Single
Packs

Single Pack NLE8.8CN 115-127V 60Hz RSCR

Single pack code number: **195B4723**

Position	Title	Code	Amount
1	Compressor NLE8.8CN	105H6094	1
2	e-PTC starting device (115V, 50hm, 6.3mm)	103N0058	1
3	Run capacitor (23.5µF 190V, 6.3mm)	117-7114	1
4	Run capacitor holder	117-0300	1
5	Screw for bracket M4x8mm	117-0301	1
6	Cord relief	103N1010	1
7	Cover	103N2011	1
8	Bolt joint for one compressor | M6 | ø16mm	118-1917	1

Secop GmbH • Lise-Meitner-Straße 29 • 24941 Flensburg, Germany • Tel: +49 461 4941 0 • **www.secop.com**

Secop accepts no responsibility for possible errors in catalogs, brochures, and other printed material. Secop reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary to specifications already agreed. All trademarks in this material are the property of the respective companies. Secop and the Secop logotype are trademarks of Secop GmbH. All rights reserved.

Model
NLE8.8CN

Sales code:
105H6094

Compressor Data

Refrigerant(s)	**R290**
Refr. charge - tech. limit	**400g / 14.11oz**
Weight	**10.90 kg / 24.03lbs**
Displacement	**8.76 cm3 / 0.53cu.in**
Compressors on pallet	**80**

General – Configurations With NLE8.8CN

–	**Conf. 1**	**Conf. 2**	**Conf. 3**
Motor configuration	CSIR	RSIR	eRSCR
Power supply (nominal)	115 V/60 Hz	115 V/60 Hz	115 V/60 Hz
Number of phases	1	1	1
Voltage range	95-135 V	95-135 V	95-135 V
Approvals	UL, CCC	UL, CCC	UL, CCC
Starting torque	HST	LST	LST
Refrigerant	R290	R290	R290
Application	LBP+MBP	LBP+MBP	LBP+MBP
Hot gas defrost	OK	OK	OK
Long interval pull down	OK	OK	OK

Application Notes

- Provision for PE Grounding is located at the PE Stamp on the compressor

Model
NLE8.8CN

Sales code:
105H6094

Compressor Design

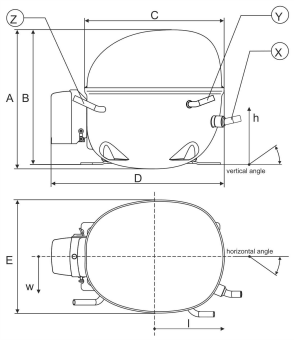
Oil type	**32 cSt POE RL32DR**	Winding resistance main	**1.6 Ohm**
Oil viscosity	**32cSt**	Winding resistance aux	**5.1 Ohm**
Oil quantity	**260 / 8.79fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**2,360 cm3 / 79.80fl.oz**	Max. discharge temp.	**120°C / 248°F**
Motor protection	**internal**		

Compressor Dimensions

Housing

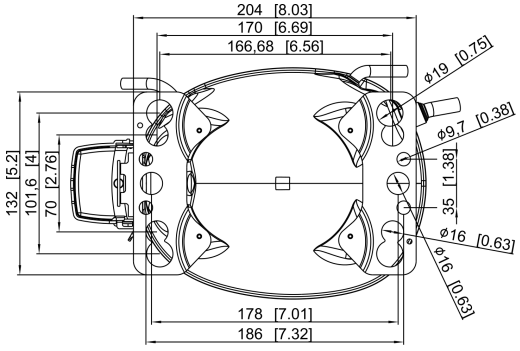
A Height	**203mm / 7.99in**
B Height	**197mm / 7.76in**
C Length shell	**205mm / 8.07in**
D Length w. cover	**254mm / 10.00in**
E Width	**166mm / 6.54in**

Find 3D Model here



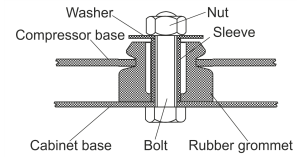
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	15°	21°	155°
Position l/h/w [mm]	132/68.5/56.7 / 5.20/2.70/2.23in	94/101.7/81 / 3.70/4.00/3.19in	-109.3/94.3/72 / -4.30/3.71/2.83in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

Mounting Accessories

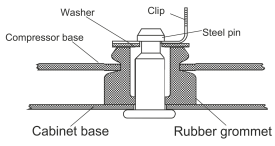


Dimensions in mm [in]

Bolt joint



Snap-on



	one comp.	multi pack
Bolt joint | M6 | ø16mm	118-1917	118-1918
Bolt joint | ø1/4" | ø16mm	118-1946	–
Bolt joint | ø1/4" | ø19mm	118-1949	–
Snap-on | ø7,3 | ø16mm	118-1947	118-1919

Model
NLE8.8CN Configuration 1

Sales code:
105H6094

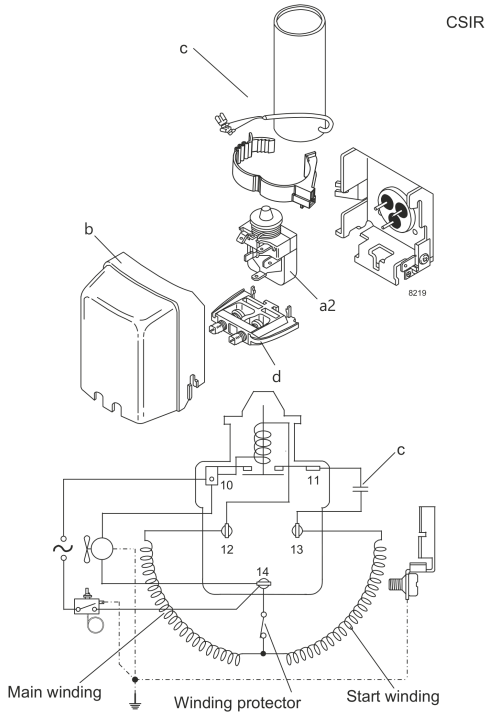
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**115 V/60 Hz 1~**
Refrigerant	**R290**
Application	**LBP+MBP**
Voltage range	**95-135 V**
Starting torque	**HST**
Approvals	**UL, CCC**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**280 µF**
LRA (locked rotor amps / 4s/ U(N))	**32.01 A**
RLA (rated load amps / 1s/ U(N))	**5.33 A**
Cut in current (U(N))	**32.01 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

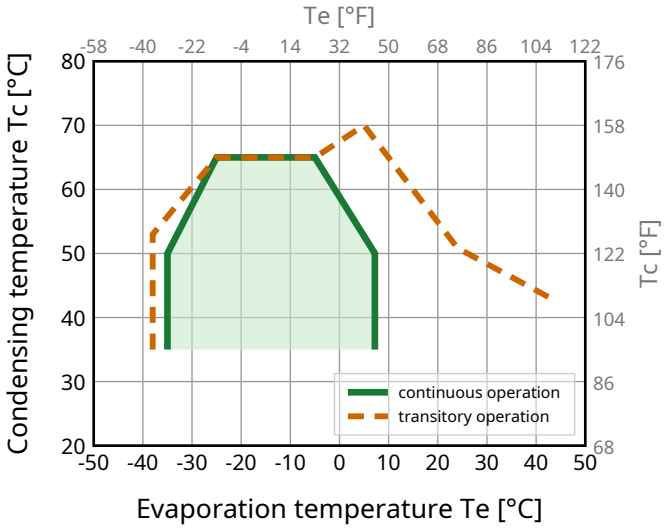
Electrical Accessories / Wiring Diagram

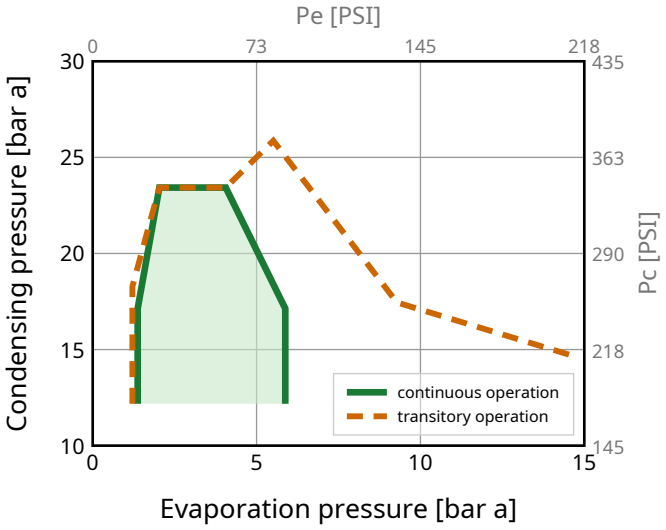


View full size

Components
a2 current relay 117U7014
c start capacitor (280µF) 117U5025
b plastic cover 103N2011
d cord relief 103N1010

Operation Pressure Range





Model

NLE8.8CN Configuration 1

Sales code:

105H6094

Standard Conditions

R290, 115 V/60 Hz, CSIR, 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]	
-23.3 -10	54.4 129.9	32.2 90	32.2 90	**515**	1759	443	**1.58**	5.39	326	4.24	5.24	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**384**	1312	331	**1.22**	4.16	316	4.18	4.82	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**304**	1039	262	**1.26**	4.30	242	3.80	3.49	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**915**	3122	787	**2.08**	7.11	439	5.00	10.48	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**728**	2484	626	**1.75**	5.97	416	4.83	9.26	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**809**	2760	696	**2.08**	7.11	388	4.64	9.95	**EN12900 MBP**

Performance Tables

R290, 115 V/60 Hz, CSIR, 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]
-35	-31	**289**	986	248	**1.18**	4.02	246	3.83	3.25
-30	-22	**365**	1246	314	**1.34**	4.56	273	3.96	4.13
-20	-4	**568**	1939	489	**1.74**	5.93	327	4.25	6.47
-10	14	**841**	2869	723	**2.17**	7.39	388	4.64	9.65
0	32	**1185**	4044	1019	**2.53**	8.64	468	5.20	13.78
7.2	45	**1479**	5047	1272	**2.72**	9.29	543	5.74	17.40

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

-35	-31	**239**	817	206	**0.97**	3.31	247	3.83	2.98
-30	-22	**304**	1036	261	**1.08**	3.67	282	4.00	3.79
-20	-4	**482**	1644	414	**1.38**	4.72	348	4.37	6.07
-10	14	**728**	2484	626	**1.75**	5.97	416	4.83	9.26
0	32	**1045**	3565	899	**2.10**	7.18	497	5.45	13.47
7.2	45	**1318**	4497	1134	**2.32**	7.91	569	6.04	17.22

Model
NLE8.8CN Configuration 2

Sales code:
105H6094

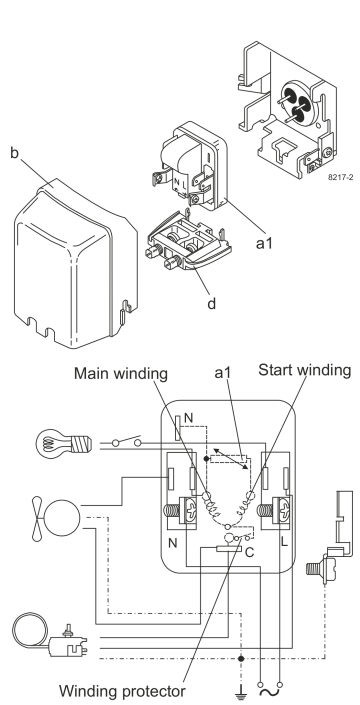
Configuration

Motor configuration	**RSIR**
Power supply (nominal)	**115 V/60 Hz 1~**
Refrigerant	**R290**
Application	**LBP+MBP**
Voltage range	**95-135 V**
Starting torque	**LST**
Approvals	**UL, CCC**
Starting device type	**PTC**
Run capacitor	**-/-**
Start capacitor	**-/-**
LRA (locked rotor amps / 4s/ U(N))	**32.01 A**
RLA (rated load amps / 1s/ U(N))	**5.33 A**
Cut in current (U(N))	**32.01 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

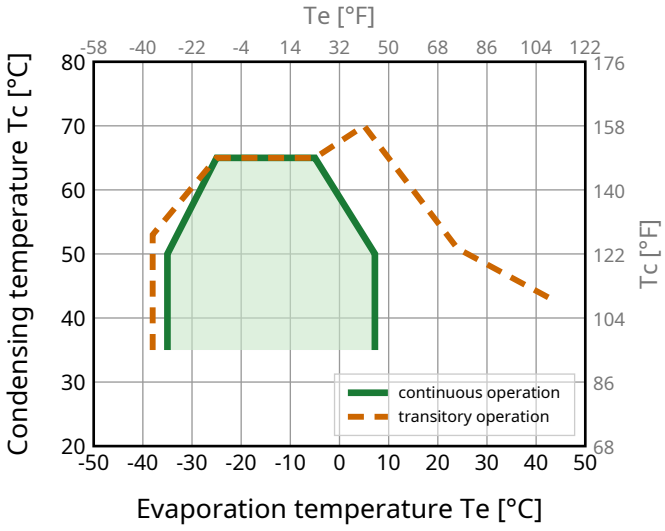
Electrical Accessories / Wiring Diagram

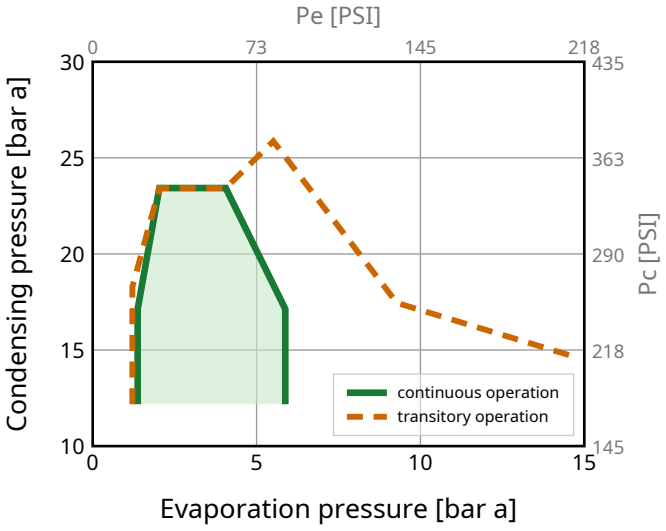


Components
a1 e-PTC starter (115V, 5Ohm, 6.3mm, 4.8-cap) 103N0057
b plastic cover 103N2011
d cord relief 103N1010

Alternative components
a1 e-PTC starter 103N0058

Operation Pressure Range





Model

NLE8.8CN Configuration 2

Sales code:

105H6094

Standard Conditions

R290, 115 V/60 Hz, RSIR, 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]	
-23.3 -10	54.4 129.9	32.2 90	32.2 90	**515**	1759	443	**1.58**	5.39	326	4.24	5.24	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**384**	1312	331	**1.22**	4.16	316	4.18	4.82	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**304**	1039	262	**1.26**	4.30	242	3.80	3.49	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**915**	3122	787	**2.08**	7.11	439	5.00	10.48	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**728**	2484	626	**1.75**	5.97	416	4.83	9.26	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**809**	2760	696	**2.08**	7.11	388	4.64	9.95	**EN12900 MBP**

Performance Tables

R290, 115 V/60 Hz, RSIR, 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]
-35	-31	**289**	986	248	**1.18**	4.02	246	3.83	3.25
-30	-22	**365**	1246	314	**1.34**	4.56	273	3.96	4.13
-20	-4	**568**	1939	489	**1.74**	5.93	327	4.25	6.47
-10	14	**841**	2869	723	**2.17**	7.39	388	4.64	9.65
0	32	**1185**	4044	1019	**2.53**	8.64	468	5.20	13.78
7.2	45	**1479**	5047	1272	**2.72**	9.29	543	5.74	17.40

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

-35	-31	**239**	817	206	**0.97**	3.31	247	3.83	2.98
-30	-22	**304**	1036	261	**1.08**	3.67	282	4.00	3.79
-20	-4	**482**	1644	414	**1.38**	4.72	348	4.37	6.07
-10	14	**728**	2484	626	**1.75**	5.97	416	4.83	9.26
0	32	**1045**	3565	899	**2.10**	7.18	497	5.45	13.47
7.2	45	**1318**	4497	1134	**2.32**	7.91	569	6.04	17.22

Model
NLE8.8CN Configuration 3

Sales code:
105H6094

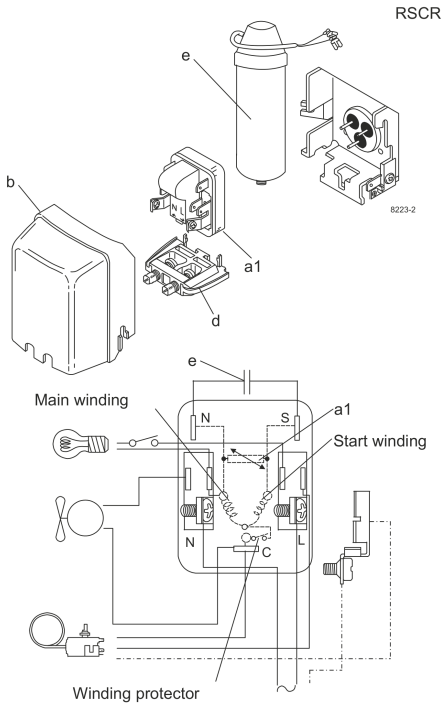
Configuration

Motor configuration	**eRSCR**
Power supply (nominal)	**115 V/60 Hz 1~**
Refrigerant	**R290**
Application	**LBP+MBP**
Voltage range	**95-135 V**
Starting torque	**LST**
Approvals	**UL, CCC**
Starting device type	**e-PTC**
Run capacitor	**23.5 µF**
Start capacitor	**-/-**
LRA (locked rotor amps / 4s/ U(N))	**32.01 A**
RLA (rated load amps / 1s/ U(N))	**5.33 A**
Cut in current (U(N))	**32.01 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

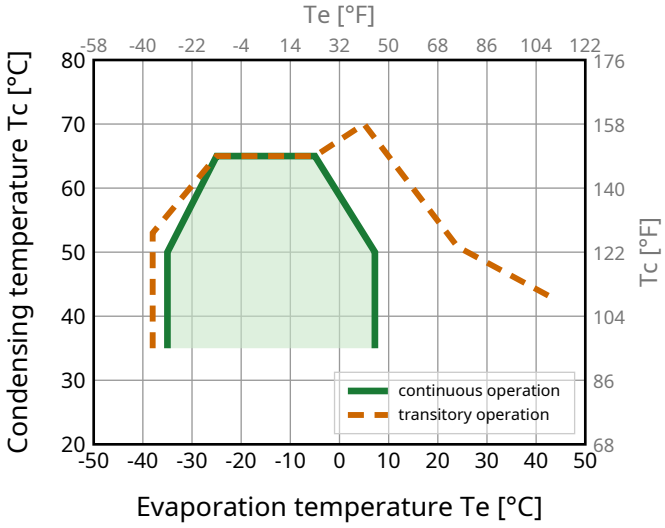
System Cooling
fan 3m/s

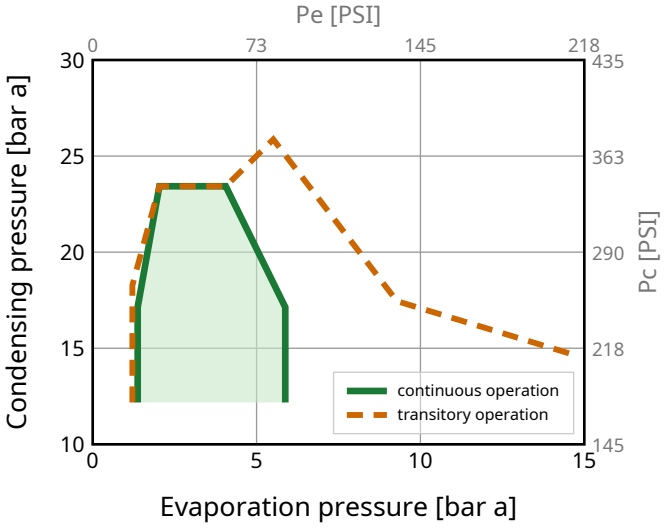
Electrical Accessories / Wiring Diagram



Components
a1 e-PTC starter 103N0058
e run capacitor (23,5µF, 6.3mm) 117-7114
b plastic cover 103N2011
d cord relief 103N1010
bracket for run capacitor 117-0300
screw M4x8mm 117-0301

Operation Pressure Range





Model
NLE8.8CN Configuration 3

Sales code:
105H6094

Standard Conditions

R290, 115 V/60 Hz, eRSCR, 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]	
-23.3 -10	54.4 129.9	32.2 90	32.2 90	**523**	1783	449	**1.68**	5.75	310	4.03	5.31	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**390**	1331	335	**1.30**	4.43	300	3.97	4.89	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**306**	1045	263	**1.41**	4.80	218	3.53	3.52	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**926**	3160	796	**2.25**	7.66	412	4.66	10.60	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**737**	2514	634	**1.89**	6.43	391	4.51	9.37	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**820**	2796	705	**2.25**	7.66	365	4.33	10.09	**EN12900 MBP**

Performance Tables

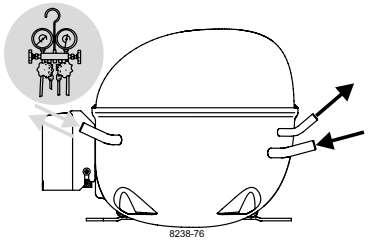
R290, 115 V/60 Hz, eRSCR, fan 3m/s

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]
-35	-31	**290**	991	250	**1.32**	4.50	220	3.52	3.27
-30	-22	**369**	1259	317	**1.45**	4.96	254	3.73	4.17
-20	-4	**576**	1965	495	**1.86**	6.34	310	4.03	6.55
-10	14	**852**	2907	733	**2.33**	7.96	365	4.33	9.78
0	32	**1201**	4097	1033	**2.75**	9.39	436	4.86	13.96
7.2	45	**1499**	5116	1289	**2.95**	10.08	508	5.51	17.64

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

-35	-31	**243**	830	209	**1.06**	3.61	230	3.48	3.03
-30	-22	**309**	1053	265	**1.15**	3.93	268	3.75	3.85
-20	-4	**488**	1666	420	**1.48**	5.04	331	4.15	6.15
-10	14	**737**	2514	634	**1.89**	6.43	391	4.51	9.37
0	32	**1058**	3609	910	**2.27**	7.75	466	5.07	13.64
7.2	45	**1336**	4557	1149	**2.48**	8.46	539	5.72	17.45



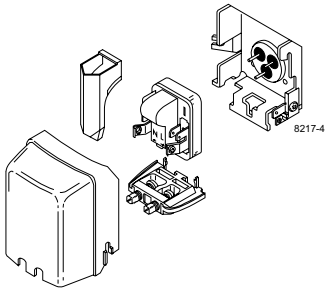
NL Compressors

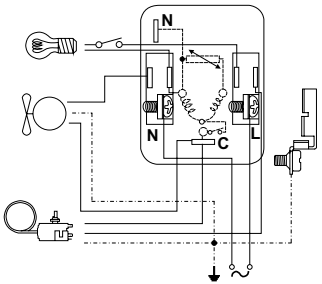
SECOP

Keep electrical equipment clear from oil, chemicals, and water

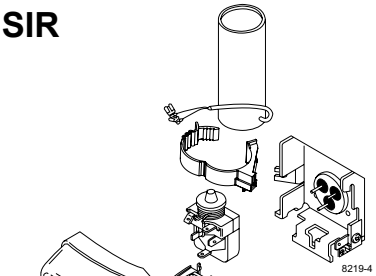
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

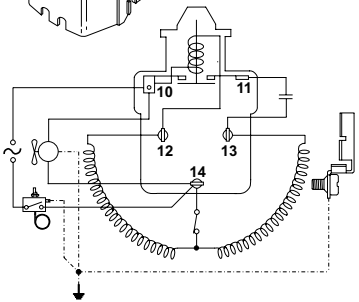
RSIR



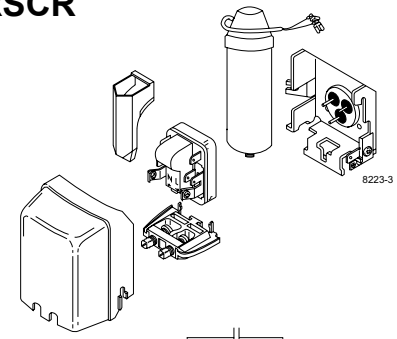


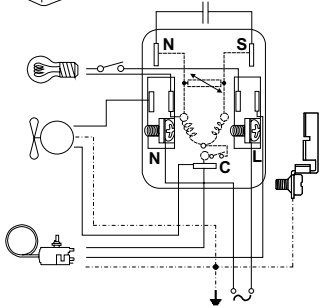
CSIR

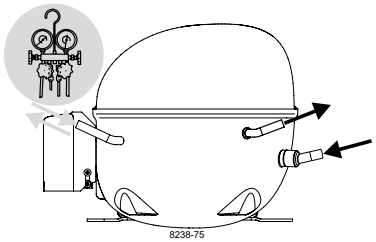




RSCR







NL Compressors

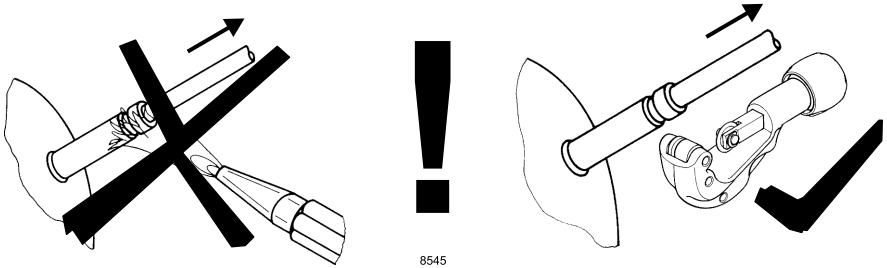
SECOP

Keep electrical equipment clear from oil, chemicals, and water

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

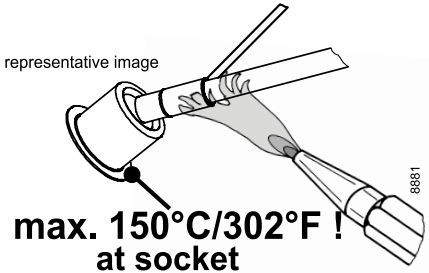
Service/Repair – R290, R600a, R170, R1270, R1234yf

(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**