Singolo
Imballi

Single Pack NLE11MN 115-127V 60Hz CSIR

Codice Imballo Singolo: **195B4359**

Posizione	Titolo	Codice	Quantità
1	Compressor NLE11MN	105H5980	1
2	Starting relay	117U7020	1
3	Starting capacitor (240µF 125V, 6.3mm)	117U5073	1
4	Cord relief	103N1010	1
5	Cover	103N2011	1
6	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 non si assume alcuna responsabilità per eventuali errori presenti in cataloghi, brochure e altro materiale stampato. Secop si riserva il diritto di modificare i propri prodotti senza preavviso. Ciò vale anche per i prodotti già ordinati, a condizione che tali modifiche possano essere apportate senza che siano necessarie modifiche successive alle specifiche già concordate. Tutti i marchi presenti in questo materiale sono di proprietà delle rispettive aziende. Secop e il logo Secop sono marchi di Secop GmbH. Tutti i diritti sono riservati.

Model
NLE11MN

Sales code:
105H5980

Compressor Data

Refrigerant(s)	**R290**
Refr. charge - tech. limit	**400g / 14.11oz**
Weight	**12.14 kg / 26.76lbs**
Displacement	**11.15 cm3 / 0.68cu.in**
Compressors on pallet	**80**

General – Configurations With NLE11MN

–	Conf. 1	Conf. 2	Conf. 3	Conf. 4
Motor configuration	CSIR	CSIR	eRSCR	eRSCR
Power supply (nominal)	115 V/60 Hz	115 V/60 Hz	115 V/60 Hz	115 V/60 Hz
Number of phases	1	1	1	1
Voltage range	95-127 V	95-135 V	95-127 V	95-135 V
Approvals	UL, CCC	UL, CCC	UL, CCC	UL, CCC
Starting torque	HST	HST	LST	LST
Refrigerant	R290	R290	R290	R290
Application	MBP	MBP	MBP	MBP
Hot gas defrost	OK	OK	OK	OK
Long interval pull down	OK	OK	OK	OK

Application Notes

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

Model
NLE11MN

Sales code:
105H5980

Compressor Design

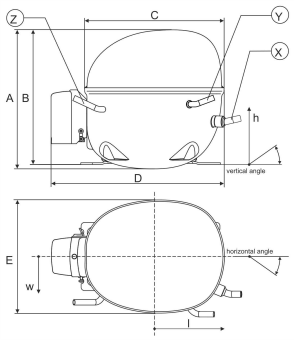
Oil type	**32 cSt POE RL32DR**	Winding resistance main	**0.85 Ohm**
Oil viscosity	**32cSt**	Winding resistance aux	**4.17 Ohm**
Oil quantity	**298 / 10.08fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**2,360 cm3 / 79.80fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**internal**		

Compressor Dimensions

Housing

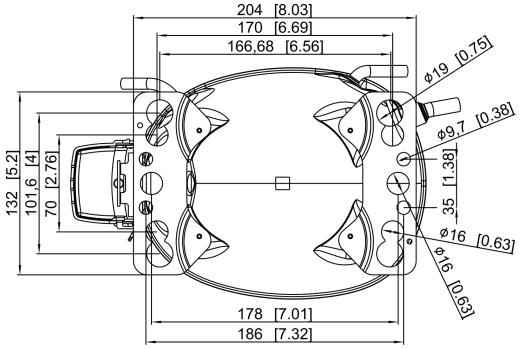
A Height	**203mm / 7.99in**
B Height	**197mm / 7.76in**
C Length shell	**205mm / 8.07in**
D Length w. cover	**254mm / 10.00in**
E Width	**166mm / 6.54in**

Find 3D Model here



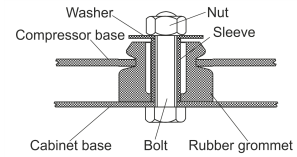
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	15°	21°	155°
Position l/h/w [mm]	132/68.5/56.7 / 5.20/2.70/2.23in	94/101.7/81 / 3.70/4.00/3.19in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

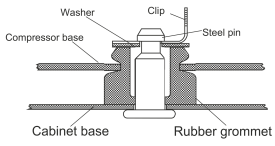


Dimensions in mm [in]

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
NLE11MN Configuration 1

Sales code:
105H5980

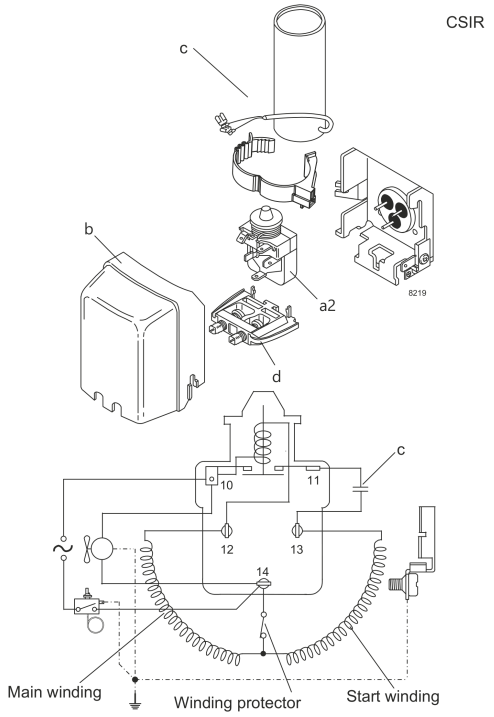
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**115 V/60 Hz 1~**
Refrigerant	**R290**
Application	**MBP**
Voltage range	**95-127 V**
Starting torque	**HST**
Approvals	**UL, CCC**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**240 µF**
LRA (locked rotor amps / 4s/ U(N))	**40.23 A**
RLA (rated load amps / 1s/ U(N))	**8.37 A**
Cut in current (U(N))	**40.23 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

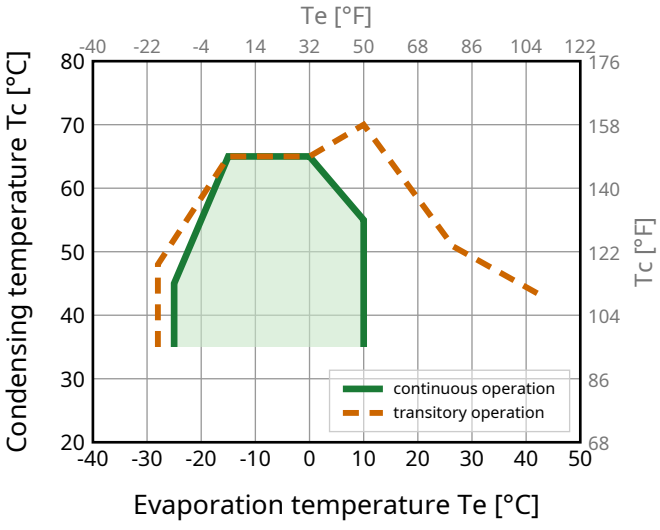


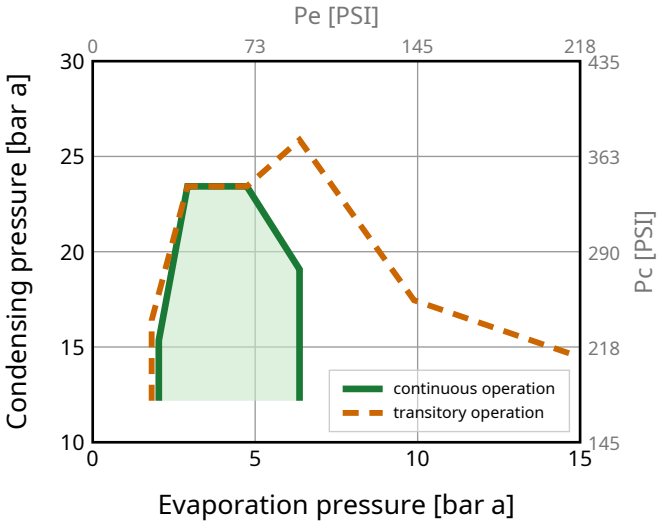
View full size

Components
a2 relay 117U7020
c start capacitor (240µF, 6,3mm) 117U5073
b plastic cover 103N2011
d cord relief 103N1010

Alternative components
a2 relay 117U7020
c start capacitor (240µF, 15kOhm) 117U5034
b plastic cover 103N2011
d cord relief 103N1010

Operation Pressure Range





Model
NLE11MN Configuration 1

Sales code:
105H5980

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]	
-6.7 20	54.4 129.9	35 95	46.1 115	**1202**	4103	1034	**2.04**	6.97	589	7.15	13.77	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**960**	3274	825	**1.71**	5.83	562	6.96	12.21	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**1060**	3616	911	**2.04**	6.97	519	6.77	13.04	**EN12900 MBP**
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	**1126**	3843	969	**2.01**	6.84	561	7.01	14.64	**ARI540 MBP**
-10 14	45 113	32 89.6	45 113	**1102**	3759	948	**2.12**	7.24	519	6.77	12.65	**opt MBP 1**
-25 -13	45 113	32 89.6	45 113	**594**	2027	511	**1.45**	4.93	411	6.09	6.73	**opt MBP 2**

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]
-25	-13	**594**	2027	511	**1.45**	4.93	411	6.09	6.73
-20	-4	**744**	2538	640	**1.66**	5.67	447	6.31	8.46
-15	5	**912**	3112	784	**1.89**	6.44	484	6.54	10.42
-10	14	**1102**	3759	948	**2.12**	7.24	519	6.77	12.65
-5	23	**1316**	4491	1132	**2.38**	8.12	553	6.99	15.20
0	32	**1559**	5318	1340	**2.67**	9.10	584	7.21	18.12
5	41	**1832**	6250	1575	**2.99**	10.20	613	7.40	21.47
10	50	**2139**	7299	1840	**3.36**	11.45	637	7.58	25.30

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

-25	-13	**498**	1700	428	**1.18**	4.02	422	6.09	6.25
-20	-4	**636**	2171	547	**1.36**	4.63	469	6.37	8.01
-15	5	**789**	2692	679	**1.53**	5.22	516	6.66	9.98
-10	14	**960**	3274	825	**1.71**	5.83	562	6.96	12.21
-5	23	**1151**	3929	990	**1.90**	6.48	606	7.27	14.74
0	32	**1367**	4665	1176	**2.11**	7.20	648	7.57	17.63
5	41	**1610**	5495	1385	**2.34**	8.00	687	7.86	20.95
10	50	**1884**	6429	1620	**2.61**	8.90	722	8.13	24.76

Model
NLE11MN Configuration 2

Sales code:
105H5980

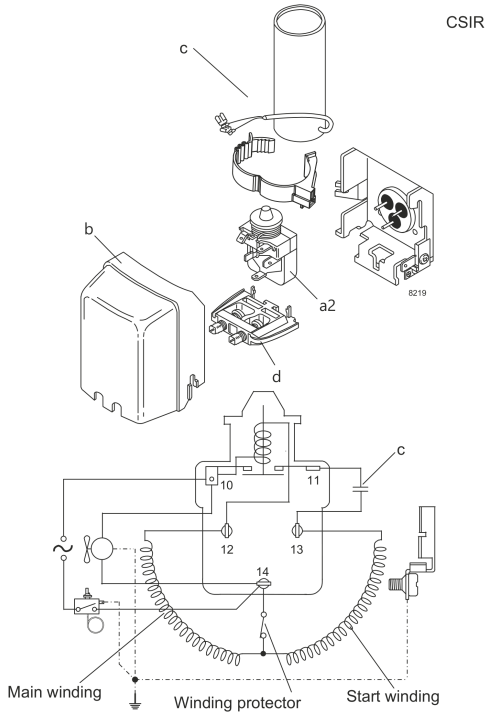
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**115 V/60 Hz 1~**
Refrigerant	**R290**
Application	**MBP**
Voltage range	**95-135 V**
Starting torque	**HST**
Approvals	**UL, CCC**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**240 µF**
LRA (locked rotor amps / 4s/ U(N))	**40.23 A**
RLA (rated load amps / 1s/ U(N))	**8.37 A**
Cut in current (U(N))	**40.23 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

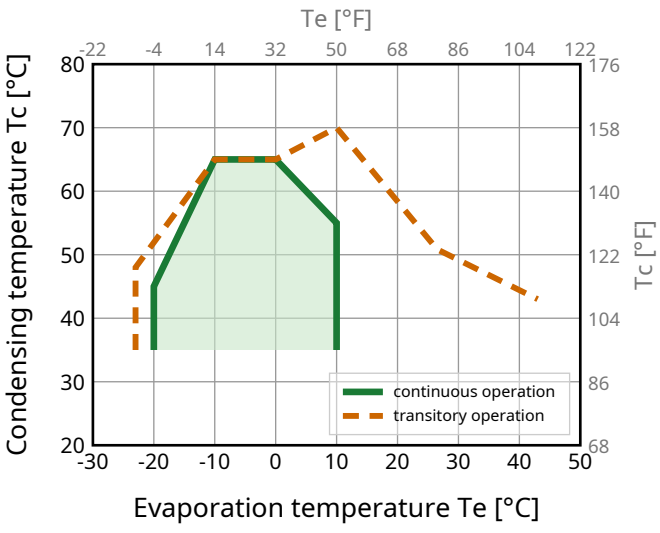


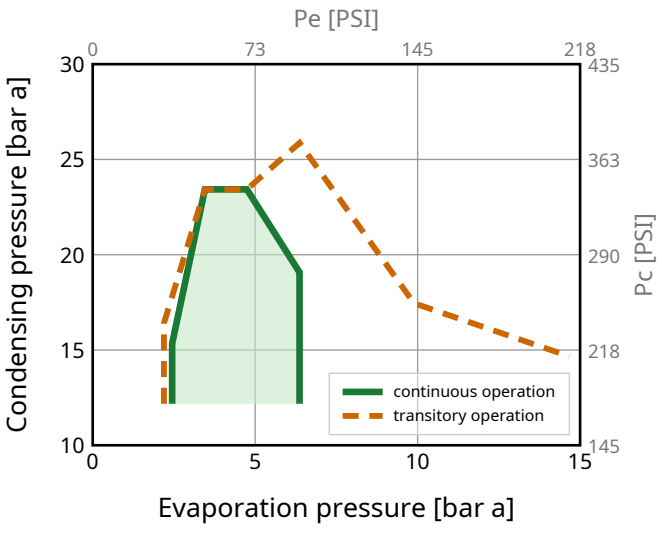
View full size

Components
a2 relay 117U7020
c start capacitor (240µF, 6,3mm) 117U5073
b plastic cover 103N2011
d cord relief 103N1010

Alternative components
a2 relay 117U7020
c start capacitor (240µF, 15kOhm) 117U5034
b plastic cover 103N2011
d cord relief 103N1010

Operation Pressure Range





Model Sales code:

NLE11MN Configuration 2 **105H5980**

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]	
-6.7 20	54.4 129.9	35 95	46.1 115	**1202**	4103	1034	**2.04**	6.97	589	7.15	13.77	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**960**	3274	825	**1.71**	5.83	562	6.96	12.21	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**1060**	3616	911	**2.04**	6.97	519	6.77	13.04	**EN12900 MBP**
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	**1126**	3843	969	**2.01**	6.84	561	7.01	14.64	**ARI540 MBP**
-10 14	45 113	32 89.6	45 113	**1102**	3759	948	**2.12**	7.24	519	6.77	12.65	**opt MBP 1**
-25 -13	45 113	32 89.6	45 113	**594**	2027	511	**1.45**	4.93	411	6.09	6.73	**opt MBP 2**

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]
-20	-4	**744**	2538	640	**1.66**	5.67	447	6.31	8.46
-15	5	**912**	3112	784	**1.89**	6.44	484	6.54	10.42
-10	14	**1102**	3759	948	**2.12**	7.24	519	6.77	12.65
-5	23	**1316**	4491	1132	**2.38**	8.12	553	6.99	15.20
0	32	**1559**	5318	1340	**2.67**	9.10	584	7.21	18.12
5	41	**1832**	6250	1575	**2.99**	10.20	613	7.40	21.47
10	50	**2139**	7299	1840	**3.36**	11.45	637	7.58	25.30

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

-20	-4	**636**	2171	547	**1.36**	4.63	469	6.37	8.01
-15	5	**789**	2692	679	**1.53**	5.22	516	6.66	9.98
-10	14	**960**	3274	825	**1.71**	5.83	562	6.96	12.21
-5	23	**1151**	3929	990	**1.90**	6.48	606	7.27	14.74
0	32	**1367**	4665	1176	**2.11**	7.20	648	7.57	17.63
5	41	**1610**	5495	1385	**2.34**	8.00	687	7.86	20.95
10	50	**1884**	6429	1620	**2.61**	8.90	722	8.13	24.76

Model
NLE11MN Configuration 3

Sales code:
105H5980

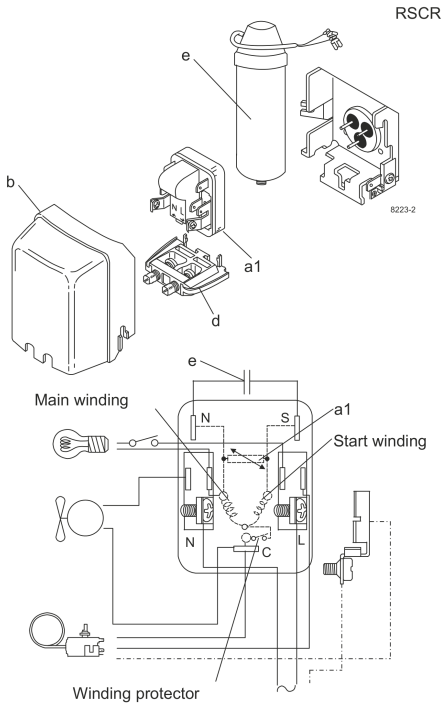
Configuration

Motor configuration	**eRSCR**
Power supply (nominal)	**115 V/60 Hz 1~**
Refrigerant	**R290**
Application	**MBP**
Voltage range	**95-127 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))	**40.23 A**
RLA (rated load amps / 1s/ U(N))	**8.37 A**
Cut in current (U(N))	**40.23 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

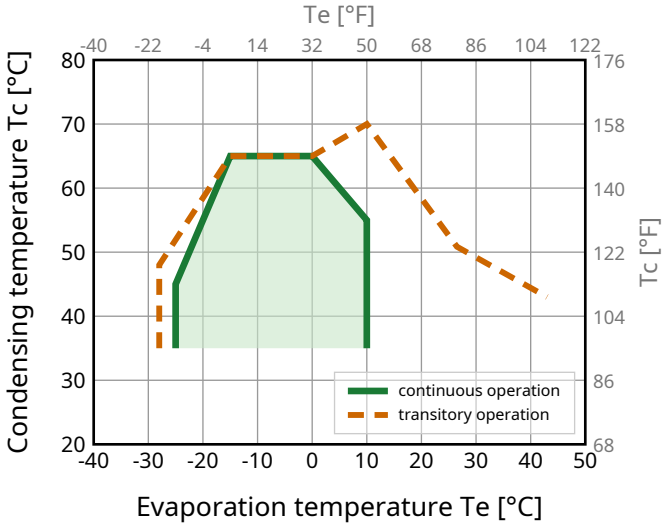
System Cooling
fan 3m/s

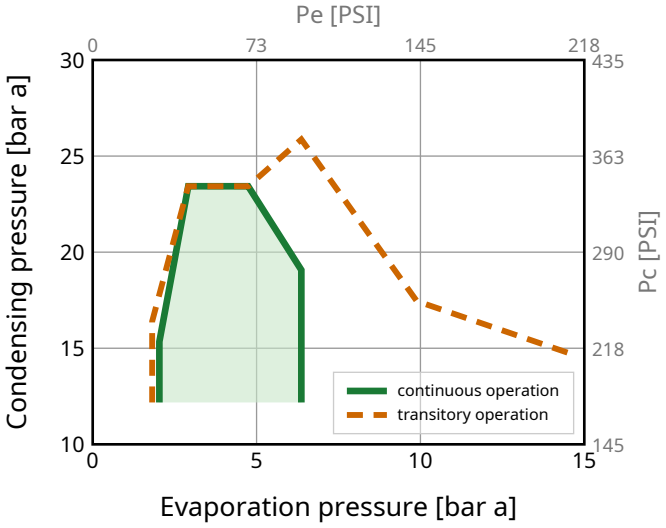
Electrical Accessories / Wiring Diagram



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
NLE11MN Configuration 3

Sales code:
105H5980

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]	
-6.7 20	54.4 129.9	35 95	46.1 115	**1221**	4167	1050	**2.20**	7.51	555	6.74	13.98	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**975**	3327	839	**1.84**	6.28	530	6.57	12.40	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**1069**	3647	919	**2.18**	7.45	490	6.38	13.15	**EN12900 MBP**
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	**1140**	3890	980	**2.15**	7.35	529	6.61	14.82	**ARI540 MBP**
-10 14	45 113	32 89.6	45 113	**1111**	3791	956	**2.27**	7.75	490	6.38	12.76	**opt MBP 1**
-25 -13	45 113	32 89.6	45 113	**598**	2042	515	**1.54**	5.27	387	5.75	6.78	**opt MBP 2**

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]
-25	-13	**598**	2042	515	**1.54**	5.27	387	5.75	6.78
-20	-4	**750**	2559	645	**1.78**	6.07	422	5.95	8.53
-15	5	**920**	3138	791	**2.02**	6.88	456	6.17	10.51
-10	14	**1111**	3791	956	**2.27**	7.75	490	6.38	12.76
-5	23	**1328**	4529	1142	**2.55**	8.69	521	6.59	15.33
0	32	**1572**	5364	1352	**2.85**	9.73	551	6.79	18.28
5	41	**1848**	6306	1589	**3.20**	10.91	578	6.98	21.66
10	50	**2159**	7366	1857	**3.59**	12.26	601	7.14	25.53

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

-25	-13	**508**	1734	437	**1.27**	4.35	398	5.75	6.37
-20	-4	**648**	2211	557	**1.46**	5.00	442	6.01	8.16
-15	5	**802**	2738	690	**1.65**	5.63	486	6.28	10.15
-10	14	**975**	3327	839	**1.84**	6.28	530	6.57	12.40
-5	23	**1169**	3989	1005	**2.04**	6.98	572	6.85	14.96
0	32	**1387**	4733	1193	**2.27**	7.75	611	7.13	17.89
5	41	**1634**	5574	1405	**2.52**	8.60	648	7.41	21.25
10	50	**1911**	6519	1643	**2.81**	9.57	681	7.67	25.11

Model
NLE11MN Configuration 4

Sales code:
105H5980

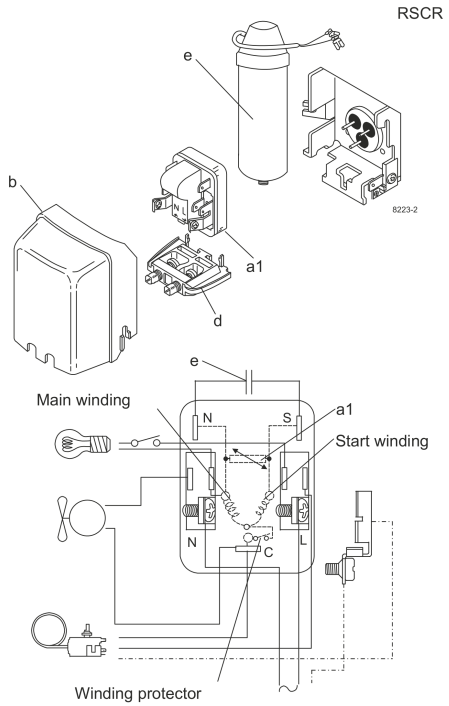
Configuration

Motor configuration	**eRSCR**
Power supply (nominal)	**115 V/60 Hz 1~**
Refrigerant	**R290**
Application	**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))	**40.23 A**
RLA (rated load amps / 1s/ U(N))	**8.37 A**
Cut in current (U(N))	**40.23 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

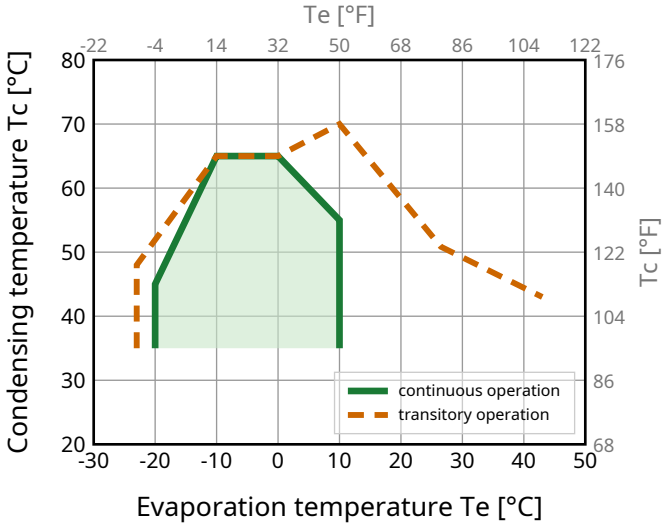
System Cooling
fan 3m/s

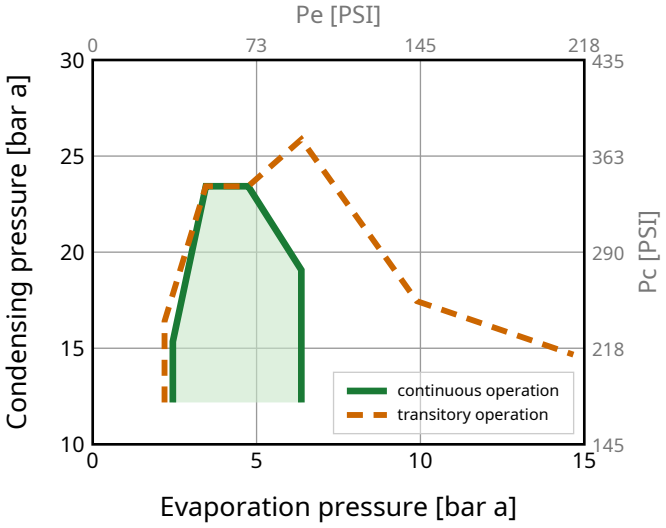
Electrical Accessories / Wiring Diagram



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
NLE11MN Configuration 4

Sales code:
105H5980

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]	
-6.7 20	54.4 129.9	35 95	46.1 115	**1221**	4167	1050	**2.20**	7.51	555	6.74	13.98	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**975**	3327	839	**1.84**	6.28	530	6.57	12.40	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**1069**	3647	919	**2.18**	7.45	490	6.38	13.15	**EN12900 MBP**
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	**1140**	3890	980	**2.15**	7.35	529	6.61	14.82	**ARI540 MBP**
-10 14	45 113	32 89.6	45 113	**1111**	3791	956	**2.27**	7.75	490	6.38	12.76	**opt MBP 1**
-25 -13	45 113	32 89.6	45 113	**598**	2042	515	**1.54**	5.27	387	5.75	6.78	**opt MBP 2**

Performance Tables

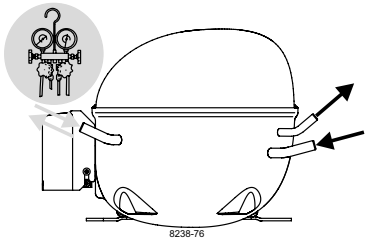
R290, 115 V/60 Hz, eRSCR, fan 3m/s

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]
-20	-4	**750**	2559	645	**1.78**	6.07	422	5.95	8.53
-15	5	**920**	3138	791	**2.02**	6.88	456	6.17	10.51
-10	14	**1111**	3791	956	**2.27**	7.75	490	6.38	12.76
-5	23	**1328**	4529	1142	**2.55**	8.69	521	6.59	15.33
0	32	**1572**	5364	1352	**2.85**	9.73	551	6.79	18.28
5	41	**1848**	6306	1589	**3.20**	10.91	578	6.98	21.66
10	50	**2159**	7366	1857	**3.59**	12.26	601	7.14	25.53

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

-20	-4	**648**	2211	557	**1.46**	5.00	442	6.01	8.16
-15	5	**802**	2738	690	**1.65**	5.63	486	6.28	10.15
-10	14	**975**	3327	839	**1.84**	6.28	530	6.57	12.40
-5	23	**1169**	3989	1005	**2.04**	6.98	572	6.85	14.96
0	32	**1387**	4733	1193	**2.27**	7.75	611	7.13	17.89
5	41	**1634**	5574	1405	**2.52**	8.60	648	7.41	21.25
10	50	**1911**	6519	1643	**2.81**	9.57	681	7.67	25.11



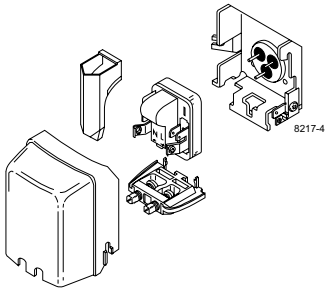
NL Compressors

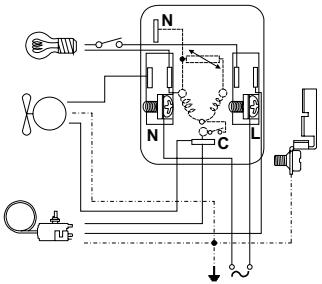
SECOP

Keep electrical equipment clear from oil, chemicals, and water

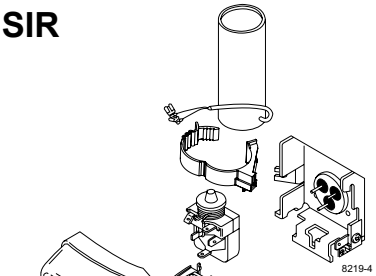
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

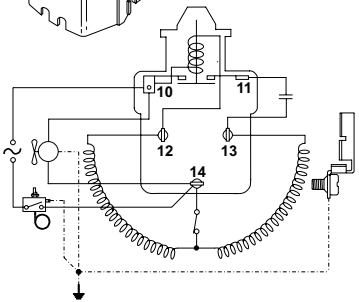
RSIR



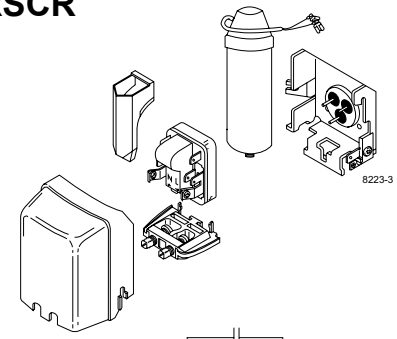


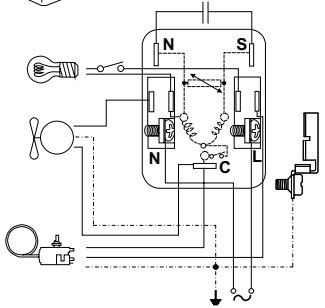
CSIR

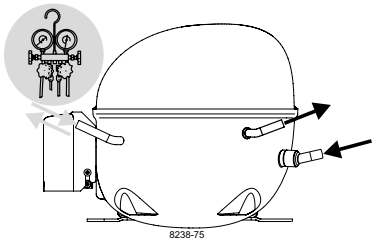




RSCR







NL Compressors

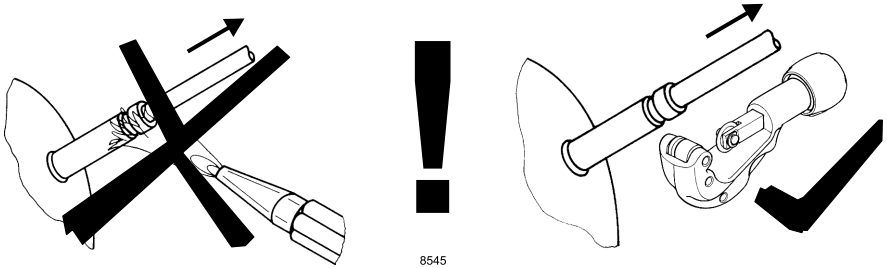
SECOP

Keep electrical equipment clear from oil, chemicals, and water

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

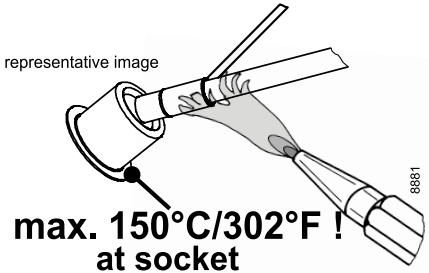
Service/Repair – R290, R600a, R170, R1270, R1234yf

(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**