Single
Packs

Single Pack NL8.4MF 220-240V 50Hz / 208-230V 60Hz CSIR

Single pack code number: **195B4347**

Position	Title	Code	Amount
1	Compressor NL8.4MF	105G7802	1
2	Starting relay	117U6016	1
3	Starting capacitor (80µF 220V, 6.3mm)	117U5015	1
4	Cord relief	103N1010	1
5	Cover	103N2011	1
6	Bolt joint for one compressor | M6 | ø16mm	118-1917	1

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Model
NL8.4MF

Sales code:
105G7802

Compressor Data

Refrigerant(s)	**R134a / R513A**
Refr. charge - tech. limit	**600g / 21.16oz**
Weight	**10.50 kg / 23.15lbs**
Displacement	**8.35 cm3 / 0.51cu.in**
Compressors on pallet	**80**

General – Configurations With NL8.4MF

–	Conf. 1	Conf. 2	Conf. 3	Conf. 4	Conf. 5	Conf. 6
Motor configuration	RSIR	CSIR	CSIR	CSIR	CSIR	RSIR
Power supply (nominal)	220-240 V/50 Hz	220-240 V/50 Hz	208-230 V/60 Hz	220-240 V/50 Hz	208-230 V/60 Hz	220-240 V/50 Hz
Number of phases	1	1	1	1	1	1
Voltage range	187-254 V	187-254 V	187-254 V	187-254 V	187-253 V	187-254 V
Approvals	VDE, CCC, EAC, UL	VDE, CCC, EAC, UL	CCC, EAC, UL	VDE, CCC, UL	CCC, UL	VDE, CCC, UL
Starting torque	LST	HST	HST	HST	HST	LST
Refrigerant	R134a	R134a	R134a	R513A	R513A	R513A
Application	MBP+HBP	MBP+HBP	LBP+MBP	MBP+HBP	LBP+MBP	MBP+HBP
Long interval pull down	OK	OK	OK	OK	OK	OK

Application Notes

- No RSIR for 60 Hz operation.
- Provision for PE Grounding is located at the PE Stamp on the compressor
- See data for different refrigerant attached

Model
NL8.4MF

Sales code:
105G7802

Compressor Design

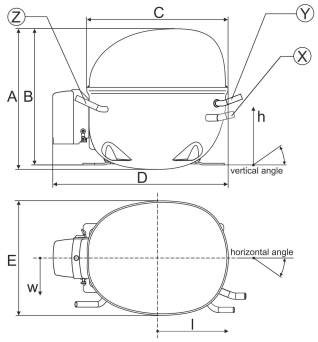
Oil type	**POE**	Winding resistance main	**7.2 Ohm**
Oil viscosity	**32cSt**	Winding resistance aux	**9.8 Ohm**
Oil quantity	**268 / 9.06fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**2,360 cm3 / 79.80fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**internal**		

Compressor Dimensions

Housing

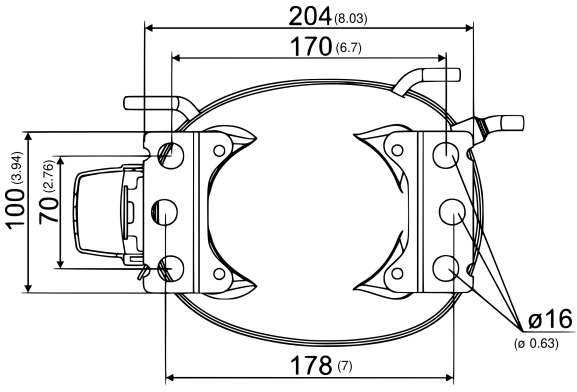
A Height	**197mm / 7.76in**
B Height	**191mm / 7.52in**
C Length shell	**205mm / 8.07in**
D Length w. cover	**254mm / 10.00in**
E Width	**166mm / 6.54in**

Find 3D Model here



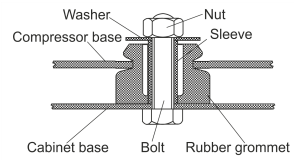
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	15°	35°	155°
Position l/h/w [mm]	125.5/75.5/78 / 4.94/2.97/3.07in	133/102.5/54 / 5.24/4.04/2.13in	-107/93.5/72 / -4.21/3.68/2.83in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

Mounting Accessories

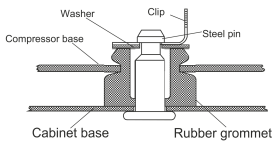


Dimensions in mm [in]

Bolt joint



Snap-on



	one comp.	multi pack
Bolt joint | M6 | ø16mm	118-1917	118-1918
Bolt joint | ø1/4" | ø16mm	118-1946	–
Snap-on | ø7,3 | ø16mm	118-1947	118-1919

Model
NL8.4MF Configuration 1

Sales code:
105G7802

Configuration

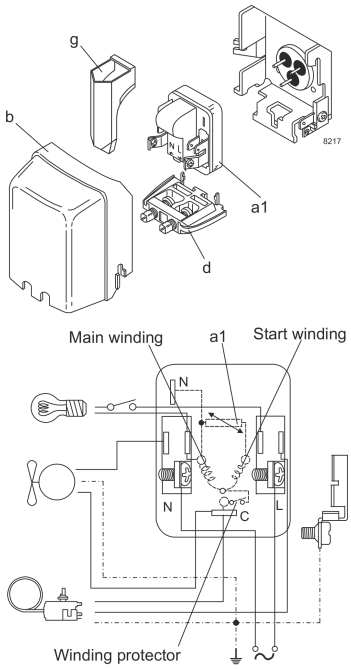
Motor configuration	**RSIR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R134a**
Application	**MBP+HBP**
Voltage range	**187-254 V**
Starting torque	**LST**
Approvals	**VDE, CCC, EAC, UL**
Starting device type	**PTC**
Run capacitor	**-/-**
Start capacitor	**-/-**
LRA (locked rotor amps / 4s/ U(N))	**10.8 A**
RLA (rated load amps / 1s/ U(N))	**2.2 A**
Cut in current (U(N))	**16.3 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 1,5m/s

Electrical Accessories / Wiring Diagram

RSIR



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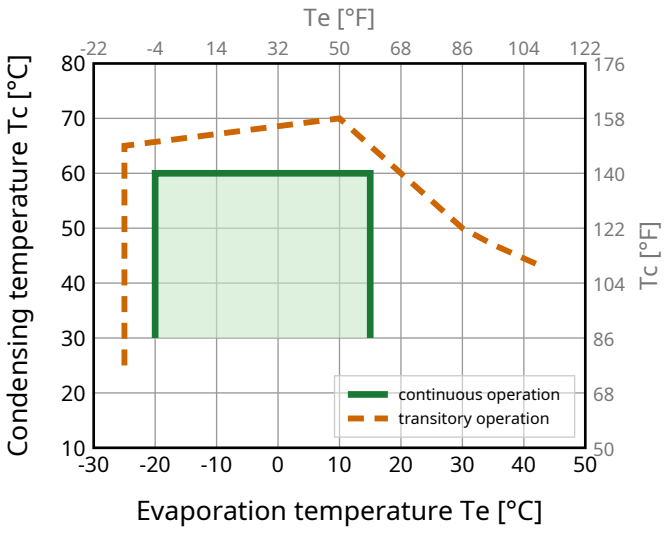
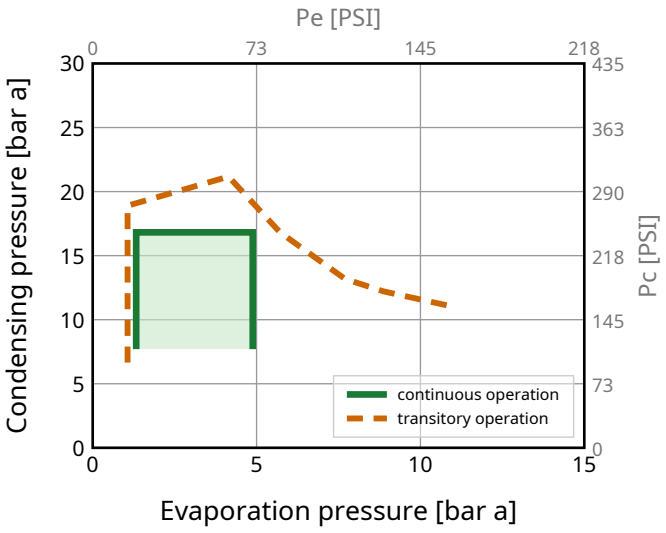
Components
a1 PTC starter (220V, 25Ohm, 4.8mm) 103N0018
b plastic cover 103N2011
d cord relief 103N1010
g protection screen for PTC 103N0476

Alternative components
a1 PTC starter (220V, 25Ohm, 6.3mm) 103N0011
b plastic cover 103N2010

Operation Pressure Range





Model
NL8.4MF Configuration 1

Sales code:
105G7802

Standard Conditions

R134a, 220 V/50 Hz, RSIR, fan 1,5m/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	**456**	1555	392	**1.64**	5.59	278	1.96	9.93	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**353**	1206	304	**1.35**	4.62	261	1.92	8.52	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**400**	1367	344	**1.62**	5.52	248	1.91	9.34	**EN12900 MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**821**	2802	706	**2.27**	7.74	362	2.27	18.18	**ASHRAE HBP**
5 41	55 131	32 89.6	55 131	**679**	2316	584	**1.94**	6.63	349	2.20	16.67	**CECOMAF HBP**
5 41	50 122	20 68	50 122	**704**	2401	605	**2.09**	7.13	337	2.16	17.65	**EN12900 HBP**

Performance Tables

R134a, 220 V/50 Hz, RSIR, fan 1,5m/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]
-20	-4	**252**	858	216	**1.24**	4.24	202	1.83	5.45
-15	5	**326**	1111	280	**1.45**	4.94	225	1.87	7.08
-10	14	**415**	1415	357	**1.68**	5.72	248	1.91	9.06
-5	23	**521**	1777	448	**1.92**	6.54	272	1.95	11.43
0	32	**646**	2202	555	**2.17**	7.41	297	2.02	14.24
5	41	**791**	2698	680	**2.44**	8.32	324	2.13	17.56
10	50	**959**	3271	824	**2.71**	9.25	354	2.28	21.46
15	59	**1151**	3927	990	**2.99**	10.20	385	2.50	26.00

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

-20	-4	**213**	727	183	**1.02**	3.49	208	1.84	5.09
-15	5	**277**	944	238	**1.18**	4.03	234	1.88	6.64
-10	14	**353**	1206	304	**1.35**	4.62	261	1.92	8.52
-5	23	**445**	1517	382	**1.54**	5.26	289	1.98	10.78
0	32	**552**	1885	475	**1.74**	5.93	318	2.07	13.47
5	41	**679**	2316	584	**1.94**	6.63	349	2.20	16.67
10	50	**826**	2817	710	**2.16**	7.36	383	2.39	20.45
15	59	**994**	3393	855	**2.38**	8.10	419	2.65	24.89

Model
NL8.4MF Configuration 2

Sales code:
105G7802

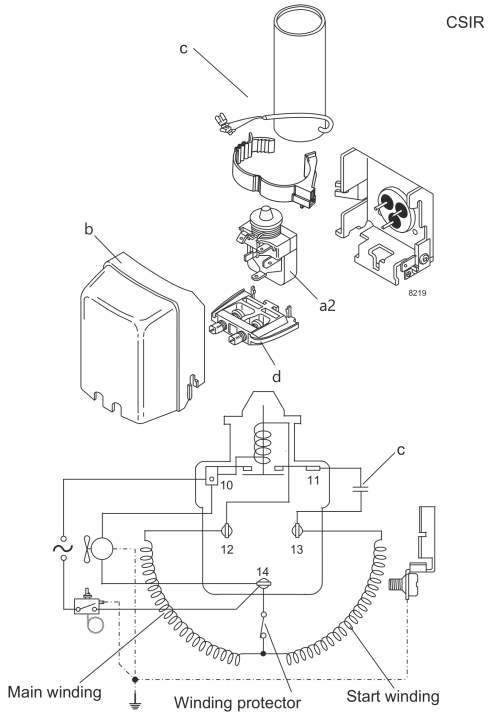
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R134a**
Application	**MBP+HBP**
Voltage range	**187-254 V**
Starting torque	**HST**
Approvals	**VDE, CCC, EAC, UL**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**10.8 A**
RLA (rated load amps / 1s/ U(N))	**2.2 A**
Cut in current (U(N))	**16.3 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 1,5m/s

Electrical Accessories / Wiring Diagram



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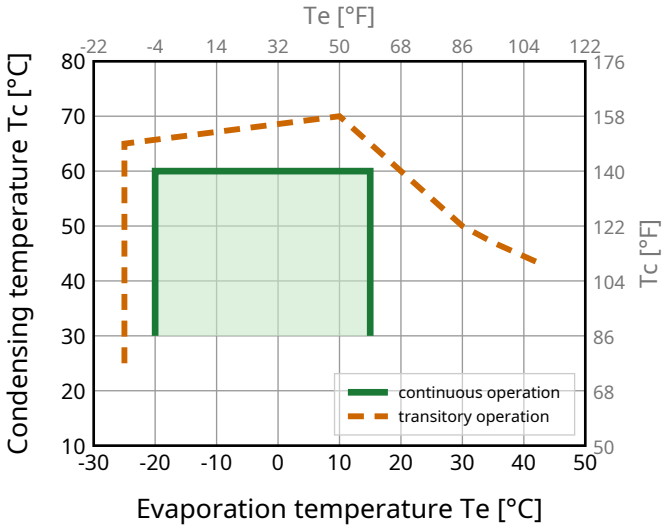
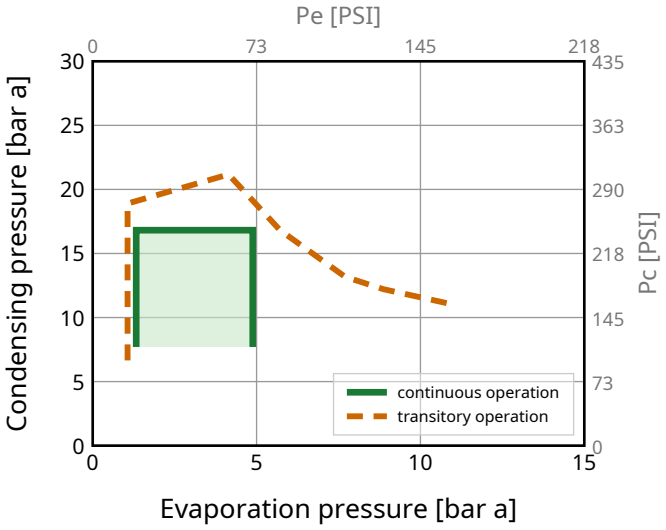
Components
a2 relay 117U6016
c start capacitor (80µF) 117U5015
b plastic cover 103N2011
d cord relief 103N1010

Operation Pressure Range





Model
NL8.4MF Configuration 2

Sales code:
105G7802

Standard Conditions

R134a, 220 V/50 Hz, CSIR, fan 1,5m/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	**456**	1555	392	**1.64**	5.59	278	1.96	9.93	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**353**	1206	304	**1.35**	4.62	261	1.92	8.52	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**400**	1367	344	**1.62**	5.52	248	1.91	9.34	**EN12900 MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**821**	2802	706	**2.27**	7.74	362	2.27	18.18	**ASHRAE HBP**
5 41	55 131	32 89.6	55 131	**679**	2316	584	**1.94**	6.63	349	2.20	16.67	**CECOMAF HBP**
5 41	50 122	20 68	50 122	**704**	2401	605	**2.09**	7.13	337	2.16	17.65	**EN12900 HBP**

Performance Tables

R134a, 220 V/50 Hz, CSIR, fan 1,5m/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]
-20	-4	**252**	858	216	**1.24**	4.24	202	1.83	5.45
-15	5	**326**	1111	280	**1.45**	4.94	225	1.87	7.08
-10	14	**415**	1415	357	**1.68**	5.72	248	1.91	9.06
-5	23	**521**	1777	448	**1.92**	6.54	272	1.95	11.43
0	32	**646**	2202	555	**2.17**	7.41	297	2.02	14.24
5	41	**791**	2698	680	**2.44**	8.32	324	2.13	17.56
10	50	**959**	3271	824	**2.71**	9.25	354	2.28	21.46
15	59	**1151**	3927	990	**2.99**	10.20	385	2.50	26.00

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

-20	-4	**213**	727	183	**1.02**	3.49	208	1.84	5.09
-15	5	**277**	944	238	**1.18**	4.03	234	1.88	6.64
-10	14	**353**	1206	304	**1.35**	4.62	261	1.92	8.52
-5	23	**445**	1517	382	**1.54**	5.26	289	1.98	10.78
0	32	**552**	1885	475	**1.74**	5.93	318	2.07	13.47
5	41	**679**	2316	584	**1.94**	6.63	349	2.20	16.67
10	50	**826**	2817	710	**2.16**	7.36	383	2.39	20.45
15	59	**994**	3393	855	**2.38**	8.10	419	2.65	24.89

Model
NL8.4MF Configuration 3

Sales code:
105G7802

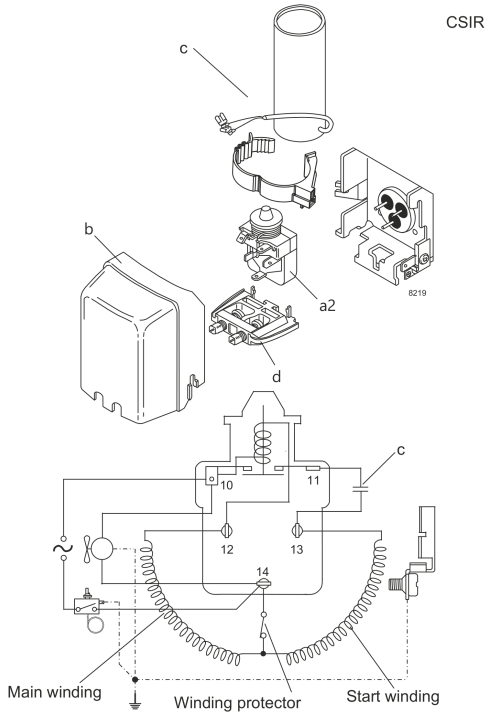
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**208-230 V/60 Hz 1~**
Refrigerant	**R134a**
Application	**LBP+MBP**
Voltage range	**187-254 V**
Starting torque	**HST**
Approvals	**CCC, EAC, UL**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**10.8 A**
RLA (rated load amps / 1s/ U(N))	**2.2 A**
Cut in current (U(N))	**16.3 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 1,5m/s

Electrical Accessories / Wiring Diagram



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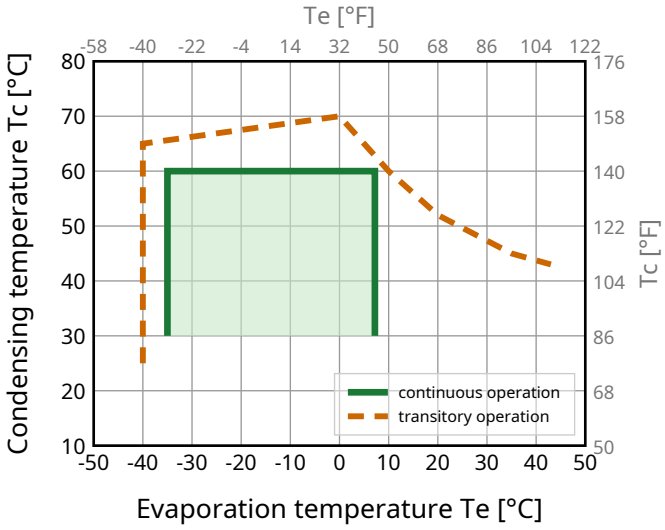
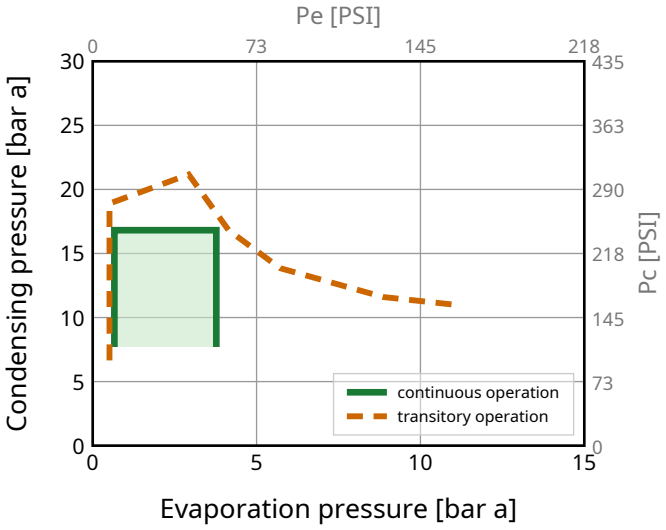
Components
a2 relay 117U6016
c start capacitor (80µF) 117U5015
b plastic cover 103N2011
d cord relief 103N1010

Operation Pressure Range





Model

NL8.4MF Configuration 3

Sales code:

105G7802

Standard Conditions

R134a, 220 V/60 Hz, CSIR, fan 1,5m/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	**545**	1861	469	**1.62**	5.52	337	1.96	11.88	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**420**	1432	361	**1.35**	4.61	311	1.86	10.12	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**485**	1653	417	**1.65**	5.64	293	1.80	11.30	**EN12900 MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**992**	3383	853	**2.19**	7.47	453	2.44	21.95	**ASHRAE HBP**
5 41	55 131	32 89.6	55 131	**818**	2791	703	**1.87**	6.38	437	2.37	20.09	**CECOMAF HBP**
5 41	50 122	20 68	50 122	**854**	2912	734	**2.05**	7.00	416	2.30	21.41	**EN12900 HBP**

Performance Tables

R134a, 220 V/60 Hz, CSIR, fan 1,5m/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]
-35	-31	**115**	391	99	**0.91**	3.10	126	1.28	2.47
-30	-22	**165**	563	142	**1.04**	3.56	158	1.37	3.56
-20	-4	**302**	1031	260	**1.34**	4.59	225	1.57	6.55
-10	14	**502**	1713	432	**1.71**	5.84	293	1.80	10.96
0	32	**782**	2666	672	**2.15**	7.35	363	2.08	17.24
7.2	45	**1042**	3555	896	**2.53**	8.63	412	2.30	23.22

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

-35	-31	**76**	261	66	**0.69**	2.37	110	1.22	1.82
-30	-22	**123**	420	106	**0.83**	2.83	149	1.33	2.93
-20	-4	**245**	836	211	**1.07**	3.66	228	1.58	5.86
-10	14	**420**	1432	361	**1.35**	4.61	311	1.86	10.12
0	32	**664**	2266	571	**1.68**	5.74	395	2.19	16.19
7.2	45	**893**	3047	768	**1.96**	6.68	456	2.45	22.01

Model
NL8.4MF Configuration 4

Sales code:
105G7802

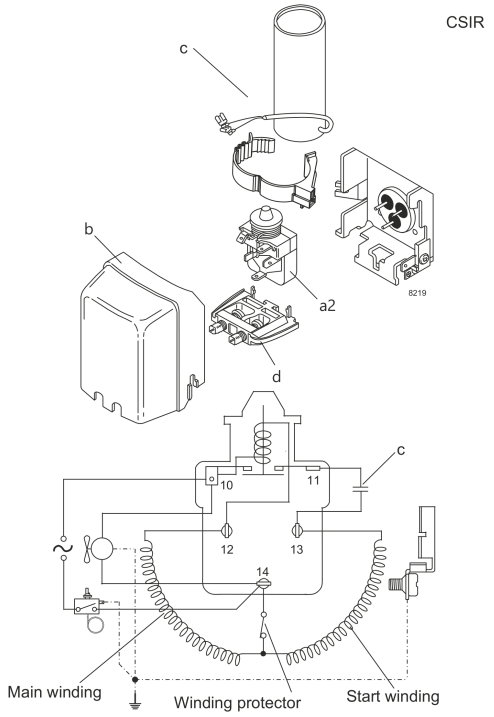
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R513A**
Application	**MBP+HBP**
Voltage range	**187-254 V**
Starting torque	**HST**
Approvals	**VDE, CCC, UL**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**10.8 A**
RLA (rated load amps / 1s/ U(N))	**2.2 A**
Cut in current (U(N))	**16.3 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 1,5m/s

Electrical Accessories / Wiring Diagram



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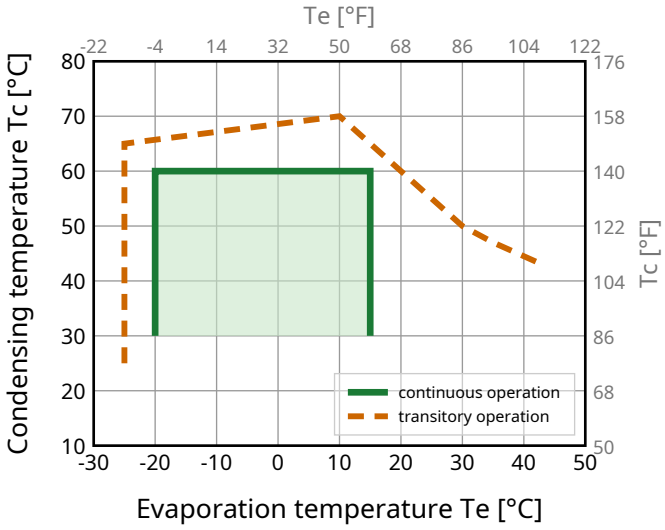
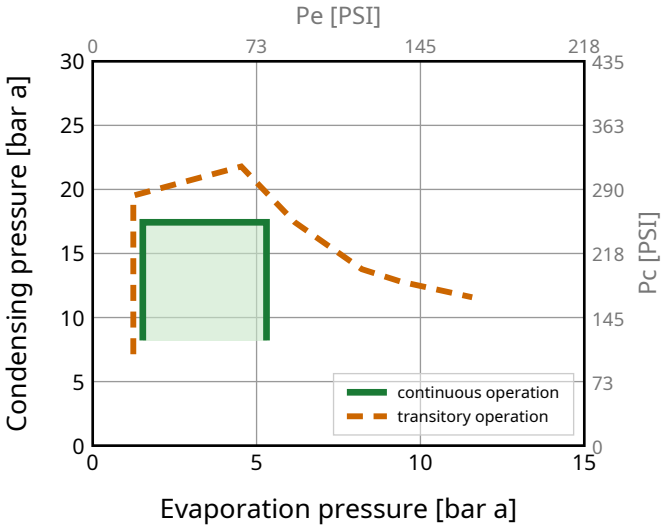
Components
a2 relay 117U6016
c start capacitor (80µF) 117U5015
b plastic cover 103N2011
d cord relief 103N1010

Operation Pressure Range





Model
NL8.4MF Configuration 4

Sales code:
105G7802

Standard Conditions

R513A, 220 V/50 Hz, CSIR, fan 1,5m/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	**479**	1634	412	**1.63**	5.56	294	2.07	11.94	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**368**	1254	316	**1.33**	4.53	277	2.02	10.31	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**417**	1423	359	**1.59**	5.43	262	1.98	11.30	**EN12900 MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**845**	2884	727	**2.24**	7.63	378	2.30	21.47	**ASHRAE HBP**
5 41	55 131	32 89.6	55 131	**688**	2348	592	**1.88**	6.43	365	2.27	19.74	**CECOMAF HBP**
5 41	50 122	20 68	50 122	**709**	2419	610	**2.01**	6.87	352	2.23	20.90	**EN12900 HBP**

Performance Tables

R513A, 220 V/50 Hz, CSIR, fan 1,5m/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]
-20	-4	**271**	925	233	**1.25**	4.28	216	1.85	6.73
-15	5	**347**	1184	299	**1.45**	4.96	239	1.91	8.65
-10	14	**438**	1493	376	**1.67**	5.70	262	1.98	10.96
-5	23	**545**	1859	469	**1.90**	6.49	286	2.04	13.71
0	32	**670**	2286	576	**2.15**	7.34	312	2.12	16.97
5	41	**815**	2781	701	**2.41**	8.21	339	2.19	20.81
10	50	**982**	3351	845	**2.67**	9.10	368	2.27	25.29
15	59	**1172**	4000	1008	**2.93**	10.01	400	2.36	30.52

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

-20	-4	**227**	775	195	**1.01**	3.46	224	1.87	6.32
-15	5	**291**	994	250	**1.16**	3.97	250	1.94	8.13
-10	14	**368**	1254	316	**1.33**	4.53	277	2.02	10.31
-5	23	**458**	1562	394	**1.50**	5.13	305	2.10	12.93
0	32	**564**	1925	485	**1.69**	5.77	334	2.18	16.05
5	41	**688**	2348	592	**1.88**	6.43	365	2.27	19.74
10	50	**832**	2837	715	**2.09**	7.12	399	2.36	24.09
15	59	**996**	3398	857	**2.29**	7.82	435	2.46	29.20

Model
NL8.4MF Configuration 5

Sales code:
105G7802

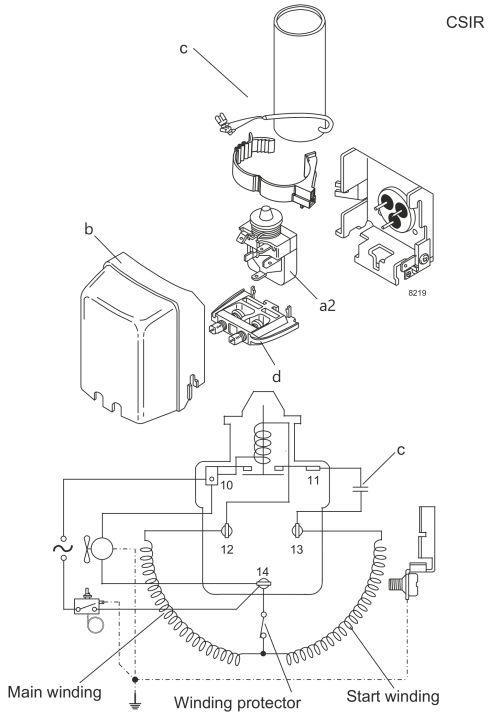
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**208-230 V/60 Hz 1~**
Refrigerant	**R513A**
Application	**LBP+MBP**
Voltage range	**187-253 V**
Starting torque	**HST**
Approvals	**CCC, UL**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**10.8 A**
RLA (rated load amps / 1s/ U(N))	**2.2 A**
Cut in current (U(N))	**16.3 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 1,5m/s

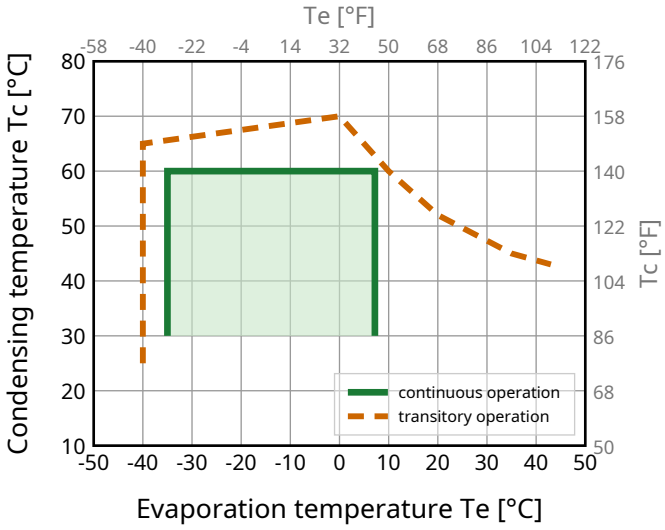
Electrical Accessories / Wiring Diagram

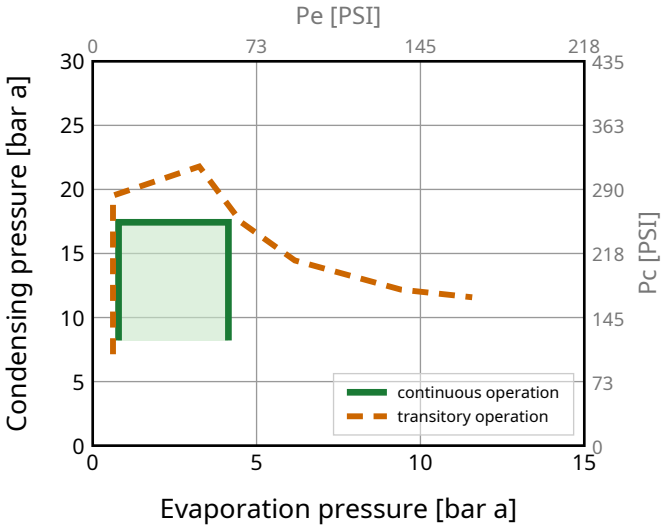


View full size

Components
a2 relay 117U6016
c start capacitor (80µF) 117U5015
b plastic cover 103N2011
d cord relief 103N1010

Operation Pressure Range





Model

NL8.4MF Configuration 5

Sales code:

105G7802

Standard Conditions

R513A, 220 V/60 Hz, CSIR, fan 1,5m/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	**573**	1954	492	**1.59**	5.42	361	2.09	14.28	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**436**	1488	375	**1.30**	4.45	334	1.99	12.23	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**504**	1721	434	**1.61**	5.48	314	1.92	13.66	**EN12900 MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**1019**	3476	876	**2.13**	7.28	478	2.54	25.89	**ASHRAE HBP**
5 41	55 131	32 89.6	55 131	**828**	2825	712	**1.79**	6.11	462	2.48	23.75	**CECOMAF HBP**
5 41	50 122	20 68	50 122	**859**	2932	739	**1.96**	6.68	439	2.39	25.33	**EN12900 HBP**

Performance Tables

R513A, 220 V/60 Hz, CSIR, fan 1,5m/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]
-35	-31	**131**	448	113	**0.93**	3.17	142	1.26	3.23
-30	-22	**184**	628	158	**1.05**	3.59	175	1.39	4.54
-20	-4	**326**	1112	280	**1.34**	4.56	244	1.65	8.09
-10	14	**529**	1806	455	**1.69**	5.75	314	1.92	13.25
0	32	**810**	2765	697	**2.11**	7.20	384	2.18	20.53
7.2	45	**1070**	3650	920	**2.47**	8.42	434	2.37	27.41

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

-35	-31	**89**	304	77	**0.71**	2.41	126	1.20	2.45
-30	-22	**137**	468	118	**0.82**	2.81	166	1.35	3.79
-20	-4	**261**	891	225	**1.05**	3.58	249	1.67	7.26
-10	14	**436**	1488	375	**1.30**	4.45	334	1.99	12.23
0	32	**677**	2311	583	**1.61**	5.51	420	2.32	19.26
7.2	45	**902**	3076	775	**1.88**	6.40	481	2.55	25.96

Model
NL8.4MF Configuration 6

Sales code:
105G7802

Configuration

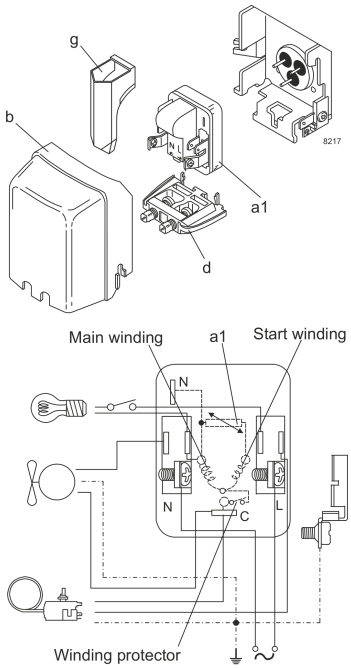
Motor configuration	**RSIR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R513A**
Application	**MBP+HBP**
Voltage range	**187-254 V**
Starting torque	**LST**
Approvals	**VDE, CCC, UL**
Starting device type	**PTC**
Run capacitor	**-/-**
Start capacitor	**-/-**
LRA (locked rotor amps / 4s/ U(N))	**10.8 A**
RLA (rated load amps / 1s/ U(N))	**2.2 A**
Cut in current (U(N))	**16.3 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 1,5m/s

Electrical Accessories / Wiring Diagram

RSIR

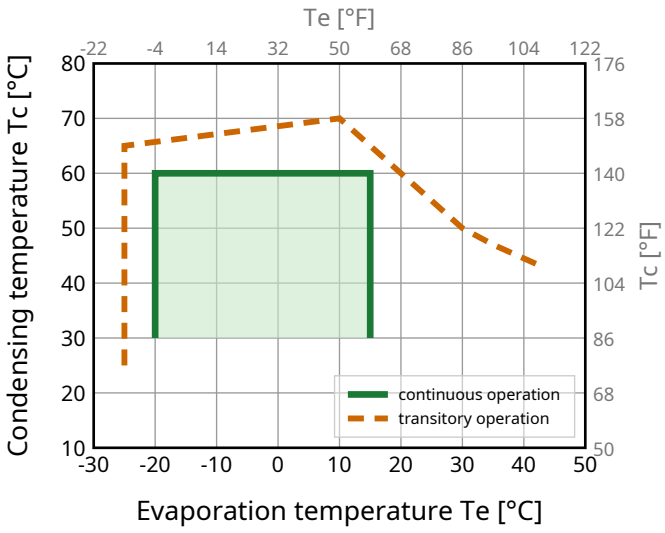


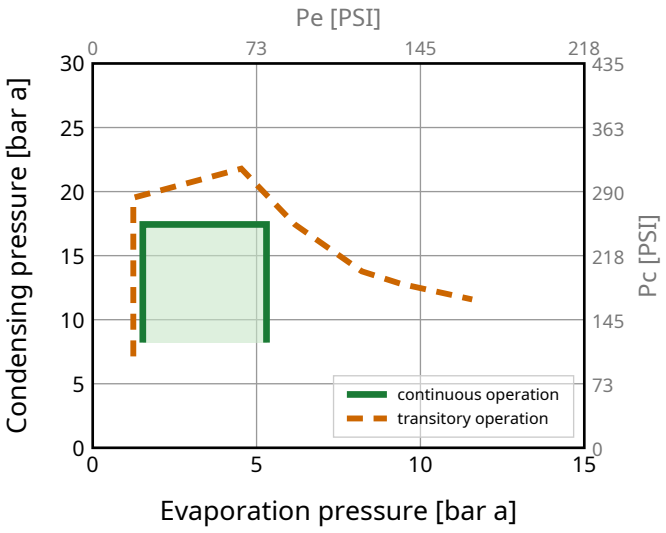
View full size

Components
a1 PTC starter (220V, 25Ohm, 4.8mm) 103N0018
b plastic cover 103N2010
d cord relief 103N1010
g protection screen for PTC 103N0476

Alternative components
a1 PTC starter (220V, 25Ohm, 6.3mm) 103N0011
b plastic cover 103N2011

Operation Pressure Range





Model

NL8.4MF Configuration 6

Sales code:

105G7802

Standard Conditions

R513A, 220 V/50 Hz, RSIR, fan 1,5m/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	**479**	1634	412	**1.63**	5.56	294	2.07	11.94	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**368**	1254	316	**1.33**	4.53	277	2.02	10.31	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**417**	1423	359	**1.59**	5.43	262	1.98	11.30	**EN12900 MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**845**	2884	727	**2.24**	7.63	378	2.30	21.47	**ASHRAE HBP**
5 41	55 131	32 89.6	55 131	**688**	2348	592	**1.88**	6.43	365	2.27	19.74	**CECOMAF HBP**
5 41	50 122	20 68	50 122	**709**	2419	610	**2.01**	6.87	352	2.23	20.90	**EN12900 HBP**

Performance Tables

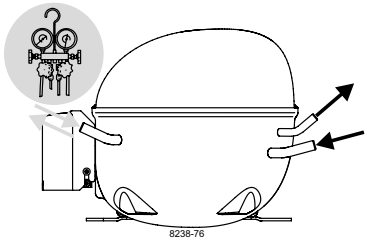
R513A, 220 V/50 Hz, RSIR, fan 1,5m/s

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]
-20	-4	**271**	925	233	**1.25**	4.28	216	1.85	6.73
-15	5	**347**	1184	299	**1.45**	4.96	239	1.91	8.65
-10	14	**438**	1493	376	**1.67**	5.70	262	1.98	10.96
-5	23	**545**	1859	469	**1.90**	6.49	286	2.04	13.71
0	32	**670**	2286	576	**2.15**	7.34	312	2.12	16.97
5	41	**815**	2781	701	**2.41**	8.21	339	2.19	20.81
10	50	**982**	3351	845	**2.67**	9.10	368	2.27	25.29
15	59	**1172**	4000	1008	**2.93**	10.01	400	2.36	30.52

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

-20	-4	**227**	775	195	**1.01**	3.46	224	1.87	6.32
-15	5	**291**	994	250	**1.16**	3.97	250	1.94	8.13
-10	14	**368**	1254	316	**1.33**	4.53	277	2.02	10.31
-5	23	**458**	1562	394	**1.50**	5.13	305	2.10	12.93
0	32	**564**	1925	485	**1.69**	5.77	334	2.18	16.05
5	41	**688**	2348	592	**1.88**	6.43	365	2.27	19.74
10	50	**832**	2837	715	**2.09**	7.12	399	2.36	24.09
15	59	**996**	3398	857	**2.29**	7.82	435	2.46	29.20



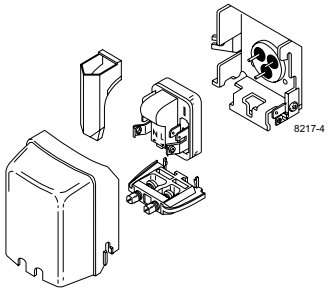
NL Compressors

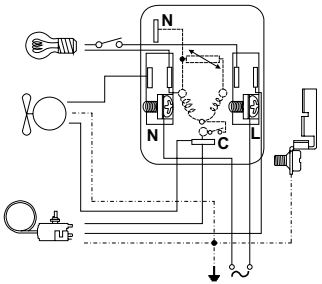
SECOP

Keep electrical equipment clear from oil, chemicals, and water

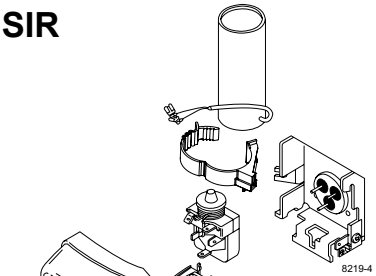
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

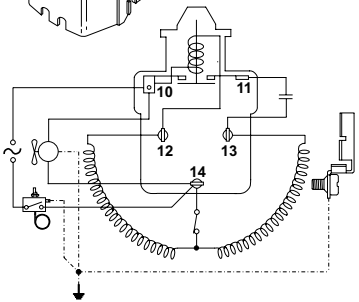
RSIR



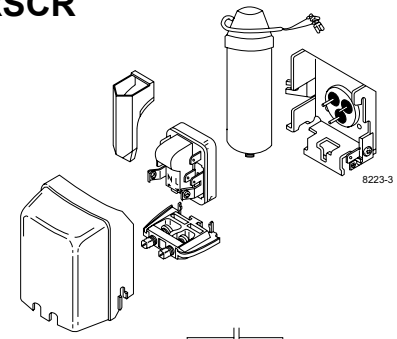


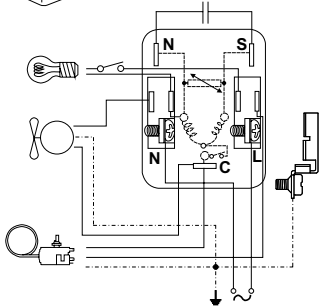
CSIR

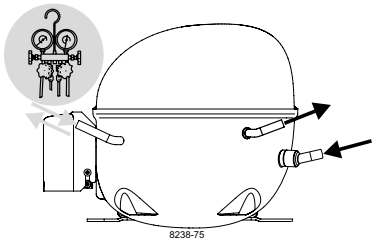




RSCR







NL Compressors

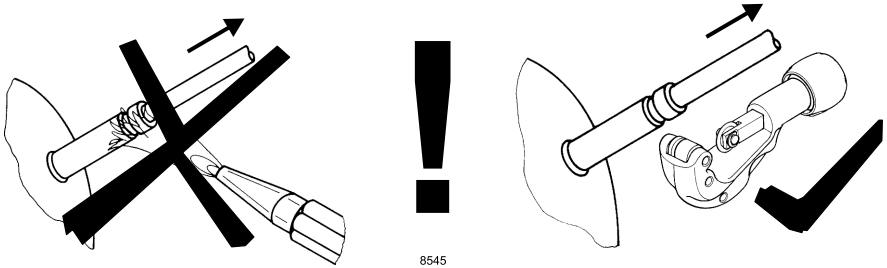
SECOP

Keep electrical equipment clear from oil, chemicals, and water

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

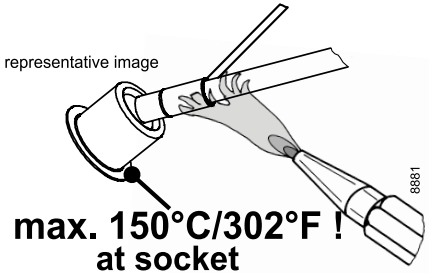
Service/Repair – R290, R600a, R170, R1270, R1234yf

(applies to all flammable refrigerants)



Brazing on Suction Connectors (Direct Intake)

representative image



! max. 150°C/302°F ! at socket

brazing solder: phosphor (LP7) or silver

Refer to Product Bulletin:
Brazing on Suction Connectors (Compressors with Direct Suction Intake)

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**