Single
Packs

Single Pack NLE8.8CNT 208-230V 60Hz CSIR

Single pack code number: **195B4331**

Position	Title	Code	Amount
1	Compressor NLE8.8CNT	105H6088	1
2	Starting relay	117U7022	1
3	Starting capacitor (100µF 260V, 6.3mm)	117U5381	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
NLE8.8CNT

Sales code:
105H6088

Compressor Data

Refrigerant(s)	**R290**
Refr. charge - tech. limit	**400g / 14.11oz**
Weight	**11.10 kg / 24.47lbs**
Displacement	**8.76 cm3 / 0.53cu.in**
Compressors on pallet	**80**

General – Configurations With NLE8.8CNT

–	**Conf. 1**	**Conf. 2**	**Conf. 3**
Motor configuration	CSIR	eRSIR	eRSCR
Power supply (nominal)	208-230 V/60 Hz	208-230 V/60 Hz	208-230 V/60 Hz
Number of phases	1	1	1
Voltage range	187-253 V	187-253 V	187-253 V
Approvals	UL, CB	UL, CB	UL, CB
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
NLE8.8CNT

Sales code:
105H6088

Compressor Design

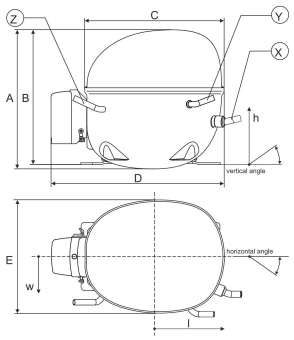
Oil type	**POE**	Winding resistance main	**6.53 Ohm**
Oil viscosity	**32cSt**	Winding resistance aux	**7.45 Ohm**
Oil quantity	**268 / 9.06fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**2,360 cm3 / 79.80fl.oz**	Max. discharge temp.	**120°C / 248°F**
Motor protection	**internal**		

Compressor Dimensions

Housing

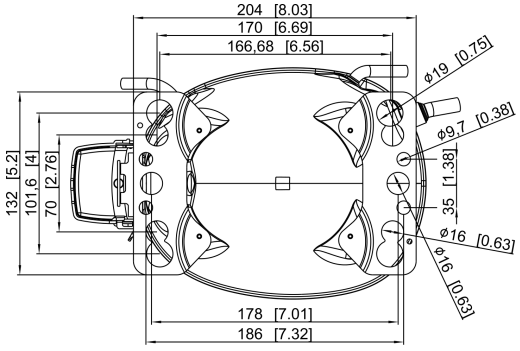
A Height	**203mm / 7.99in**
B Height	**197mm / 7.76in**
C Length shell	**205mm / 8.07in**
D Length w. cover	**254mm / 10.00in**
E Width	**166mm / 6.54in**

Find 3D Model here



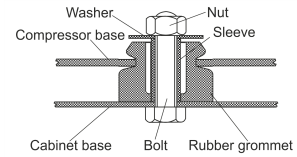
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	15°	21°	155°
Position l/h/w [mm]	132/68.5/56.7 / 5.20/2.70/2.23in	94/101.7/81 / 3.70/4.00/3.19in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

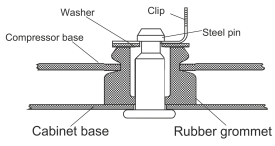


Dimensions in mm [in]

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
NLE8.8CNT Configuration 1

Sales code:
105H6088

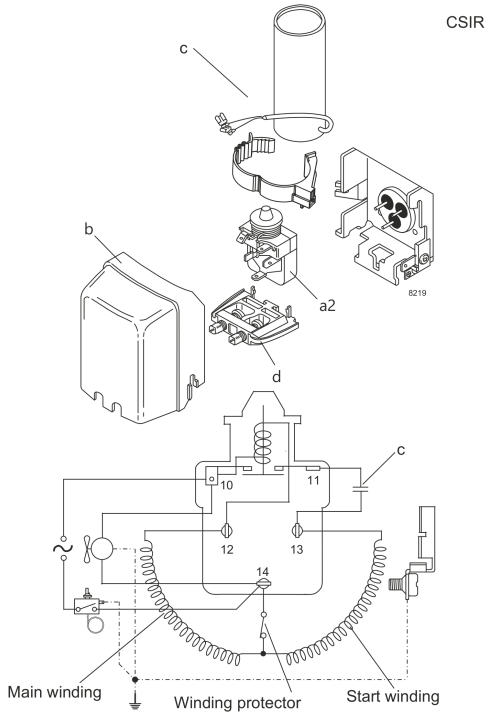
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**208-230 V/60 Hz 1~**
Refrigerant	**R290**
Application	**LBP+MBP**
Voltage range	**187-253 V**
Starting torque	**HST**
Approvals	**UL, CB**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**100 µF**
LRA (locked rotor amps / 4s/ U(N))	**15.5 A**
RLA (rated load amps / 1s/ U(N))	**3 A**
Cut in current (U(N))	**15.5 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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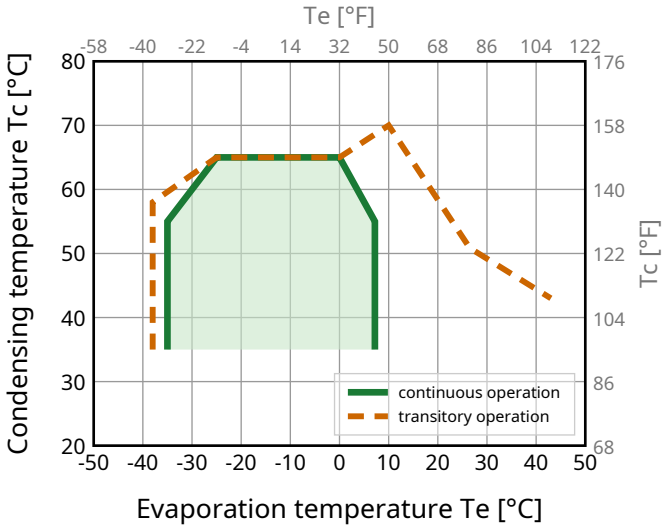
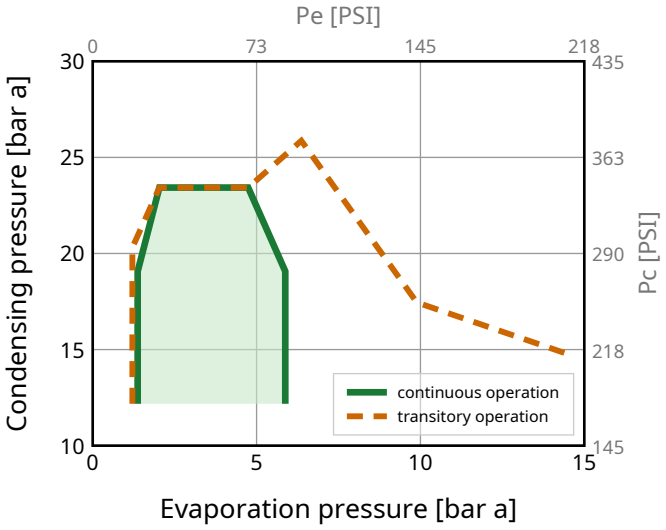
Components
a2 relay 117U7022
c start capacitor (100µF, 82kOhm) 117U5381
b plastic cover 103N2011
d cord relief 103N1010

Operation Pressure Range





Model
NLE8.8CNT Configuration 1

Sales code:
105H6088

Standard Conditions

R290, 230 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	**513**	1751	441	**1.56**	5.34	328	2.12	5.21	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**381**	1300	328	**1.20**	4.11	316	2.08	4.78	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**300**	1022	258	**1.23**	4.18	245	1.91	3.44	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**915**	3121	787	**2.05**	6.99	447	2.52	10.47	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**728**	2483	626	**1.71**	5.83	426	2.44	9.26	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**808**	2757	695	**2.06**	7.01	393	2.33	9.94	**EN12900 MBP**

Performance Tables

R290, 230 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	**285**	973	245	**1.15**	3.93	247	1.91	3.21
-30	-22	**360**	1227	309	**1.31**	4.46	275	1.97	4.06
-20	-4	**561**	1914	482	**1.68**	5.72	334	2.14	6.38
-10	14	**840**	2866	722	**2.14**	7.29	393	2.33	9.64
0	32	**1206**	4113	1037	**2.73**	9.32	441	2.50	14.02
7.2	45	**1528**	5213	1314	**3.29**	11.22	465	2.58	17.97

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

-35	-31	**222**	756	191	**0.89**	3.04	249	1.91	2.76
-30	-22	**295**	1006	254	**1.05**	3.58	281	1.99	3.68
-20	-4	**481**	1641	414	**1.36**	4.65	353	2.20	6.05
-10	14	**728**	2483	626	**1.71**	5.83	426	2.44	9.26
0	32	**1044**	3563	898	**2.12**	7.25	491	2.68	13.46
7.2	45	**1320**	4505	1136	**2.50**	8.52	529	2.83	17.25

Model
NLE8.8CNT Configuration 2

Sales code:
105H6088

Configuration

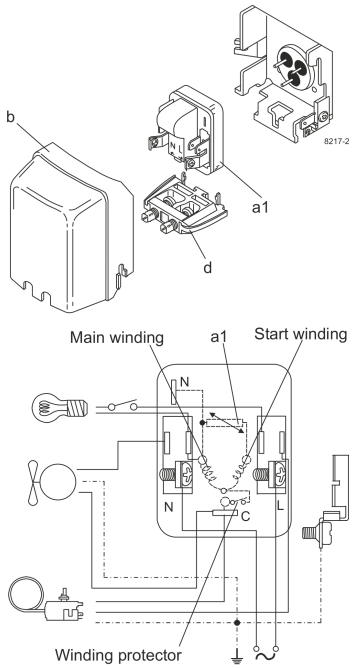
Motor configuration	**eRSIR**
Power supply (nominal)	**208-230 V/60 Hz 1~**
Refrigerant	**R290**
Application	**LBP+MBP**
Voltage range	**187-253 V**
Starting torque	**LST**
Approvals	**UL, CB**
Starting device type	**e-PTC**
Run capacitor	**-/-**
Start capacitor	**-/-**
LRA (locked rotor amps / 4s/ U(N))	**15.5 A**
RLA (rated load amps / 1s/ U(N))	**3 A**
Cut in current (U(N))	**15.5 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

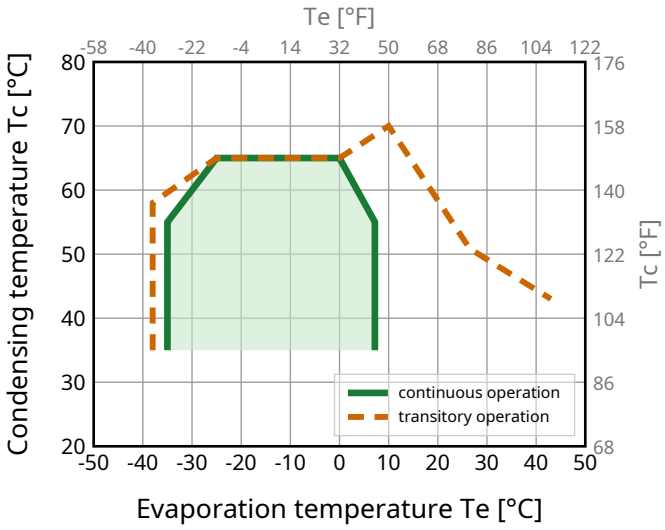
Electrical Accessories / Wiring Diagram

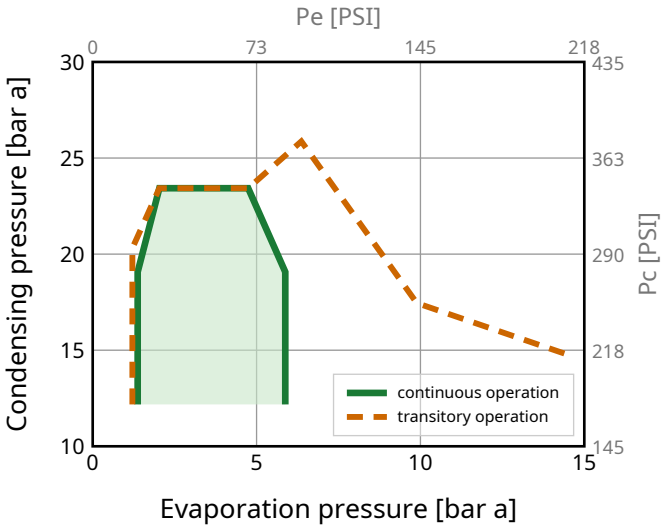
RSIR



Components
a1 e-PTC starter (220V, 25Ohm, 4.8mm) 103N0050
b plastic cover 103N2011
d cord relief 103N1010

Operation Pressure Range





Model

NLE8.8CNT Configuration 2

Sales code:

105H6088

Standard Conditions

R290, 230 V/60 Hz, eRSIR, 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	**513**	1751	441	**1.56**	5.34	328	2.12	5.21	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**381**	1300	328	**1.20**	4.11	316	2.08	4.78	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**300**	1022	258	**1.23**	4.18	245	1.91	3.44	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**915**	3121	787	**2.05**	6.99	447	2.52	10.47	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**728**	2483	626	**1.71**	5.83	426	2.44	9.26	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**808**	2757	695	**2.06**	7.01	393	2.33	9.94	**EN12900 MBP**

Performance Tables

R290, 230 V/60 Hz, eRSIR, 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	**285**	973	245	**1.15**	3.93	247	1.91	3.21
-30	-22	**360**	1227	309	**1.31**	4.46	275	1.97	4.06
-20	-4	**561**	1914	482	**1.68**	5.72	334	2.14	6.38
-10	14	**840**	2866	722	**2.14**	7.29	393	2.33	9.64
0	32	**1206**	4113	1037	**2.73**	9.32	441	2.50	14.02
7.2	45	**1528**	5213	1314	**3.29**	11.22	465	2.58	17.97

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

-35	-31	**222**	756	191	**0.89**	3.04	249	1.91	2.76
-30	-22	**295**	1006	254	**1.05**	3.58	281	1.99	3.68
-20	-4	**481**	1641	414	**1.36**	4.65	353	2.20	6.05
-10	14	**728**	2483	626	**1.71**	5.83	426	2.44	9.26
0	32	**1044**	3563	898	**2.12**	7.25	491	2.68	13.46
7.2	45	**1320**	4505	1136	**2.50**	8.52	529	2.83	17.25

Model
NLE8.8CNT Configuration 3

Sales code:
105H6088

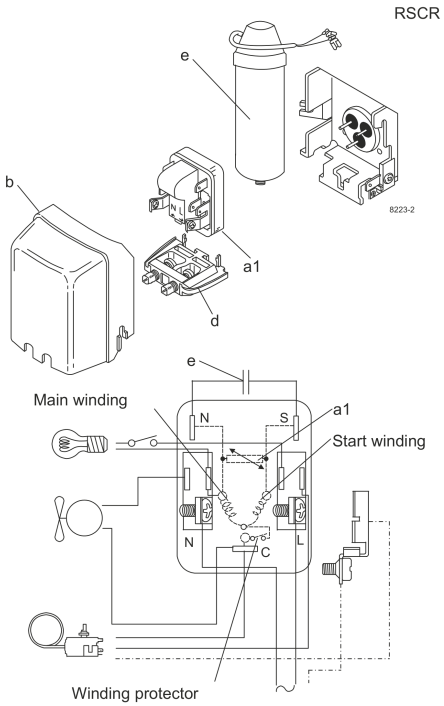
Configuration

Motor configuration	**eRSCR**
Power supply (nominal)	**208-230 V/60 Hz 1~**
Refrigerant	**R290**
Application	**LBP+MBP**
Voltage range	**187-253 V**
Starting torque	**LST**
Approvals	**UL, CB**
Starting device type	**e-PTC**
Run capacitor	**4 µF**
Start capacitor	**-/-**
LRA (locked rotor amps / 4s/ U(N))	**15.5 A**
RLA (rated load amps / 1s/ U(N))	**3 A**
Cut in current (U(N))	**15.5 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

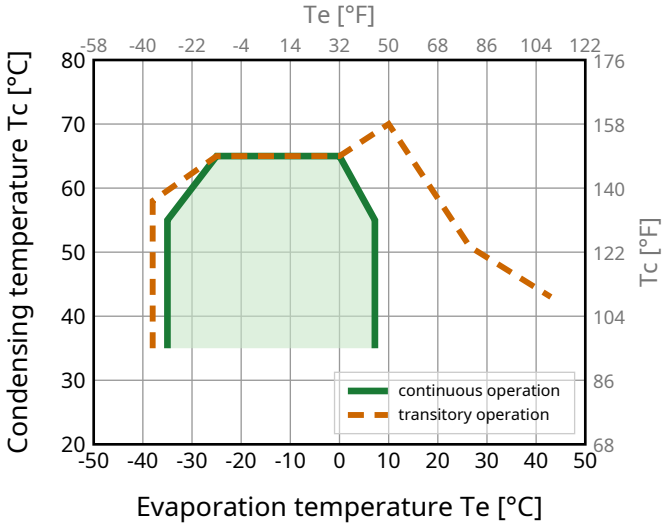
System Cooling
fan 3m/s

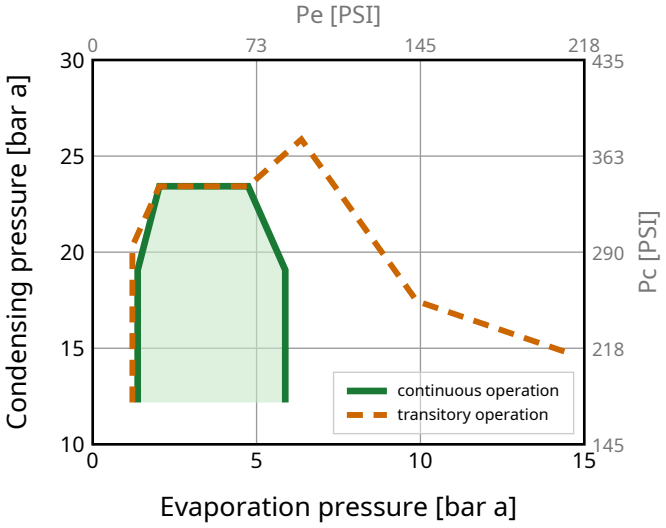
Electrical Accessories / Wiring Diagram



Components
a1 e-PTC starter (220V, 25Ohm, 4.8mm) 103N0050
e run capacitor (4µF, 4.8mm) 117-7119
b plastic cover 103N2011
d cord relief 103N1010
bracket for run capacitor 117-0300
screw M4x8mm 117-0301

Operation Pressure Range





Model

NLE8.8CNT Configuration 3

Sales code:

105H6088

Standard Conditions

R290, 230 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	**514**	1754	442	**1.64**	5.60	314	1.76	5.22	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**380**	1295	326	**1.26**	4.29	302	1.73	4.76	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**302**	1029	259	**1.29**	4.39	234	1.53	3.46	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**917**	3129	789	**2.16**	7.37	425	2.17	10.50	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**731**	2496	629	**1.80**	6.15	406	2.10	9.30	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**805**	2747	692	**2.16**	7.37	373	1.98	9.91	**EN12900 MBP**

Performance Tables

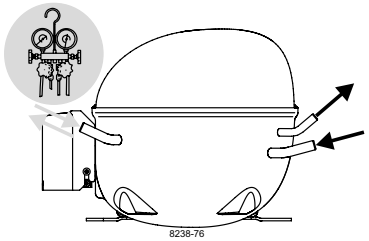
R290, 230 V/60 Hz, eRSCR, fan 3m/s

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	**283**	964	243	**1.20**	4.08	237	1.53	3.19
-30	-22	**363**	1238	312	**1.38**	4.70	264	1.61	4.10
-20	-4	**565**	1926	486	**1.77**	6.04	319	1.78	6.42
-10	14	**837**	2856	720	**2.25**	7.67	373	1.98	9.61
0	32	**1200**	4093	1032	**2.87**	9.78	419	2.15	13.95
7.2	45	**1527**	5210	1313	**3.44**	11.72	444	2.25	17.96

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

-35	-31	**198**	675	170	**0.85**	2.91	232	1.52	2.47
-30	-22	**285**	973	245	**1.07**	3.65	267	1.62	3.56
-20	-4	**484**	1651	416	**1.43**	4.89	337	1.85	6.09
-10	14	**731**	2496	629	**1.80**	6.15	406	2.10	9.30
0	32	**1047**	3572	900	**2.25**	7.66	466	2.34	13.50
7.2	45	**1327**	4527	1141	**2.64**	9.01	503	2.49	17.33



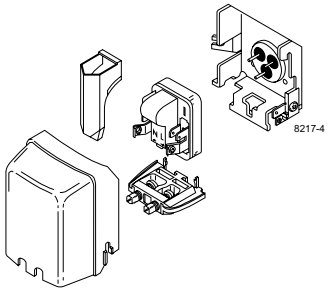
NL Compressors

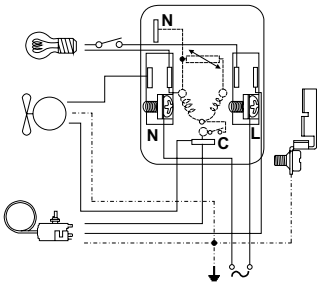
SECOP

Keep electrical equipment clear from oil, chemicals, and water

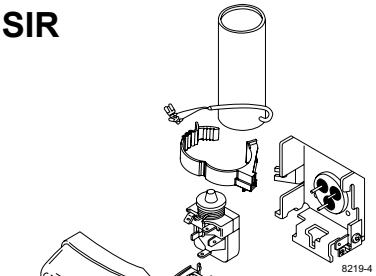
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

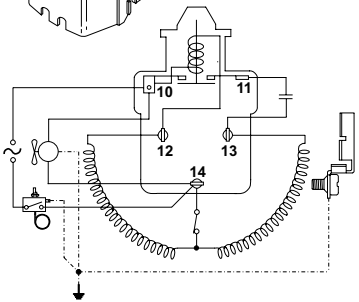
RSIR



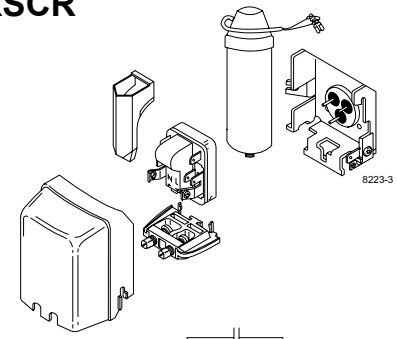


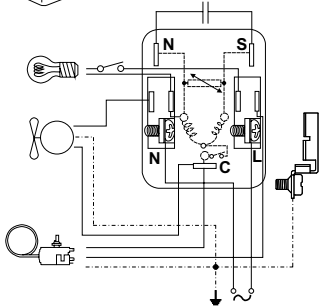
CSIR

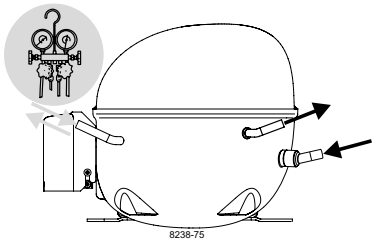




RSCR







NL Compressors

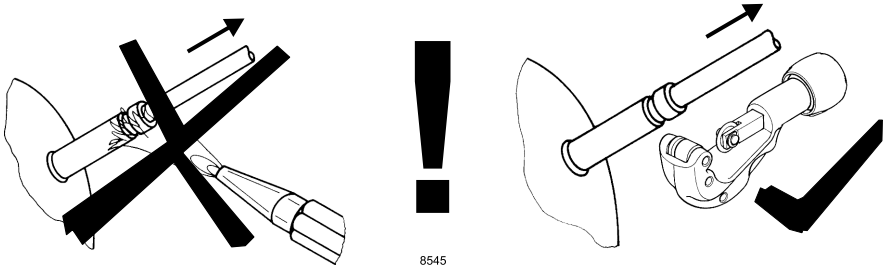
SECOP

Keep electrical equipment clear from oil, chemicals, and water

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

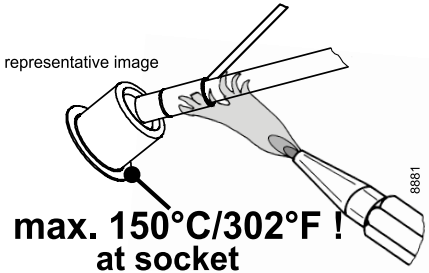
Service/Repair – R290, R600a, R170, R1270, R1234yf

(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**