Single
Packs

Single Pack NLE12.6CNS 115-127V 60Hz CSIR

Single pack code number: **195B4610**

Position	Title	Code	Amount
1	Compressor NLE12.6CNS	105H6392	1
2	Starting relay	117U7023	1
3	Starting capacitor (180µF 125V, 6.3mm)	117U5039	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 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
NLE12.6CNS

Sales code:
105H6392

Compressor Data

Refrigerant(s)	**R290**
Refr. charge - tech. limit	**300g / 10.58oz**
Weight	**11.70 kg / 25.79lbs**
Displacement	**12.55 cm3 / 0.77cu.in**
Compressors on pallet	**80**

General – Configurations With NLE12.6CNS

–	**Conf. 1**	**Conf. 2**
Motor configuration	CSIR	eRSCR
Power supply (nominal)	115 V/60 Hz	115 V/60 Hz
Number of phases	1	1
Voltage range	103-135 V	103-135 V
Approvals	UL	UL
Starting torque	HST	LST
Refrigerant	R290	R290
Application	LBP+MBP	LBP+MBP
Hot gas defrost	OK	OK
Long interval pull down	OK	OK

Application Notes

- Important: compressor is optimized for strong power supply and oversized heat exchangers.
- Important: compressor is optimized for strong power supply and oversized heat exchangers.
- Tailor made for supermarket applications.
- Provision for PE Grounding is located at the PE Stamp on the compressor

Model
NLE12.6CNS

Sales code:
105H6392

Compressor Design

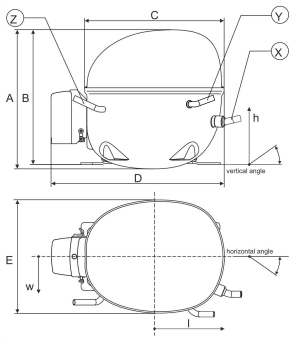
Oil type	**POE**	Winding resistance main	**1 Ohm**
Oil viscosity	**32cSt**	Winding resistance aux	**3.3 Ohm**
Oil quantity	**298 / 10.08fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**2,360 cm3 / 79.80fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**internal**		

Compressor Dimensions

Housing

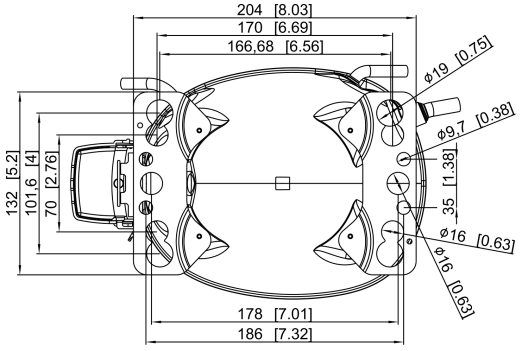
A Height	**203mm / 7.99in**
B Height	**197mm / 7.76in**
C Length shell	**205mm / 8.07in**
D Length w. cover	**254mm / 10.00in**
E Width	**166mm / 6.54in**

Find 3D Model here



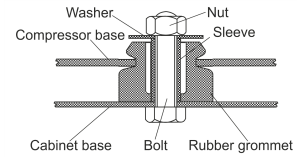
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	15°	21°	155°
Position l/h/w [mm]	132/68.5/56.7 / 5.20/2.70/2.23in	94/101.7/81 / 3.70/4.00/3.19in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

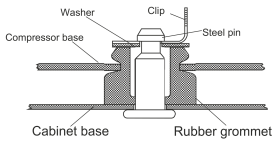


Dimensions in mm [in]

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
NLE12.6CNS Configuration 1

Sales code:
105H6392

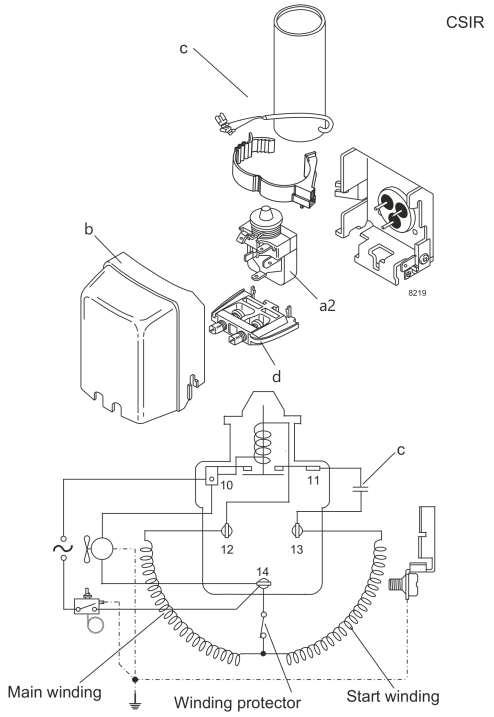
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**115 V/60 Hz 1~**
Refrigerant	**R290**
Application	**LBP+MBP**
Voltage range	**103-135 V**
Starting torque	**HST**
Approvals	**UL**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**180 µF**
LRA (locked rotor amps / 4s/ U(N))	**31 A**
RLA (rated load amps / 1s/ U(N))	**6.4 A**
Cut in current (U(N))	**31 A**

Ambient/ machine room temperatures minimum /maximum
Ambient temperature range: 10 - 38°C / 50 - 100°F
Machine room temp. compressor: 10 - 43°C / 50 - 109°F

System Cooling
fan 3m/s

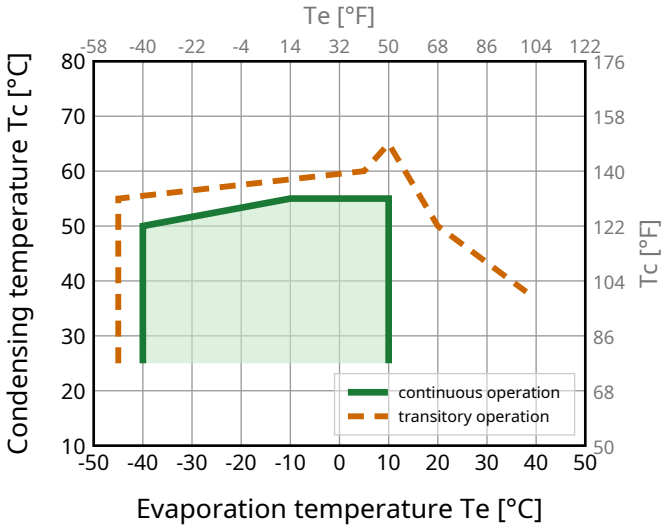
Electrical Accessories / Wiring Diagram

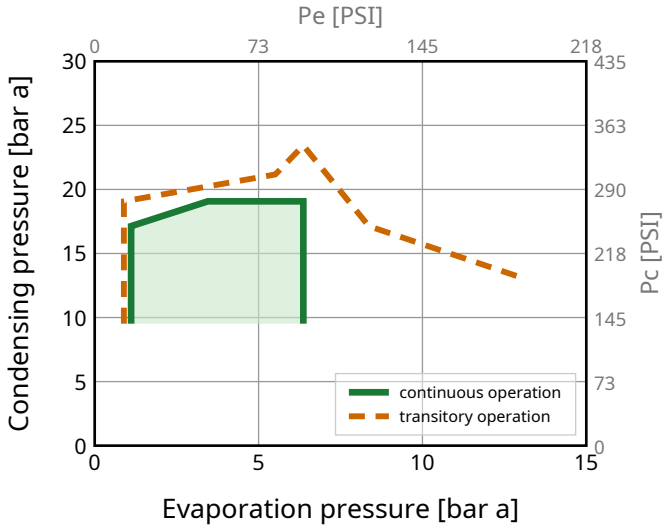


View full size

Components
a2 current relay 117U7023
c start capacitor (180µF) 117U5039
b plastic cover 103N2011
d cord relief 103N1010

Operation Pressure Range





Model

NLE12.6CNS Configuration 1

Sales code:

105H6392

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	**753**	2568	647	**1.61**	5.49	468	5.35	7.64	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**556**	1896	478	**1.25**	4.25	446	5.17	6.96	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**419**	1429	360	**1.32**	4.51	317	4.10	4.80	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**1340**	4571	1152	**1.98**	6.76	676	7.08	15.34	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**1071**	3654	921	**1.68**	5.72	639	6.78	13.62	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**1182**	4034	1017	**2.00**	6.83	591	6.37	14.55	**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]
-40	-40	**278**	949	239	**1.09**	3.71	256	3.59	3.13
-30	-22	**518**	1768	446	**1.38**	4.72	375	4.58	5.86
-20	-4	**831**	2836	715	**1.71**	5.82	487	5.51	9.46
-10	14	**1229**	4193	1057	**2.08**	7.10	591	6.37	14.11
0	32	**1724**	5881	1482	**2.52**	8.62	683	7.14	20.04
10	50	**2327**	7938	2001	**3.06**	10.44	760	7.78	27.52

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

-40	-40	**183**	625	158	**0.77**	2.63	238	3.44	2.28
-30	-22	**418**	1425	359	**1.11**	3.77	378	4.60	5.22
-20	-4	**710**	2421	610	**1.39**	4.73	512	5.72	8.93
-10	14	**1071**	3654	921	**1.68**	5.72	639	6.78	13.62
0	32	**1514**	5165	1302	**2.00**	6.83	756	7.75	19.52
10	50	**2050**	6995	1763	**2.38**	8.13	860	8.61	26.94

Model
NLE12.6CNS Configuration 2

Sales code:
105H6392

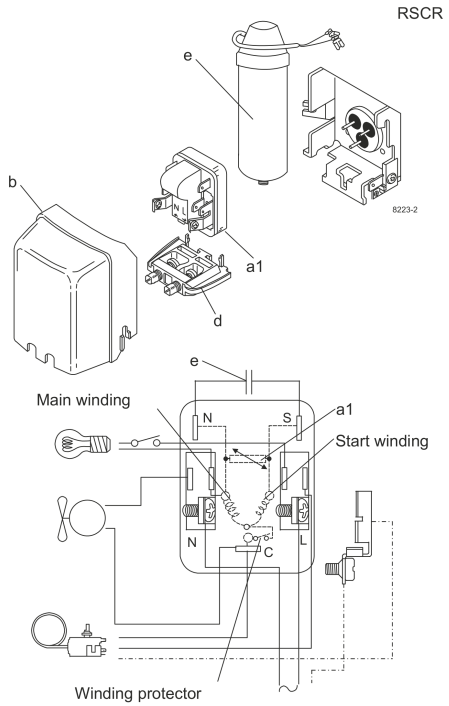
Configuration

Motor configuration	**eRSCR**
Power supply (nominal)	**115 V/60 Hz 1~**
Refrigerant	**R290**
Application	**LBP+MBP**
Voltage range	**103-135 V**
Starting torque	**LST**
Approvals	**UL**
Starting device type	**e-PTC**
Run capacitor	**23.5 µF**
Start capacitor	**-/-**
LRA (locked rotor amps / 4s/ U(N))	**31 A**
RLA (rated load amps / 1s/ U(N))	**6.4 A**
Cut in current (U(N))	**31 A**

Ambient/ machine room temperatures minimum /maximum
Ambient temperature range: 10 - 38°C / 50 - 100°F
Machine room temp. compressor: 10 - 43°C / 50 - 109°F

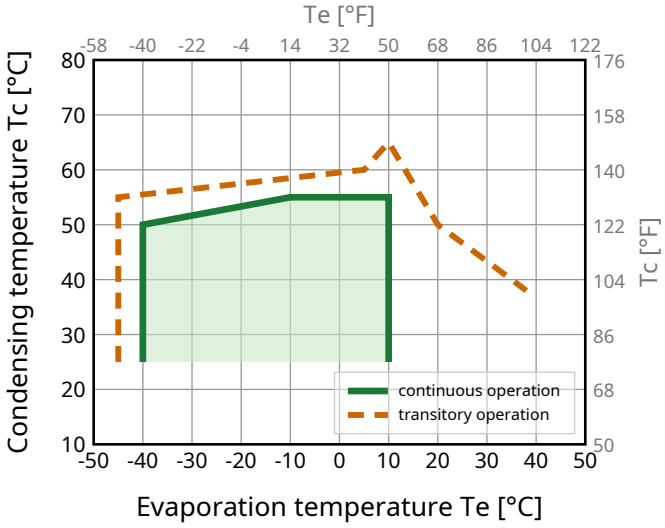
System Cooling
fan 3m/s

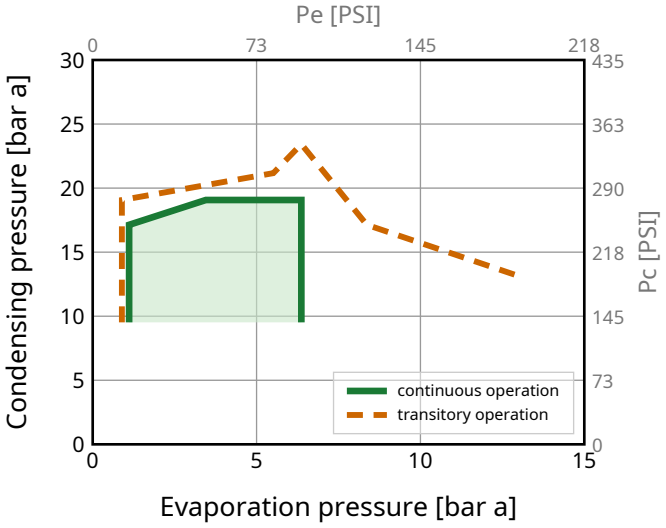
Electrical Accessories / Wiring Diagram



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

NLE12.6CNS Configuration 2

Sales code:

105H6392

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	**755**	2575	649	**1.71**	5.83	441	3.97	7.67	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**557**	1900	479	**1.32**	4.51	421	3.81	6.98	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**419**	1430	361	**1.38**	4.72	303	3.11	4.81	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**1346**	4594	1158	**2.14**	7.31	629	5.58	15.41	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**1076**	3670	925	**1.80**	6.16	596	5.30	13.68	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**1187**	4049	1020	**2.15**	7.33	553	4.96	14.60	**EN12900 MBP**

Performance Tables

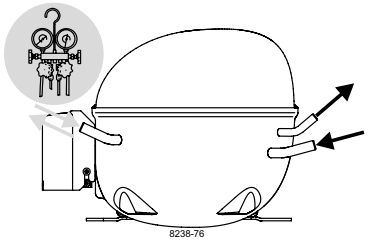
R290, 115 V/60 Hz, eRSCR, fan 3m/s

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]
-40	-40	**278**	949	239	**1.13**	3.87	246	2.64	3.13
-30	-22	**519**	1772	447	**1.46**	4.97	356	3.41	5.87
-20	-4	**834**	2845	717	**1.81**	6.19	459	4.19	9.48
-10	14	**1234**	4209	1061	**2.23**	7.62	553	4.96	14.17
0	32	**1732**	5910	1490	**2.73**	9.31	635	5.68	20.14
10	50	**2342**	7990	2014	**3.33**	11.34	704	6.31	27.70

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

-40	-40	**183**	626	158	**0.80**	2.74	228	2.38	2.28
-30	-22	**418**	1428	360	**1.17**	3.98	359	3.32	5.23
-20	-4	**712**	2428	612	**1.48**	5.04	482	4.31	8.96
-10	14	**1076**	3670	925	**1.80**	6.16	596	5.30	13.68
0	32	**1523**	5196	1310	**2.18**	7.42	700	6.25	19.64
10	50	**2067**	7052	1777	**2.61**	8.91	792	7.14	27.16



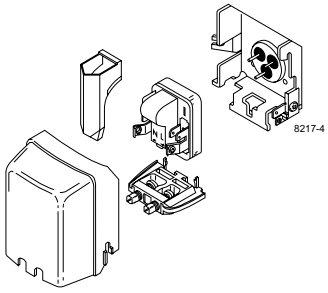
NL Compressors

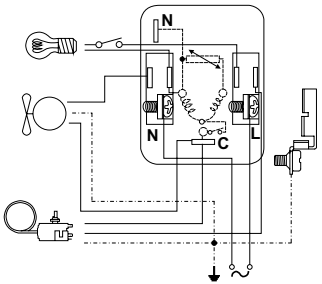
SECOP

Keep electrical equipment clear from oil, chemicals, and water

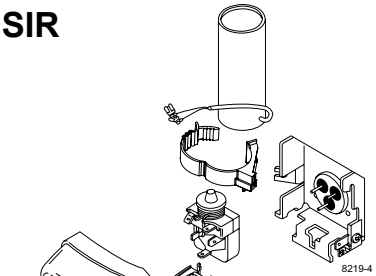
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

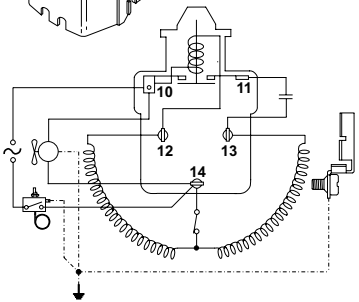
RSIR



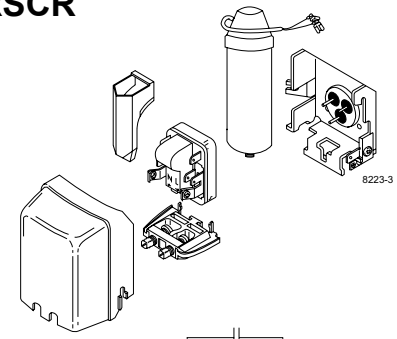


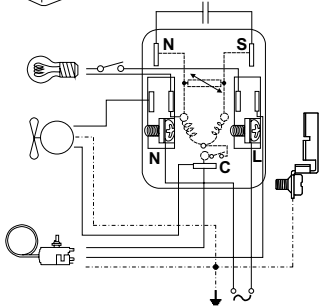
CSIR

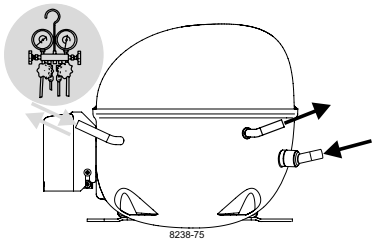




RSCR







NL Compressors

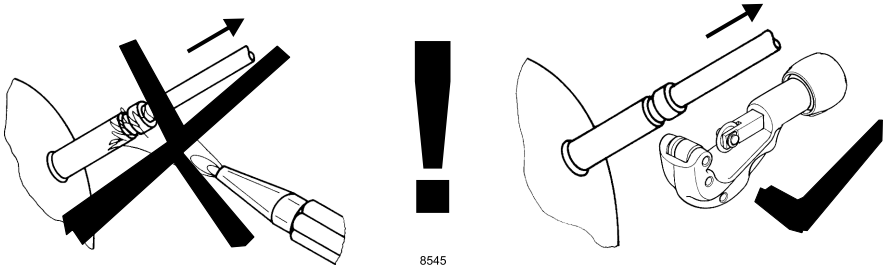
SECOP

Keep electrical equipment clear from oil, chemicals, and water

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

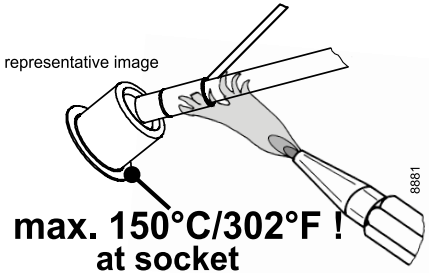
Service/Repair – R290, R600a, R170, R1270, R1234yf

(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**