Single
Packs

Single Pack GS21MLX 187-254V 60Hz CSCR

Single pack code number: **195B4636**

Position	Title	Code	Amount
1	Compressor GS21MLX	107B0509	1
2	GS starting device (600mm)	117-7073	1
3	Bolt joint for one compressor | M8 | ø19mm	107B9150	1
Below electrical equipment is pre-assembled on the compressor:			
4	Cover	107B9106	1
5	Cover clamp	107B9104	1
6	Cover gasket	107B9100	1

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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

Model
GS21MLX

Sales code:
107B0509

Compressor Design

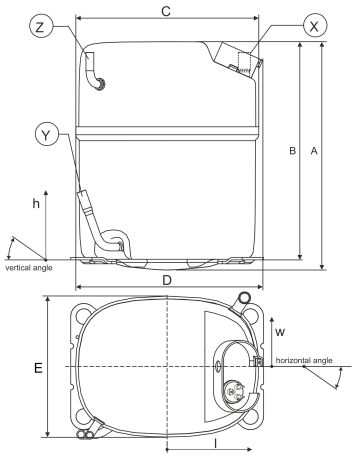
Oil type	**POE**	Motor protection	**internal**
Oil viscosity	**32,5cSt**	Winding resistance main	**1.5 Ohm**
Oil quantity	**902 / 30.50fl.oz**	Winding resistance aux	**5.8 Ohm**
Free gas volume comp.	**3,540 cm3 / 119.70fl.oz**	Max. discharge temp.	**130°C / 266°F**

Compressor Dimensions

Housing

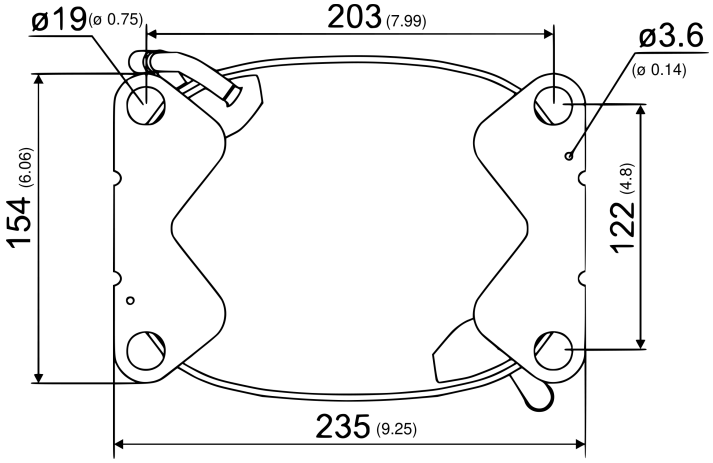
A Height	**279mm / 10.98in**
B Height	**267mm / 10.51in**
C Length shell	**224mm / 8.82in**
D Length w. cover	**232mm / 9.13in**
E Width	**173mm / 6.81in**

Find 3D Model here



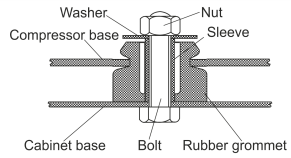
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 12.75–13.05 / 0.50–0.51in	øi 9.63–9.73 / 0.38–0.38in	øi 6.4–6.6 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	90°	71°	90°
Position l/h/w [mm]	-94.5/234/-84 / -3.72/9.21/-3.31in	-105/84/-84 / -4.13/3.31/-3.31in	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



Dimensions in mm [in]

Bolt joint



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

Model
GS21MLX Configuration 1

Sales code:
107B0509

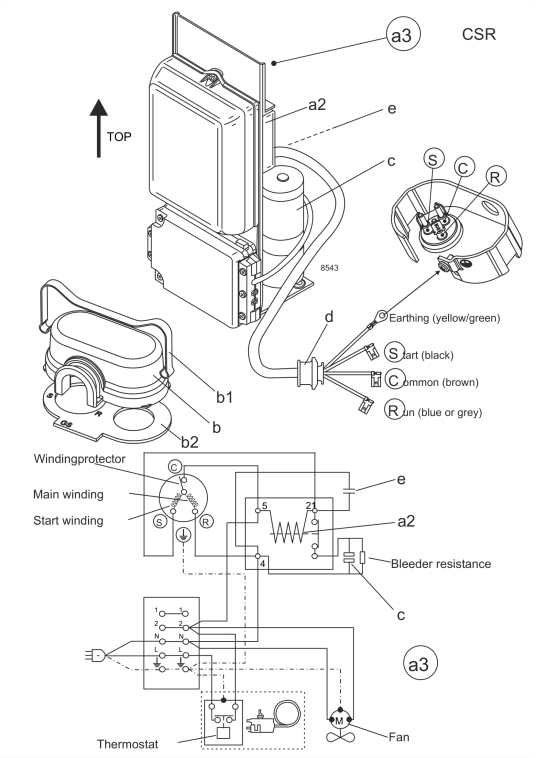
Configuration

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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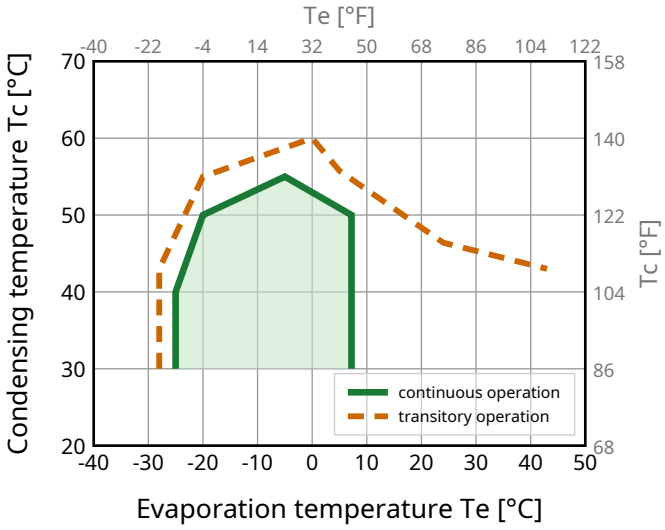
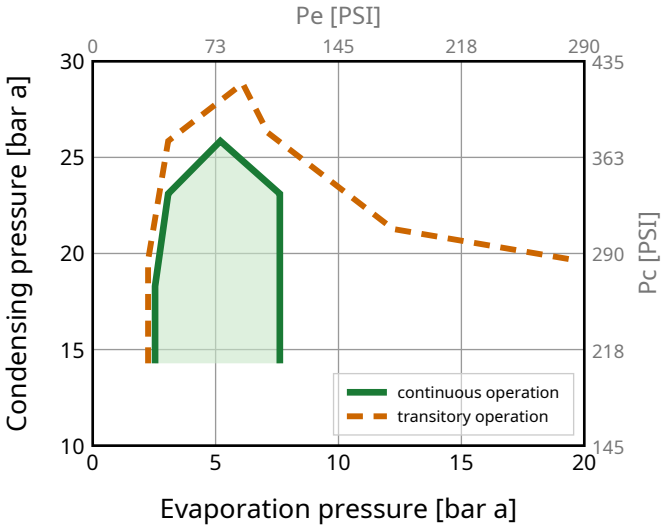
Components (cover, clamp, gasket: pre assembled)
a3 GS starter kit (600mm) 117-7073
b cover 107B9101
b2 gasket 107B9100
b1 clamp 107B9104

Operation Pressure Range





Model
GS21MLX Configuration 1

Sales code:
107B0509

Standard Conditions

R404A, 230 V/60 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	**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	ṁ
[°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

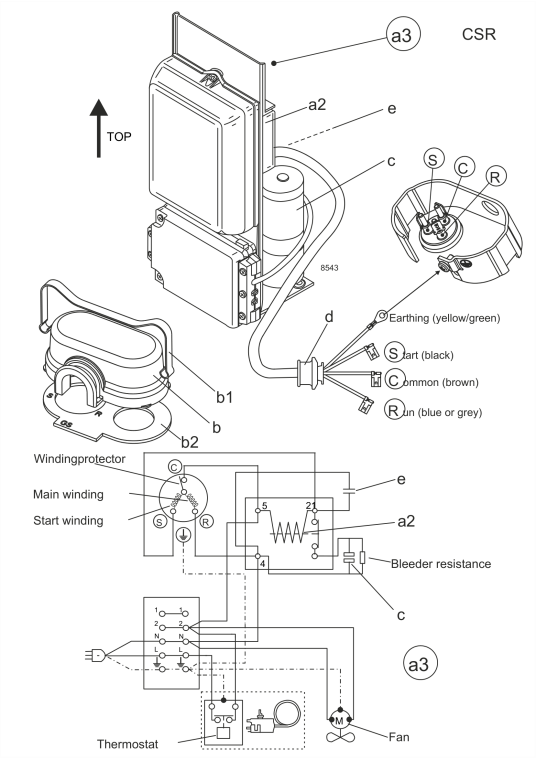
Configuration

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
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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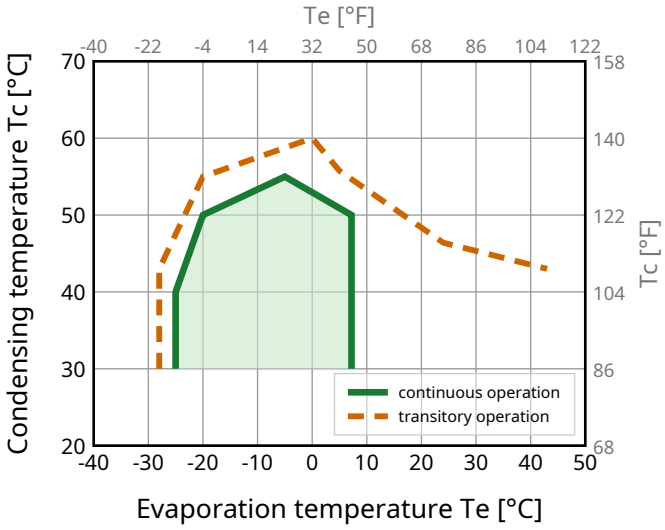
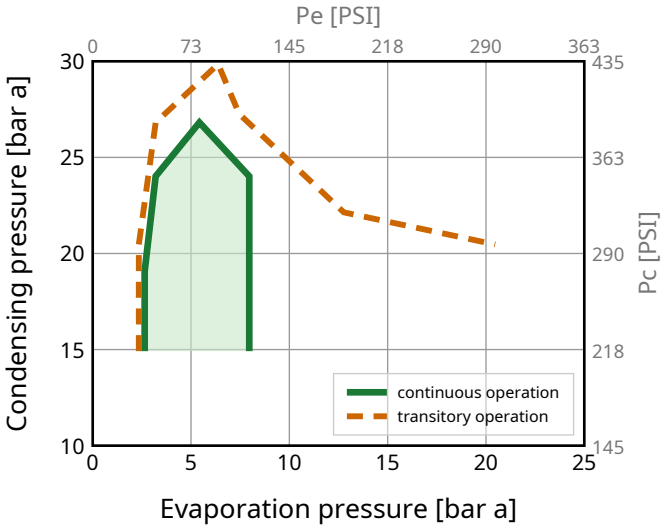
Components (cover, clamp, gasket: pre assembled)
a3 GS starter kit (600mm) 117-7073
b cover 107B9101
b2 gasket 107B9100
b1 clamp 107B9104

Operation Pressure Range





Model
GS21MLX Configuration 2

Sales code:
107B0509

Standard Conditions

R452A, 230 V/60 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	**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

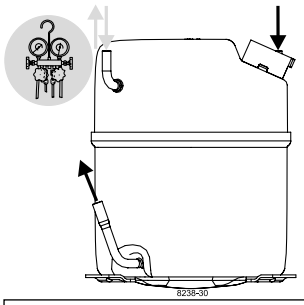
R452A, 230 V/60 Hz, CSCR, fan 3m/s

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

pe		Cooling capacity			COP	EER	P	I	ṁ
[°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



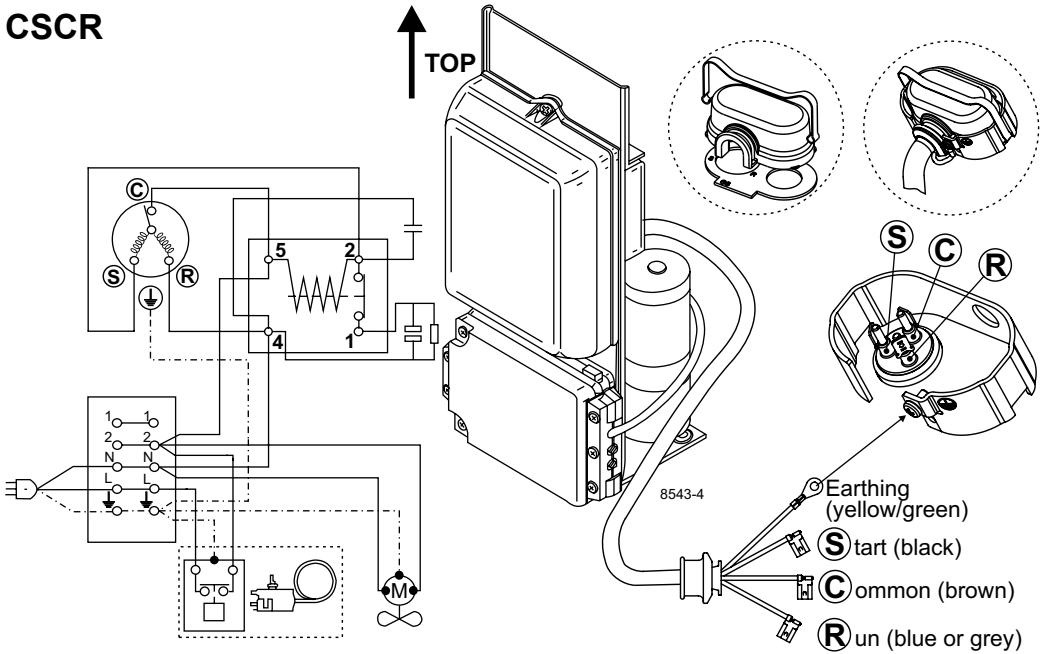
GS Compressors

SECOP

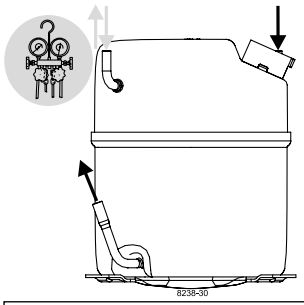
Keep electrical equipment clear from oil, chemicals, and water

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

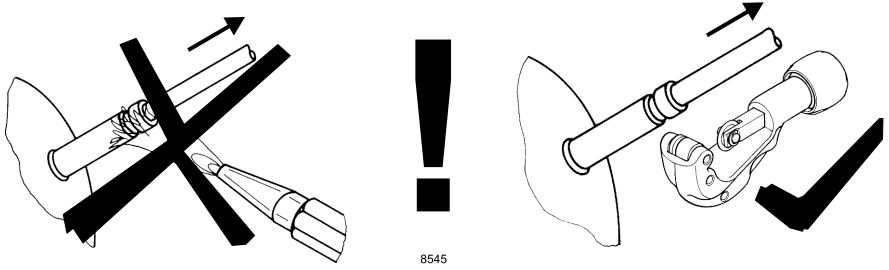
SECOP

Keep electrical equipment clear from oil, chemicals, and water

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

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**