	11885	2996	**2.78**	9.50	1252	5.91	110.44

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

-20	-4	**847**	2889	728	**1.02**	3.49	827	3.97	29.39
-15	5	**1082**	3692	931	**1.15**	3.93	939	4.44	37.94
-10	14	**1360**	4639	1169	**1.30**	4.44	1046	4.91	48.26
-5	23	**1686**	5752	1450	**1.47**	5.01	1149	5.39	60.71
0	32	**2067**	7053	1778	**1.65**	5.64	1250	5.87	75.74
5	41	**2510**	8564	2159	**1.85**	6.33	1353	6.35	93.90
7.2	45	**2726**	9301	2344	**1.95**	6.65	1400	6.56	103.06

Model
GS21MLX Configuration 2

Sales code:
107B0502

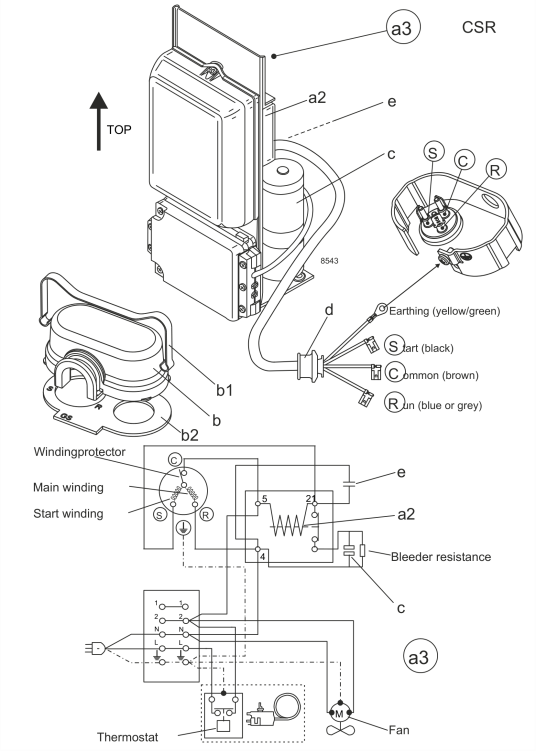
Configuration

Motor configuration	**CSCR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R452A**
Application	**MBP**
Voltage range	**198-254 V**
Starting torque	**HST**
Approvals	**VDE, CCC**
Starting device type	**relay**
Run capacitor	**20 µF**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**24 A**
RLA (rated load amps / 1s/ U(N))	**4.7 A**
Cut in current (U(N))	**24 A**

Ambient/ machine room temperatures minimum /maximum
Ambient temperature range: 10 - 38°C / 50 - 100°F
Machine room temp. compressor: 10 - 43°C / 50 - 109°F

System Cooling
fan 3m/s

Electrical Accessories / Wiring Diagram



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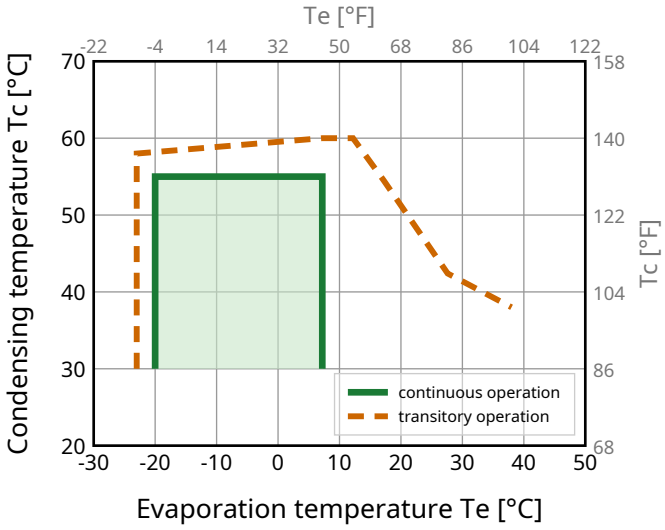
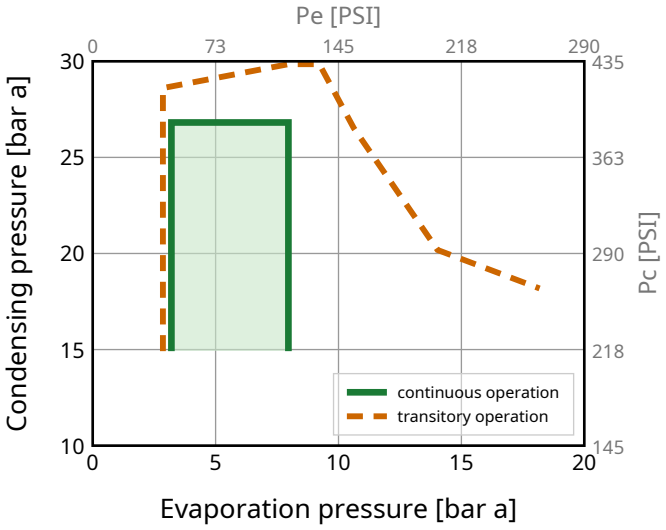
Components (cover, clamp, gasket: pre assembled)
a3 GS starter kit (600mm) 117-7070
b cover 107B9101
b2 gasket 107B9100
b1 clamp 107B9104

Operation Pressure Range





Model
GS21MLX Configuration 2

Sales code:
107B0502

Standard Conditions

R452A, 220 V/50 Hz, CSCR, fan 3m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°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	**2021**	6896	1738	**1.92**	6.56	1051	5.88	57.65	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**1492**	5092	1283	**1.51**	5.15	988	5.61	49.33	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**1746**	5958	1502	**1.91**	6.52	914	5.29	54.47	**EN12900 MBP**
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	**1847**	6302	1589	**1.85**	6.30	1001	5.67	62.34	**ARI540 MBP**
-10 14	45 113	32 89.6	45 113	**1852**	6319	1593	**2.03**	6.91	914	5.29	52.88	**opt MBP 1**
-25 -13	45 113	32 89.6	45 113	**870**	2968	748	**1.33**	4.53	655	4.18	24.32	**opt MBP 2**

Performance Tables

R452A, 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	ṁ
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-20	-4	**1076**	3673	926	**1.44**	4.93	746	4.57	32.95
-15	5	**1381**	4712	1188	**1.66**	5.67	831	4.94	42.64
-10	14	**1746**	5958	1502	**1.91**	6.52	914	5.29	54.47
-5	23	**2180**	7440	1875	**2.19**	7.47	996	5.65	68.85
0	32	**2692**	9187	2316	**2.49**	8.51	1080	6.01	86.25
5	41	**3291**	11228	2830	**2.82**	9.62	1167	6.38	107.26
7.2	45	**3583**	12226	3082	**2.97**	10.12	1208	6.56	117.83

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

-20	-4	**846**	2886	727	**1.10**	3.74	771	4.68	30.32
-15	5	**1092**	3727	939	**1.24**	4.22	882	5.16	39.55
-10	14	**1386**	4731	1192	**1.40**	4.79	988	5.61	50.81
-5	23	**1737**	5927	1494	**1.59**	5.43	1092	6.06	64.57
0	32	**2152**	7344	1851	**1.80**	6.14	1196	6.51	81.38
5	41	**2641**	9010	2271	**2.03**	6.92	1302	6.96	101.92
7.2	45	**2881**	9830	2478	**2.13**	7.28	1350	7.17	112.35

Model
GS21MLX Configuration 3

Sales code:
107B0502

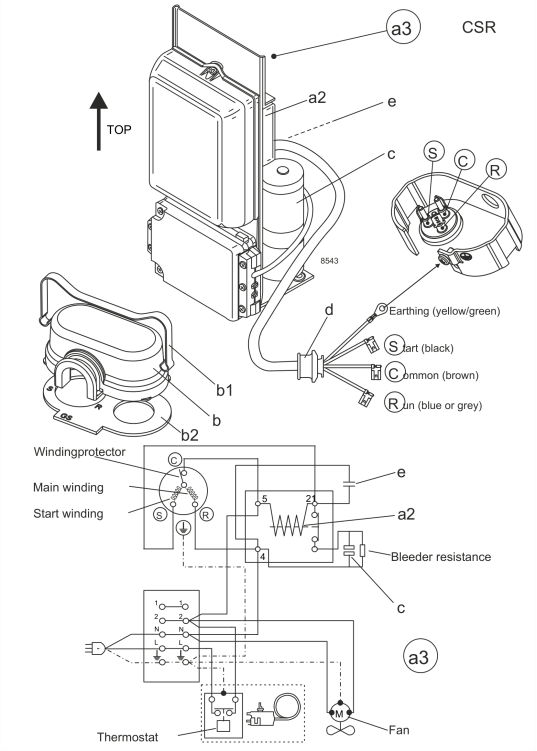
Configuration

Motor configuration	**CSCR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R448A**
Application	**MBP**
Voltage range	**198-254 V**
Starting torque	**HST**
Starting device type	**relay**
Run capacitor	**20 µF**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**24 A**
RLA (rated load amps / 1s/ U(N))	**4.7 A**
Cut in current (U(N))	**24 A**

Ambient/ machine room temperatures minimum /maximum
Ambient temperature range: 10 - 38°C / 50 - 100°F
Machine room temp. compressor: 10 - 43°C / 50 - 109°F

System Cooling
fan 3m/s

Electrical Accessories / Wiring Diagram



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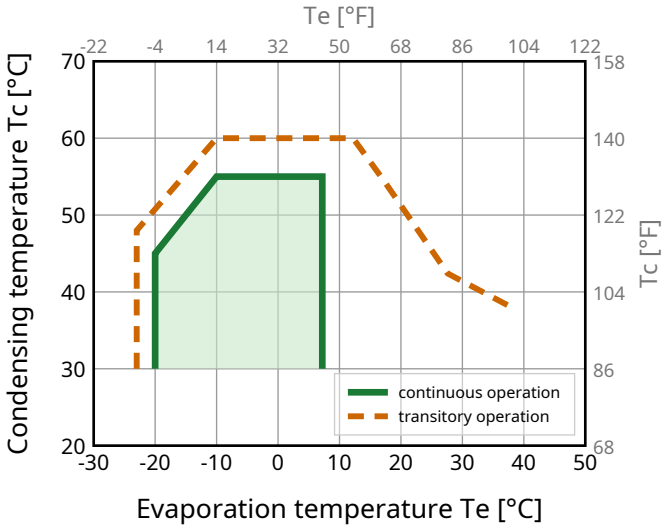
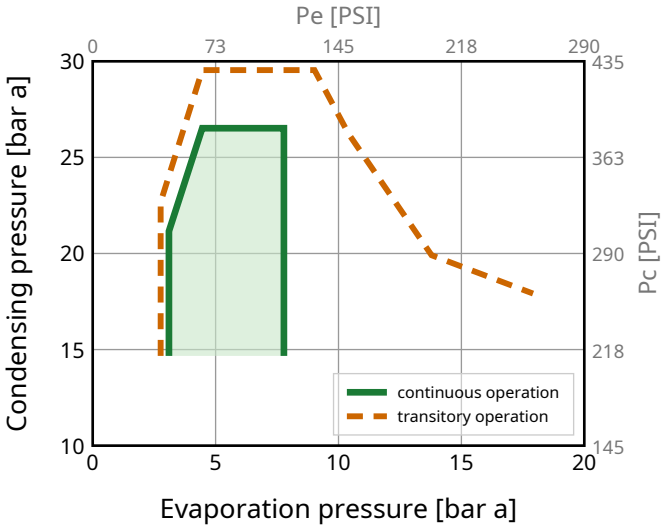
Components (cover, clamp, gasket: pre assembled)
a3 GS starter kit (600mm) 117-7070
b cover 107B9101
b2 gasket 107B9100
b1 clamp 107B9104

Operation Pressure Range





Model

GS21MLX Configuration 3

Sales code:

107B0502

Standard Conditions

R448A, 220 V/50 Hz, CSCR, fan 3m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°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	**1892**	6457	1628	**1.89**	6.45	1001	4.73	41.89	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**1435**	4896	1234	**1.53**	5.22	938	4.45	35.65	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**1672**	5706	1438	**1.93**	6.58	867	4.14	39.69	**EN12900 MBP**
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	**1800**	6142	1548	**1.89**	6.45	952	4.51	45.49	**ARI540 MBP**
-10 14	45 113	32 89.6	45 113	**1741**	5941	1497	**2.01**	6.85	867	4.14	38.53	**opt MBP 1**
-25 -13	45 113	32 89.6	45 113	**795**	2714	684	**1.30**	4.43	612	3.02	17.27	**opt MBP 2**

Performance Tables

R448A, 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	ṁ
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-20	-4	**1012**	3455	871	**1.44**	4.93	701	3.41	23.63
-15	5	**1311**	4473	1128	**1.67**	5.69	785	3.78	30.84
-10	14	**1672**	5706	1438	**1.93**	6.58	867	4.14	39.69
-5	23	**2105**	7181	1810	**2.22**	7.57	949	4.50	50.50
0	32	**2618**	8932	2251	**2.54**	8.66	1032	4.87	63.64
5	41	**3220**	10987	2769	**2.88**	9.81	1120	5.25	79.51
7.2	45	**3516**	11997	3024	**3.03**	10.34	1160	5.43	87.50

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

-20	-4	**816**	2785	702	**1.12**	3.84	725	3.52	21.52
-15	5	**1065**	3635	916	**1.28**	4.36	834	3.99	28.34
-10	14	**1366**	4660	1175	**1.46**	4.97	938	4.45	36.72
-5	23	**1727**	5892	1485	**1.66**	5.66	1041	4.91	47.00
0	32	**2157**	7359	1855	**1.88**	6.43	1145	5.36	59.57
5	41	**2665**	9094	2292	**2.13**	7.26	1252	5.83	74.93
7.2	45	**2916**	9949	2508	**2.24**	7.65	1300	6.04	82.72

Model
GS21MLX Configuration 4

Sales code:
107B0502

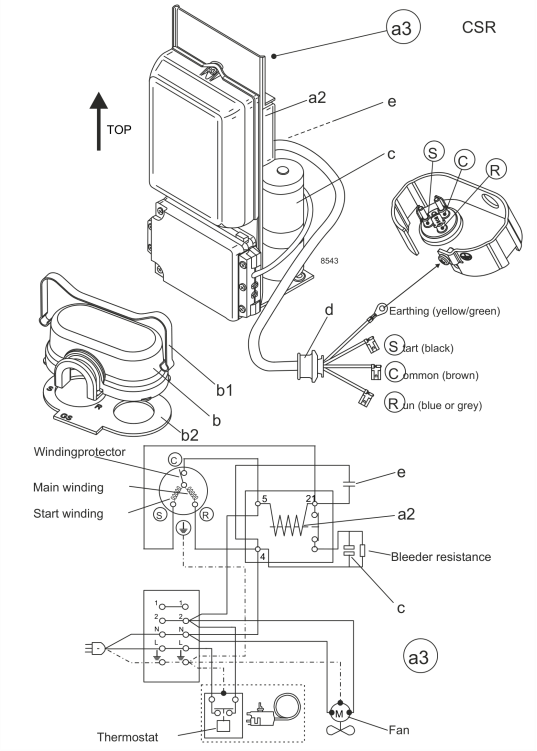
Configuration

Motor configuration	**CSCR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R449A**
Application	**MBP**
Voltage range	**198-254 V**
Starting torque	**HST**
Starting device type	**relay**
Run capacitor	**20 µF**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**24 A**
RLA (rated load amps / 1s/ U(N))	**4.7 A**
Cut in current (U(N))	**24 A**

Ambient/ machine room temperatures minimum /maximum
Ambient temperature range: 10 - 38°C / 50 - 100°F
Machine room temp. compressor: 10 - 43°C / 50 - 109°F

System Cooling
fan 3m/s

Electrical Accessories / Wiring Diagram



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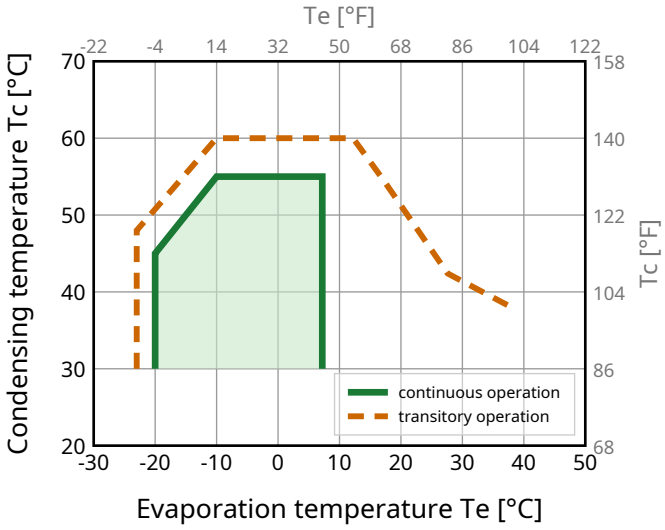
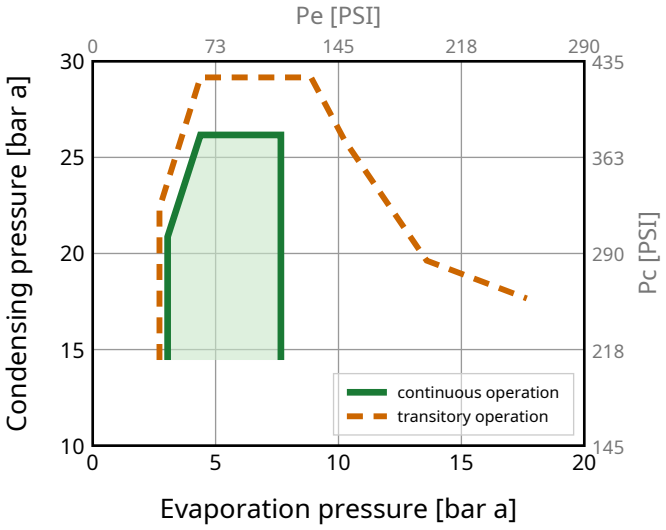
Components (cover, clamp, gasket: pre assembled)
a3 GS starter kit (600mm) 117-7070
b cover 107B9101
b2 gasket 107B9100
b1 clamp 107B9104

Operation Pressure Range





Model

GS21MLX Configuration 4

Sales code:

107B0502

Standard Conditions

R449A, 220 V/50 Hz, CSCR, fan 3m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°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	**1884**	6427	1620	**1.89**	6.46	995	4.70	42.12	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**1427**	4869	1227	**1.53**	5.22	933	4.43	35.86	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**1663**	5675	1430	**1.93**	6.57	863	4.12	39.92	**EN12900 MBP**
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	**1789**	6105	1539	**1.89**	6.45	947	4.49	45.74	**ARI540 MBP**
-10 14	45 113	32 89.6	45 113	**1733**	5914	1491	**2.01**	6.85	863	4.12	38.75	**opt MBP 1**
-25 -13	45 113	32 89.6	45 113	**793**	2705	682	**1.30**	4.43	610	3.01	17.40	**opt MBP 2**

Performance Tables

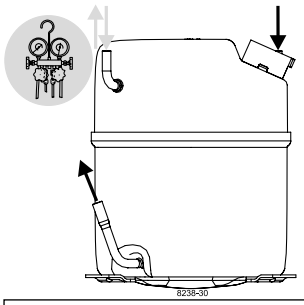
R449A, 220 V/50 Hz, CSCR, fan 3m/s

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

pe		Cooling capacity			COP	EER	P	I	ṁ
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-20	-4	**1008**	3439	867	**1.44**	4.92	699	3.40	23.79
-15	5	**1305**	4452	1122	**1.67**	5.69	782	3.77	31.02
-10	14	**1663**	5675	1430	**1.93**	6.57	863	4.12	39.92
-5	23	**2093**	7141	1800	**2.22**	7.56	944	4.48	50.77
0	32	**2602**	8879	2238	**2.54**	8.65	1026	4.84	63.96
5	41	**3201**	10920	2753	**2.88**	9.82	1112	5.22	79.90
7.2	45	**3494**	11923	3005	**3.03**	10.35	1152	5.39	87.92

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

-20	-4	**812**	2770	698	**1.12**	3.83	723	3.50	21.67
-15	5	**1059**	3613	911	**1.28**	4.35	830	3.98	28.52
-10	14	**1357**	4631	1167	**1.45**	4.96	933	4.43	36.93
-5	23	**1715**	5852	1475	**1.66**	5.65	1035	4.88	47.25
0	32	**2142**	7308	1842	**1.88**	6.43	1137	5.33	59.88
5	41	**2646**	9029	2276	**2.13**	7.27	1242	5.79	75.31
7.2	45	**2895**	9878	2490	**2.25**	7.66	1289	6.00	83.13



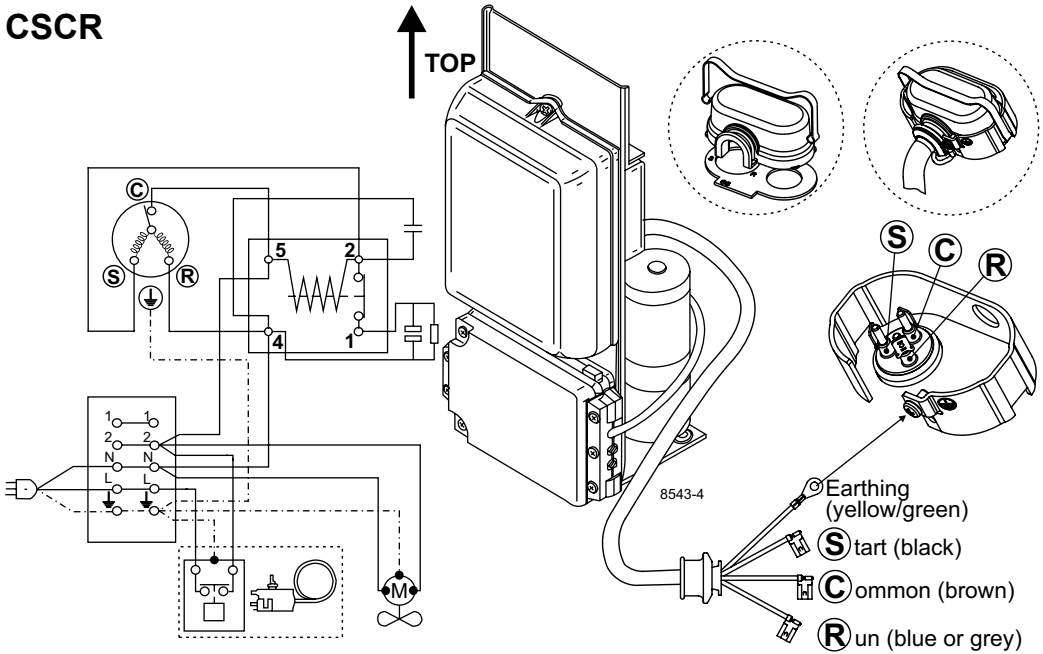
GS Compressors

SECOP

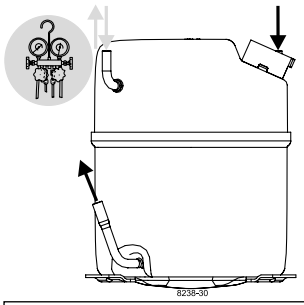
Keep electrical equipment clear from oil, chemicals, and water

When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

CSCR



	S	C	R
ENGLISH	Black	Brown	Blue or grey
DEUTSCH	Schwarz	Braun	Blau od. grau
FRANÇAIS	Noir	Marron	Bleu ou gris
ESPAÑOL	Negro	Marrón	Azul o gris
ITALIANO	Nero	Marrone	Blu o grigio
NEDERLANDS	Zwart	Bruin	Blauw of grijs
DANSK	Sort	Brun	Blå eller grå
SVENSKA	Svart	Brun	Blå eller grå
SUOMEKSI	Musta	Ruskea	Sininen tai harmaa
РУССКИЙ	Чёрный	Корич-невый	Синий или серый
中文	黑色	棕色	蓝色或灰色



GS Compressors

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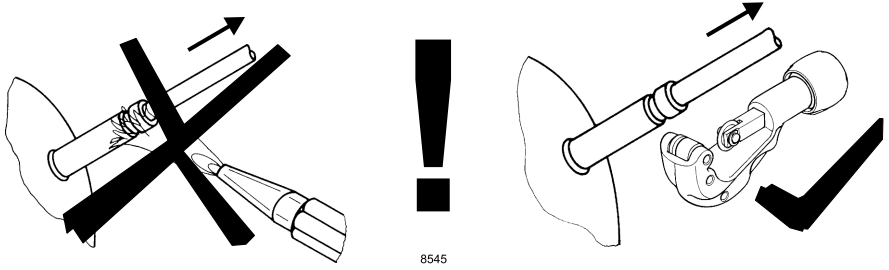
Service/Repair – R1234yf

(applies to all flammable refrigerants)



Dismantling, recycling, disposal: At the end of a compressor's lifecycle, proceed by separating and storing components according to their environmental impact. Parts that may cause pollution must be clearly identified and handled separately, ensuring appropriate disposal. Refrigerant gas must not be released into the environment and should be recovered by qualified operators. Compressor oil must also be collected separately. The compressor should be disposed of at specialized disposal centers in accordance with the applicable regulations. **Subject to modifications/alterations. www.secop.com**