Single
Packs

Single Pack NLE13KK.4 220-240V 50Hz RSIR

Single pack code number: **195B4487**

Position	Title	Code	Amount
1	Compressor NLE13KK.4	105H6959	1
2	PTC starting device (220V, 250hm, 6.3mm)	103N0011	1
3	Protection screen for PTC	103N0476	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
NLE13KK.4

Sales code:
105H6959

Compressor Data

Refrigerant(s)	**R600a**
Refr. charge - tech. limit	**150g / 5.29oz**
Weight	**10.00 kg / 22.05lbs**
Displacement	**13.25 cm3 / 0.81cu.in**
Compressors on pallet	**80**

General – Configurations With NLE13KK.4

–	**Conf. 1**	**Conf. 2**
Motor configuration	RSCR	RSIR
Power supply (nominal)	220-240 V/50 Hz	220-240 V/50 Hz
Number of phases	1	1
Voltage range	198-254 V	198-254 V
Approvals	VDE, CB	VDE, CB
Starting torque	LST	LST
Refrigerant	R600a	R600a
Application	LBP	LBP

Application Notes

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

Model
NLE13KK.4

Sales code:
105H6959

Compressor Design

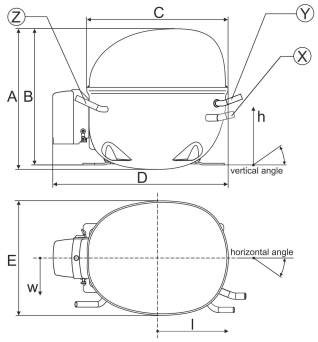
Oil type	**Mineral**	Winding resistance main	**13.7 Ohm**
Oil viscosity	**9,6cSt**	Winding resistance aux	**14.9 Ohm**
Oil quantity	**265 / 8.96fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**2,310 cm3 / 78.11fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**internal**		

Compressor Dimensions

Housing

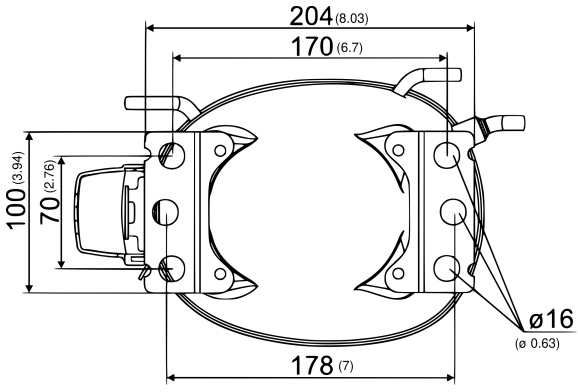
A Height	**190.5mm / 7.50in**
B Height	**184.5mm / 7.26in**
C Length shell	**205mm / 8.07in**
D Length w. cover	**254mm / 10.00in**
E Width	**166mm / 6.54in**

Find 3D Model here



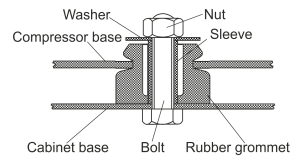
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 6.11–6.29 / 0.24–0.25in	øi 9.61–9.79 / 0.38–0.39in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	15°	35°	155°
Position l/h/w [mm]	125.5/75.5/78 / 4.94/2.97/3.07in	133/102.5/54 / 5.24/4.04/2.13in	-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

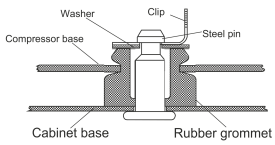


Dimensions in mm [in]

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
NLE13KK.4 Configuration 1

Sales code:
105H6959

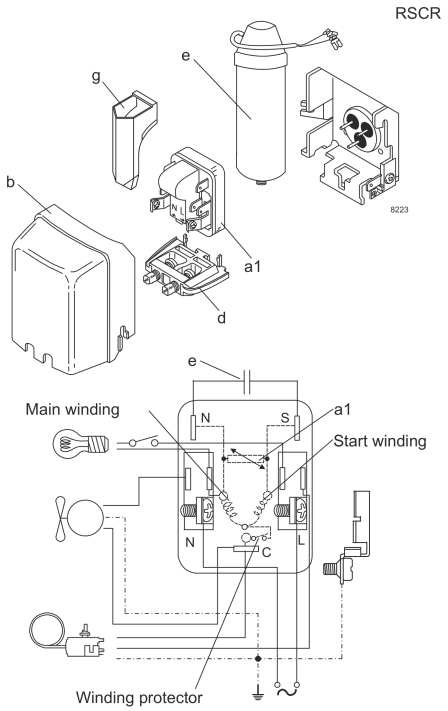
Configuration

Motor configuration	**RSCR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R600a**
Application	**LBP**
Voltage range	**198-254 V**
Starting torque	**LST**
Approvals	**VDE, CB**
Starting device type	**PTC**
Run capacitor	**4 µF**
Start capacitor	**-/-**
LRA (locked rotor amps / 4s/ U(N))	**5.8 A**
RLA (rated load amps / 1s/ U(N))	**1.1 A**
Cut in current (U(N))	**10.3 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
static

Electrical Accessories / Wiring Diagram

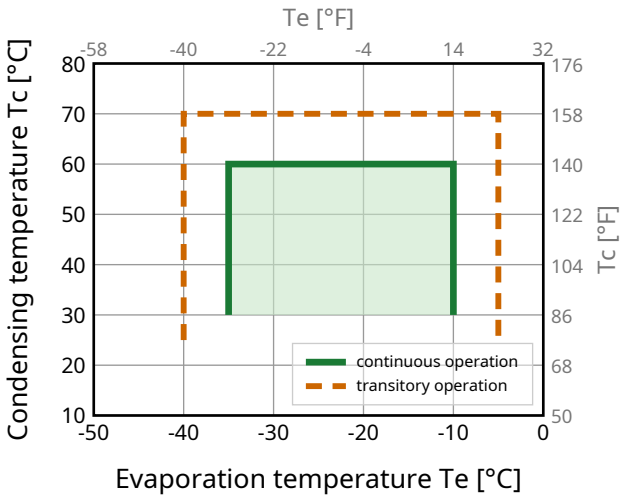


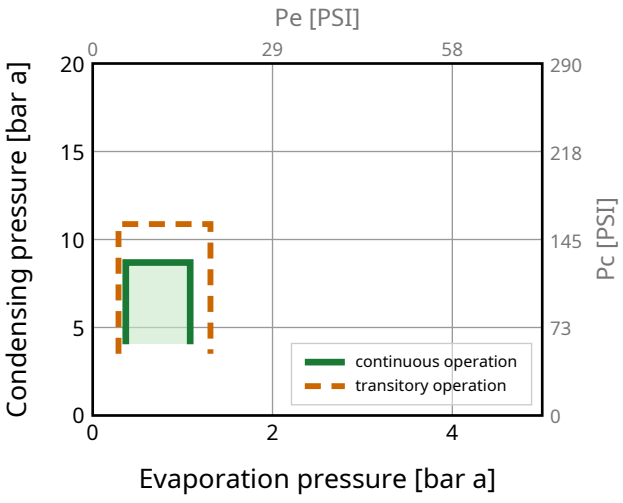
View full size

Components
a1 PTC starter (220V, 25Ohm, 4.8mm) 103N0021
e run capacitor (4µF, 4.8mm) 117-7119
b plastic cover 103N2010
d cord relief 103N1010
g protection screen for PTC 103N0476
bracket for run capacitor 117-0300

Alternative components
a1 e-PTC starter (220V, 25Ohm, 4.8mm) 103N0050
b plastic cover 103N2011
screw M4x8mm 117-0301

Operation Pressure Range





Model

NLE13KK.4 Configuration 1

Sales code:

105H6959

Standard Conditions

R600a, 220 V/50 Hz, RSCR, static

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	**225**	769	194	**1.50**	5.12	150	1.00	2.42	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**170**	580	146	**1.18**	4.03	144	0.97	2.22	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**122**	417	105	**1.13**	3.87	108	0.85	1.49	**EN12900 LBP**
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	**184**	629	158	**1.26**	4.29	147	0.98	2.69	**ARI540 LBP**
-23.3 -10	40.6 105.1	32.2 90	32.2 90	**243**	828	209	**1.72**	5.88	141	0.96	2.61	**AHAM LBP**
-35 -31	45 113	32 89.6	45 113	**117**	400	101	**1.08**	3.67	109	0.85	1.39	**opt LBP**

Performance Tables

R600a, 220 V/50 Hz, RSCR, static

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	**117**	400	101	**1.08**	3.67	109	0.85	1.39
-30	-22	**153**	523	132	**1.25**	4.26	123	0.89	1.82
-25	-13	**197**	674	170	**1.43**	4.87	138	0.95	2.35
-20	-4	**250**	854	215	**1.60**	5.47	156	1.02	2.99
-15	5	**313**	1069	270	**1.76**	6.02	178	1.12	3.74
-10	14	**387**	1322	333	**1.91**	6.51	203	1.23	4.64

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

-35	-31	**99**	337	85	**0.91**	3.11	108	0.86	1.28
-30	-22	**131**	447	113	**1.04**	3.56	126	0.91	1.70
-25	-13	**170**	580	146	**1.18**	4.03	144	0.97	2.22
-20	-4	**217**	741	187	**1.32**	4.51	164	1.05	2.84
-15	5	**274**	933	235	**1.46**	4.98	187	1.16	3.58
-10	14	**340**	1160	292	**1.59**	5.41	214	1.27	4.46

Model

NLE13KK.4 Configuration 2

Sales code:

105H6959

Configuration

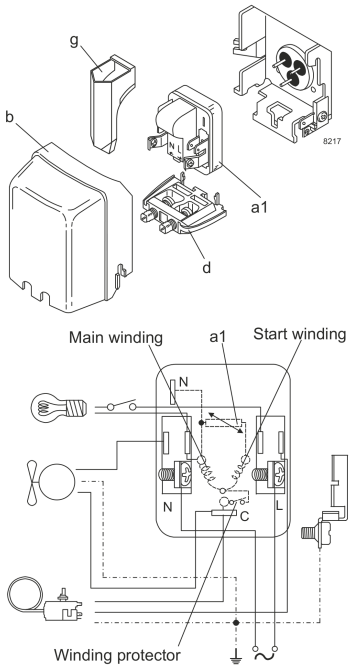
Motor configuration	**RSIR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R600a**
Application	**LBP**
Voltage range	**198-254 V**
Starting torque	**LST**
Approvals	**VDE, CB**
Starting device type	**PTC**
Run capacitor	**-/-**
Start capacitor	**-/-**
LRA (locked rotor amps / 4s/ U(N))	**5.8 A**
RLA (rated load amps / 1s/ U(N))	**1.1 A**
Cut in current (U(N))	**10.3 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
static

Electrical Accessories / Wiring Diagram

RSIR

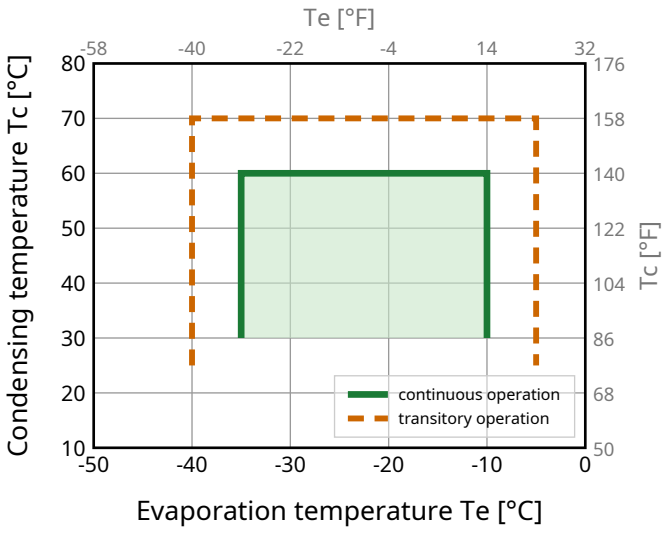


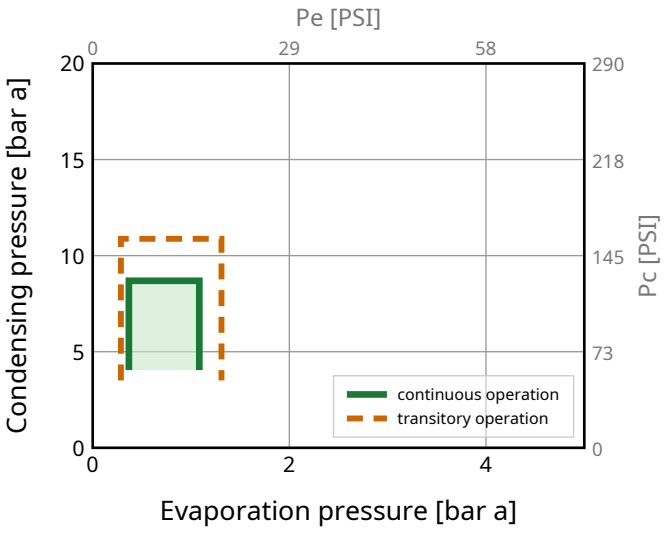
View full size

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
NLE13KK.4 Configuration 2

Sales code:
105H6959

Standard Conditions

R600a, 220 V/50 Hz, RSIR, static

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	**225**	769	194	**1.50**	5.12	150	1.00	2.42	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**170**	580	146	**1.18**	4.03	144	0.97	2.22	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**122**	417	105	**1.13**	3.87	108	0.85	1.49	**EN12900 LBP**
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	**184**	629	158	**1.26**	4.29	147	0.98	2.69	**ARI540 LBP**
-23.3 -10	40.6 105.1	32.2 90	32.2 90	**243**	828	209	**1.72**	5.88	141	0.96	2.61	**AHAM LBP**
-35 -31	45 113	32 89.6	45 113	**117**	400	101	**1.08**	3.67	109	0.85	1.39	**opt LBP**

Performance Tables

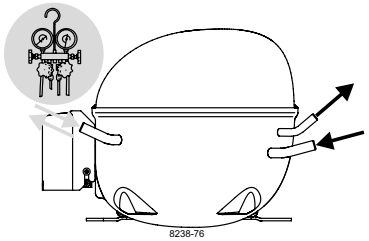
R600a, 220 V/50 Hz, RSIR, static

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	**117**	400	101	**1.08**	3.67	109	0.85	1.39
-30	-22	**153**	523	132	**1.25**	4.26	123	0.89	1.82
-25	-13	**197**	674	170	**1.43**	4.87	138	0.95	2.35
-20	-4	**250**	854	215	**1.60**	5.47	156	1.02	2.99
-15	5	**313**	1069	270	**1.76**	6.02	178	1.12	3.74
-10	14	**387**	1322	333	**1.91**	6.51	203	1.23	4.64

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

-35	-31	**99**	337	85	**0.91**	3.11	108	0.86	1.28
-30	-22	**131**	447	113	**1.04**	3.56	126	0.91	1.70
-25	-13	**170**	580	146	**1.18**	4.03	144	0.97	2.22
-20	-4	**217**	741	187	**1.32**	4.51	164	1.05	2.84
-15	5	**274**	933	235	**1.46**	4.98	187	1.16	3.58
-10	14	**340**	1160	292	**1.59**	5.41	214	1.27	4.46



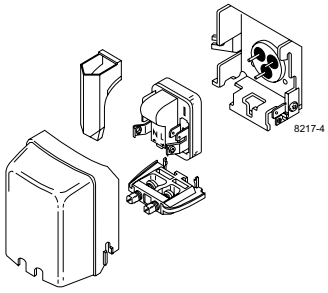
NL Compressors

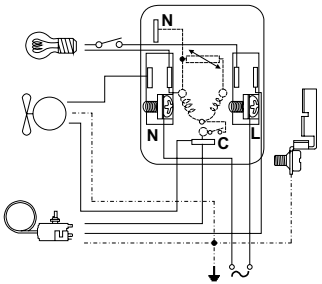
SECOP

Keep electrical equipment clear from oil, chemicals, and water

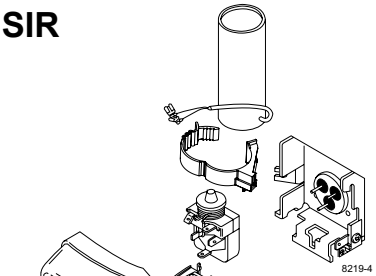
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

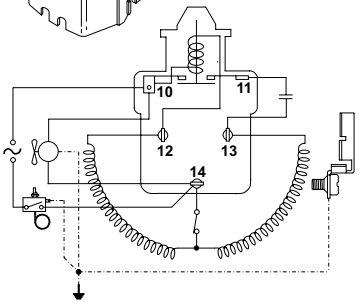
RSIR



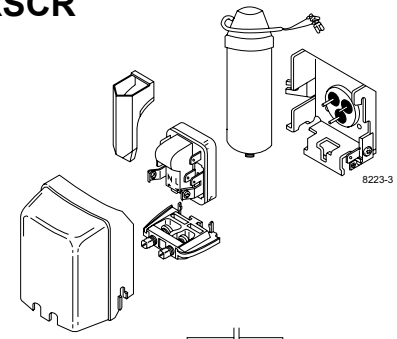


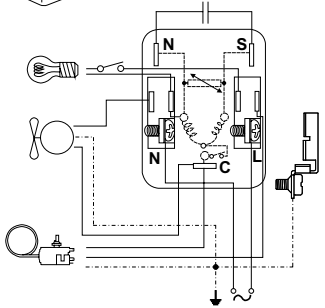
CSIR

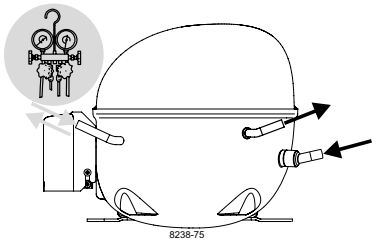




RSCR







NL Compressors

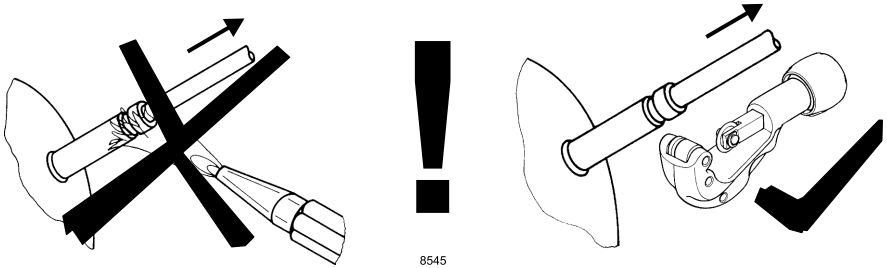
SECOP

Keep electrical equipment clear from oil, chemicals, and water

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

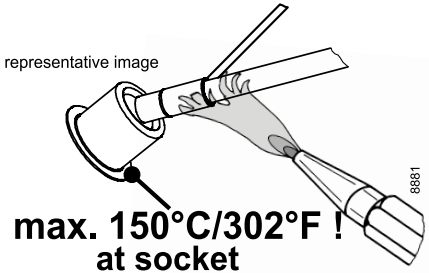
Service/Repair – R290, R600a, R170, R1270, R1234yf

(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**