

Single Pack NLE10CN 220-240V 50Hz CSIR

Single pack code number: **195B4104**

Position	Title	Code	Amount
1	Compressor NLE10CN	105H6175	1
2	Starting relay	117U7002	1
3	Starting capacitor (80µF 220V, 6.3mm)	117U5015	1
4	Cord relief	103N1010	1
5	Cover	103N2010	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 subsequent 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

Designation	NLE10CN	220-240V/50Hz 1~	Sales code:	105H6175
-------------	----------------	-------------------------	-------------	-----------------

Compressor design

Oil type	Polyolester	Refrigerant(s)	R290
Oil viscosity	32cSt	Displacement	10,09cm ³ / 0,62cu.in
Oil quantity	270cm ³ / 9,1fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	150g / 5,3oz		
Free gas volume comp.	2360cm ³ / 79,8fl.oz		
Weight	10,9kg / 24lbs		
Motor protection	1# internal		
Winding resistance main	7,79Ω (at 25°C)		
Winding resistance aux	18,39Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	120°C / 248°F		



General - Configurations with NLE10CN

	Conf. 1	Conf. 2	Conf. 3
Motorconfiguration	CSIR	RSIR	RSCR
Power supply (nominal)	220-240V/50Hz	220-240V/50Hz	220-240V/50Hz
Number of phases	1	1	1
Voltage range	198-254V	198-254V	198-254V
Approvals	VDE, CCC, EAC	VDE, CCC, EAC	VDE, CCC, EAC
Starting torque	HST	LST	LST
Note	- / -		

Applications with NLE10CN

	Conf. 1	Conf. 2	Conf. 3
Refrigerant	R290	R290	R290
Application	LBP+MBP	LBP+MBP	LBP+MBP
System cooling	fan 3m/s	fan 3m/s	fan 3m/s
Hot gas defrost	OK	OK	OK
Long interval pull down	OK	OK	OK

Electrical data - Configurations with NLE10CN

	Conf. 1	Conf. 2	Conf. 3
Starting device type	relay	PTC	PTC
Run capacitor	-/-	-/-	4μF
Start capacitor	80μF	-/-	-/-
LRA (locked rotor amps / 4s)	12,25A	10,9A	12,25A
RLA (rated load amps / 1s)	2,58A	2,58A	2,27A
Cut in current	12,25A	15,8A	12,25A
IP class	21	21	21

Model

Designation

NLE10CN

220-240V/50Hz 1~

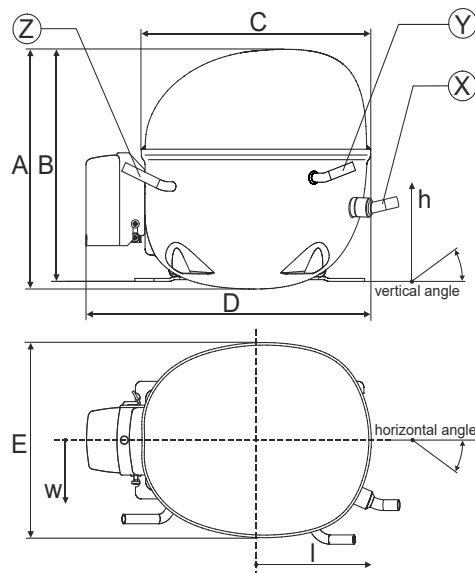
Sales code:

105H6175

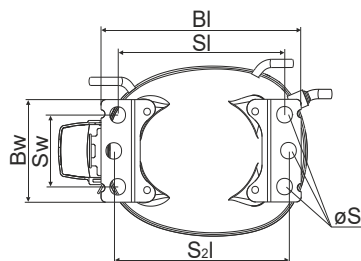
Compressor dimensions

Housing	A Height	203mm / 7,99in
	B Height	197mm / 7,76in
	C Length shell	205mm / 8,07in
	D Length w. cover	254mm / 10in
	E Width	166mm / 6,54in

Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8,11-8,29	øi 6,11-6,29	øi 6,11-6,29
(i:inside, o:outside) [in]	øi 0,32-0,33	øi 0,24-0,25	øi 0,24-0,25
Material	copper	copper	copper
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	15°	21°	155°
Position l/h/w [mm]	132/69/56	94/99/86	-111/92/72
[in]	5,2/2,7/2,2	3,7/3,9/3,4	-4,4/3,6/2,8
Straight tube l. [mm]	12	12	12
[in]	0,5	0,5	0,5

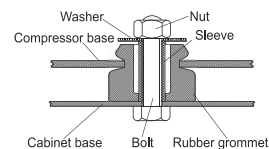


Compressor fixation

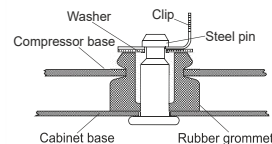


Baseplate	[mm]	[inch]
BI	204	8.03
Bw	100	3.94
Small holes	[mm]	[inch]
SI	170	6.7
Sw	70	2.76
S2l	178	7
øS	ø 16	ø 0.63

Bolt joint



Snap-on



Mounting accessories

	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

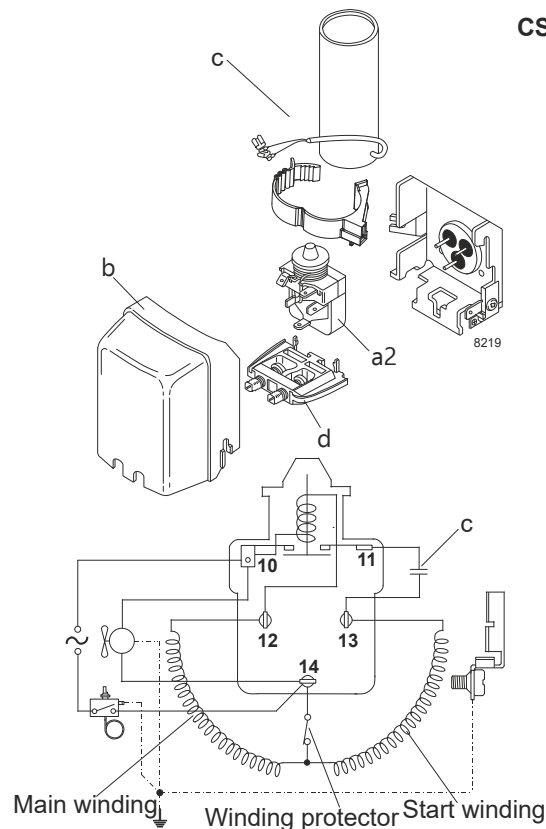
Designation	NLE10CN	220-240V/50Hz	Conf. 1	Sales code:	105H6175
-------------	---------	---------------	---------	-------------	----------

Configuration

Motor configuration	CSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R290
Application	LBP+MBP
Voltage range	198-254V
Starting torque	HST
Approvals	VDE
	CCC
	EAC

Electrical accessories / wiring diagram

CSIR

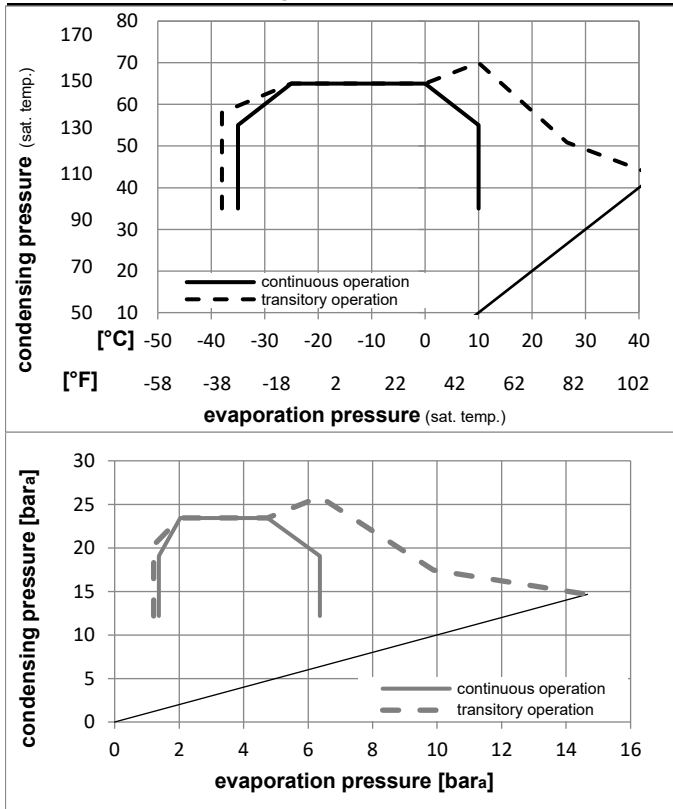


Ambient temperatures / system cooling

Ambient temperature min.:	10°C / 50°F
Ambient temperature max.:	43°C / 110°F

System cooling (n/a: outside limits)			
T ambient	LBP	MBP	HBP
32°C / 90°F	fan 3m/s	fan 3m/s	n/a
38°C / 100°F	fan 3m/s	fan 3m/s	n/a
43°C / 110°F	fan 3m/s	fan 3m/s	n/a

Operation pressure range



Components

a2	relay	117U7002
c	start capacitor (80μF)	117U5015
b	plastic cover	103N2010
d	cord relief	103N1010

Alternative components

b	plastic cover	103N2011
---	---------------	----------

Model

Designation

NLE10CN

220-240V/50Hz

Conf. 1

Sales code:

105H6175

Optimization + standard conditions

220-240V/50Hz 1~, CSIR, fan 3m/s, VDE, CCC, EAC

Evaporating pressure (saturation temperature)													
Condensing pressure (saturation temperature)													
Return gas temp.													
Liquid temp.													
Cooling capacity													
COP													
EER													
Power consumption													
Current consumption													
Ref. mass flow													
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	m
[°C]	-23,3	54,4	32,2	32,2	485,4	1658	417,7	1,47	5,00	1,26	331,3	2,15	4,92
[°F]	-10	130	90	90									
[°C]	-25	55	32	55	362,5	1238	312,0	1,14	3,88	0,98	318,8	2,11	4,51
[°F]	-13	131	89,6	131									
[°C]	-35	40	20	40	285,5	975	245,7	1,23	4,21	1,06	231,7	1,87	3,26
[°F]	-31	104	68	104									
[°C]	-6,66	54,4	35	46,1	873,2	2982	751,5	1,89	6,44	1,62	462,7	2,62	9,96
[°F]	20	130	95	115									
[°C]	-10	55	32	55	693,0	2367	596,4	1,58	5,39	1,36	439,1	2,53	8,77
[°F]	14	131	89,6	131									
[°C]	-10	45	20	45	781,1	2667	672,2	1,96	6,70	1,69	398,0	2,39	9,59
[°F]	14	113	68	113									

Performance tables

220-240V/50Hz 1~, CSIR, fan 3m/s, VDE, CCC, EAC

	pe	Cooling capacity			COP			EER			P1	I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]		
[°C / °F]	-35	-31	274,0	936	235,8	1,16	3,96	1,00	236,0	1,89	3,07		
cond. pressure	-25	-13	436,9	1492	376,0	1,45	4,94	1,25	301,9	2,06	4,93		
pc= 45/113	-15	5	668,8	2284	575,6	1,82	6,21	1,57	367,6	2,28	7,61		
return gas temp.	-10	14	813,1	2777	699,8	2,04	6,98	1,76	398,0	2,39	9,30		
RGT= 32/90	0	32	1163,7	3974	1001,5	2,59	8,85	2,23	449,2	2,58	13,50		
liquid temp	5	41	1371,8	4685	1180,6	2,93	10,01	2,52	468,2	2,65	16,05		
Tliq= 45/113	10	50	1603,3	5475	1379,8	3,33	11,37	2,87	481,5	2,70	18,95		
[°C / °F]	-35	-31	215,5	736	185,4	0,88	3,01	0,76	244,6	1,91	2,66		
cond. pressure	-25	-13	362,5	1238	312,0	1,14	3,88	0,98	318,8	2,11	4,51		
pc= 55/131	-15	5	566,9	1936	487,9	1,42	4,85	1,22	399,1	2,38	7,13		
return gas temp	-10	14	693,0	2367	596,4	1,58	5,39	1,36	439,1	2,53	8,77		
RGT= 32/90	0	32	998,3	3409	859,2	1,94	6,63	1,67	514,5	2,82	12,82		
liquid temp	5	41	1179,4	4028	1015,0	2,15	7,35	1,85	547,9	2,96	15,29		
Tliq= 55/131	10	50	1380,9	4716	1188,4	2,39	8,17	2,06	577,2	3,09	18,11		

Model

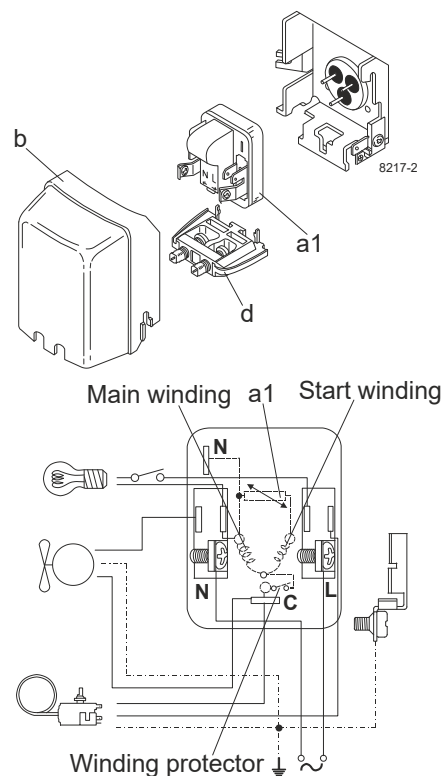
Designation	NLE10CN	220-240V/50Hz	Conf. 2	Sales code:	105H6175
-------------	---------	---------------	---------	-------------	----------

Configuration

Motor configuration	RSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R290
Application	LBP+MBP
Voltage range	198-254V
Starting torque	LST
Approvals	VDE
	CCC
	EAC

Electrical accessories / wiring diagram

RSIR

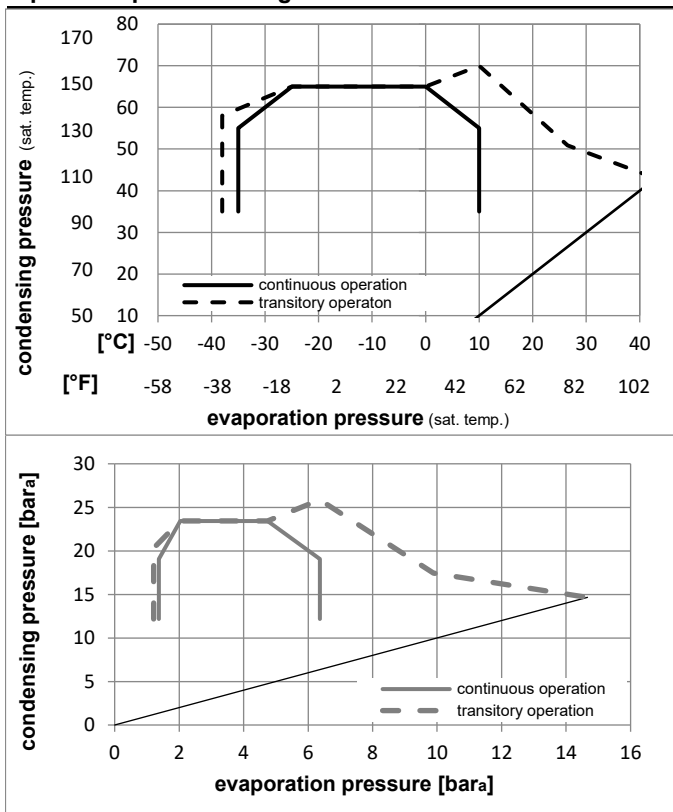


Ambient temperatures / system cooling

Ambient temperature min.:	10°C / 50°F
Ambient temperature max.:	43°C / 110°F

System cooling (n/a: outside limits)			
T ambient	LBP	MBP	HBP
32°C / 90°F	fan 3m/s	fan 3m/s	n/a
38°C / 100°F	fan 3m/s	fan 3m/s	n/a
43°C / 110°F	fan 3m/s	fan 3m/s	n/a

Operation pressure range



Components

a1	e-PTC starter (220V, 250hm, 4.8mm)	103N0050
b	plastic cover	103N2010
d	cord relief	103N1010

Alternative components

b	plastic cover	103N2011
---	---------------	----------

Model

Designation	NLE10CN	220-240V/50Hz	Conf. 2	Sales code:	105H6175
-------------	---------	---------------	---------	-------------	----------

Optimization + standard conditions

220-240V/50Hz 1~, RSIR, fan 3m/s, VDE, CCC, EAC

Evaporating pressure (saturation temperature)													
Condensing pressure (saturation temperature)													
Return gas temp.													
Liquid temp.													
Cooling capacity													
COP													
EER													
Power consumption													
Current consumption													
Ref. mass flow													
pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	m	
[°C]										[W]	[A]	[kg/h]	
-23,3	54,4	32,2	32,2	485,4	1658	417,7	1,47	5,00	1,26	331,3	2,15	4,92	ASHRAE LBP
[°F]	-10	130	90										
-25	55	32	55	362,5	1238	312,0	1,14	3,88	0,98	318,8	2,11	4,51	cecomaf LBP
[°F]	-13	131	89,6										
-35	40	20	40	285,5	975	245,7	1,23	4,21	1,06	231,7	1,87	3,26	EN12900 LBP
[°F]	-31	104	68										
-6,66	54,4	35	46,1	873,2	2982	751,5	1,89	6,44	1,62	462,7	2,62	9,96	ASHRAE MBP
[°F]	20	130	95										
-10	55	32	55	693,0	2367	596,4	1,58	5,39	1,36	439,1	2,53	8,77	cecomaf MBP
[°F]	14	131	89,6										
-10	45	20	45	781,1	2667	672,2	1,96	6,70	1,69	398,0	2,39	9,59	EN12900 MBP
[°F]	14	113	68										

Performance tables

220-240V/50Hz 1~, RSIR, fan 3m/s, VDE, CCC, EAC

	pe	Cooling capacity			COP			EER			P1	I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]		
[°C / °F]	-35	-31	274,0	936	235,8	1,16	3,96	1,00	236,0	1,89	3,07		
cond. pressure	-25	-13	436,9	1492	376,0	1,45	4,94	1,25	301,9	2,06	4,93		
pc= 45/113	-15	5	668,8	2284	575,6	1,82	6,21	1,57	367,6	2,28	7,61		
return gas temp.	-10	14	813,1	2777	699,8	2,04	6,98	1,76	398,0	2,39	9,30		
RGT= 32/90	0	32	1163,7	3974	1001,5	2,59	8,85	2,23	449,2	2,58	13,50		
liquid temp	5	41	1371,8	4685	1180,6	2,93	10,01	2,52	468,2	2,65	16,05		
Tliq= 45/113	10	50	1603,3	5475	1379,8	3,33	11,37	2,87	481,5	2,70	18,95		
[°C / °F]	-35	-31	215,5	736	185,4	0,88	3,01	0,76	244,6	1,91	2,66		
cond. pressure	-25	-13	362,5	1238	312,0	1,14	3,88	0,98	318,8	2,11	4,51		
pc= 55/131	-15	5	566,9	1936	487,9	1,42	4,85	1,22	399,1	2,38	7,13		
return gas temp	-10	14	693,0	2367	596,4	1,58	5,39	1,36	439,1	2,53	8,77		
RGT= 32/90	0	32	998,3	3409	859,2	1,94	6,63	1,67	514,5	2,82	12,82		
liquid temp	5	41	1179,4	4028	1015,0	2,15	7,35	1,85	547,9	2,96	15,29		
Tliq= 55/131	10	50	1380,9	4716	1188,4	2,39	8,17	2,06	577,2	3,09	18,11		

Model

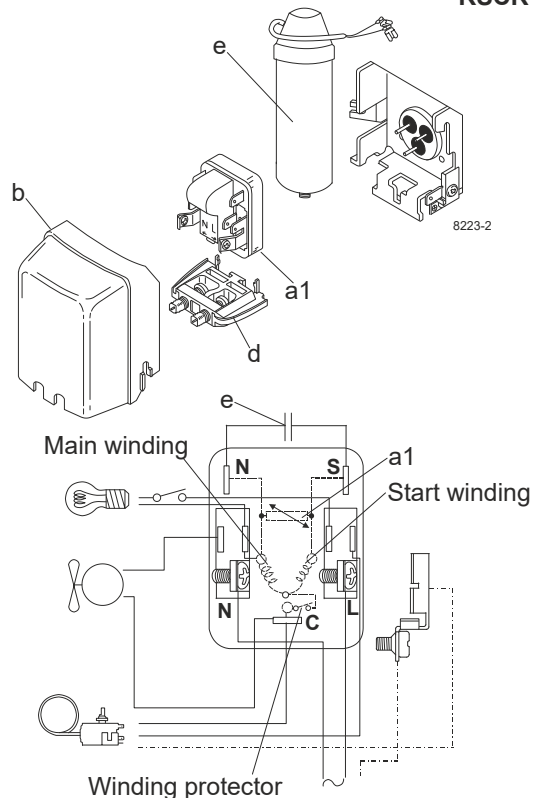
Designation	NLE10CN	220-240V/50Hz	Conf. 3	Sales code:	105H6175
-------------	---------	---------------	---------	-------------	----------

Configuration

Motorconfiguration	RSCR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R290
Application	LBP+MBP
Voltage range	198-254V
Starting torque	LST
Approvals	VDE
	CCC
	EAC

Electrical accessories / wiring diagram

RSCR

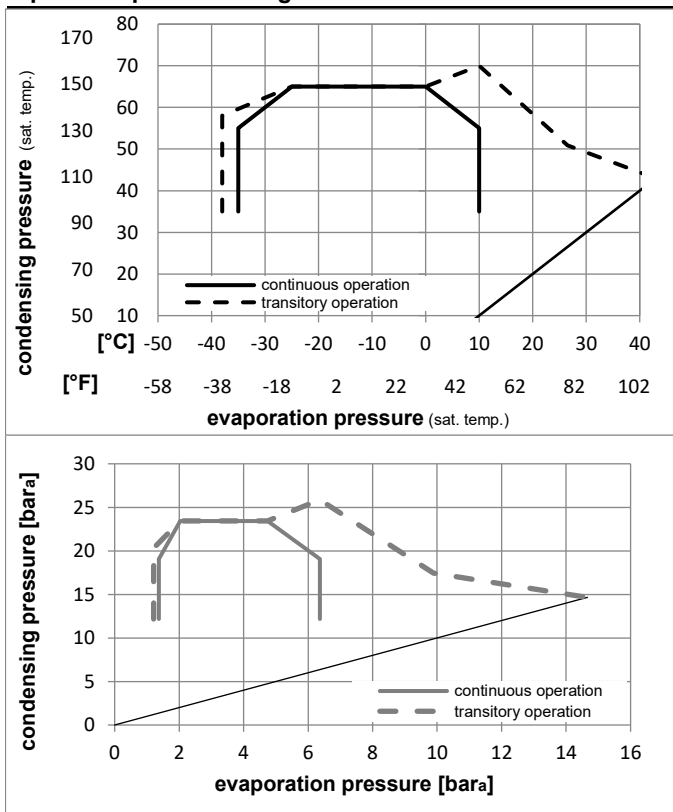


Ambient temperatures / system cooling

Ambient temperature min.:	10°C / 50°F
Ambient temperature max.:	43°C / 110°F

System cooling (n/a: outside limits)			
T ambient	LBP	MBP	HBP
32°C / 90°F	fan 3m/s	fan 3m/s	n/a
38°C / 100°F	fan 3m/s	fan 3m/s	n/a
43°C / 110°F	fan 3m/s	fan 3m/s	n/a

Operation pressure range



Components

a1	e-PTC starter (220V, 250hm, 4.8mm)	103N0050
e	run capacitor (4μF, 4.8mm)	117-7119
b	plastic cover	103N2010
d	cord relief	103N1010
	bracket for run capacitor	117-0300
	screw M4x8mm	117-0301

Alternative components

b	plastic cover	103N2011
---	---------------	----------

Model

Designation	NLE10CN	220-240V/50Hz	Conf. 3	Sales code:	105H6175
-------------	---------	---------------	---------	-------------	----------

Optimization + standard conditions

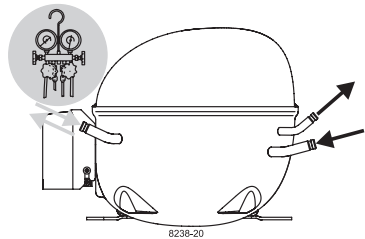
220-240V/50Hz 1~, RSCR, fan 3m/s, VDE, CCC, EAC

Evaporating pressure (saturation temperature)													
Condensing pressure (saturation temperature)													
Return gas temp.													
Liquid temp.													
Cooling capacity													
COP													
EER													
Power consumption													
Current consumption													
Ref. mass flow													
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	m
[°C]	-23,3	54,4	32,2	32,2	490,2	1674	421,9	1,54	5,24	1,32	319,3	1,88	4,96
[°F]	-10	130	90	90									ASHRAE LBP
[°C]	-25	55	32	55	366,2	1251	315,1	1,19	4,07	1,03	307,3	1,84	4,56
[°F]	-13	131	89,6	131									cecomaf LBP
[°C]	-35	40	20	40	288,3	985	248,1	1,27	4,33	1,09	227,4	1,43	3,29
[°F]	-31	104	68	104									EN12900 LBP
[°C]	-6,66	54,4	35	46,1	881,9	3012	759,0	1,99	6,79	1,71	443,7	2,30	10,06
[°F]	20	130	95	115									ASHRAE MBP
[°C]	-10	55	32	55	700,0	2391	602,4	1,66	5,67	1,43	421,4	2,22	8,85
[°F]	14	131	89,6	131									cecomaf MBP
[°C]	-10	45	20	45	788,9	2694	678,9	2,06	7,03	1,77	383,5	2,03	9,69
[°F]	14	113	68	113									EN12900 MBP

Performance tables

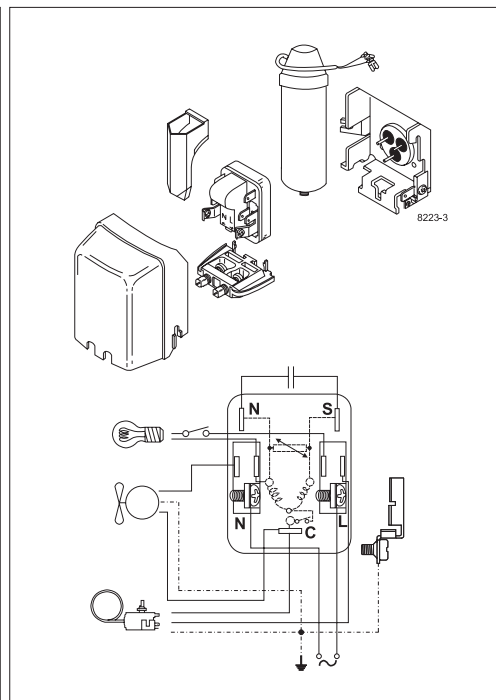
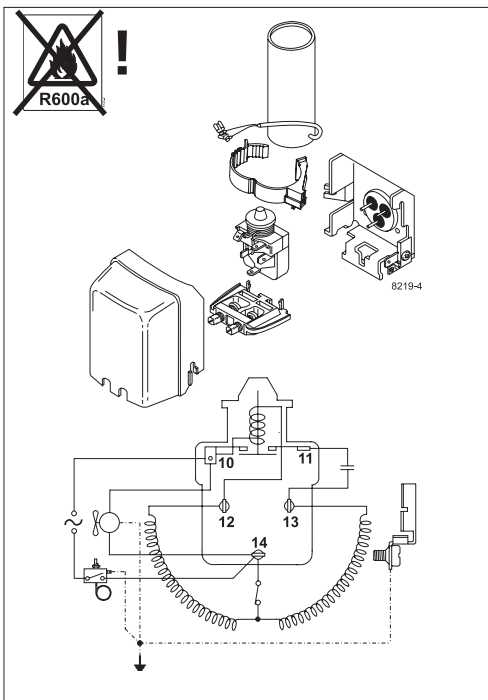
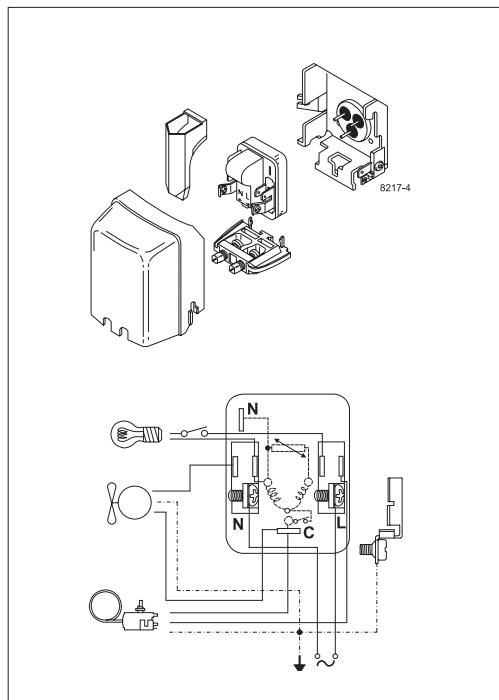
220-240V/50Hz 1~, RSCR, fan 3m/s, VDE, CCC, EAC

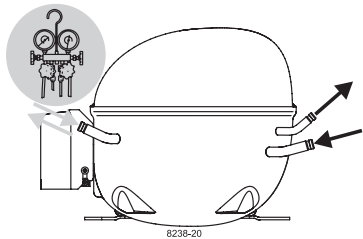
	pe	Cooling capacity			COP			EER			P1	I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]		
[°C / °F]	-35	-31	276,7	945	238,2	1,20	4,08	1,03	231,6	1,46	3,10		
cond. pressure	-25	-13	441,2	1507	379,7	1,51	5,14	1,30	293,1	1,72	4,98		
pc= 45/113	-15	5	675,5	2307	581,3	1,90	6,50	1,64	354,8	1,94	7,68		
return gas temp.	-10	14	821,3	2805	706,8	2,14	7,31	1,84	383,5	2,03	9,40		
RGT= 32/90	0	32	1175,3	4014	1011,5	2,72	9,29	2,34	432,2	2,19	13,63		
liquid temp	5	41	1385,5	4732	1192,4	3,08	10,51	2,65	450,4	2,24	16,21		
Tliq= 45/113	10	50	1619,3	5530	1393,6	3,49	11,94	3,01	463,3	2,29	19,13		
[°C / °F]	-35	-31	217,6	743	187,3	0,92	3,15	0,79	236,0	1,59	2,69		
cond. pressure	-25	-13	366,2	1251	315,1	1,19	4,07	1,03	307,3	1,84	4,56		
pc= 55/131	-15	5	572,6	1955	492,8	1,49	5,10	1,28	383,6	2,10	7,20		
return gas temp	-10	14	700,0	2391	602,4	1,66	5,67	1,43	421,4	2,22	8,85		
RGT= 32/90	0	32	1008,3	3444	867,7	2,05	7,00	1,76	491,8	2,47	12,95		
liquid temp	5	41	1191,2	4068	1025,2	2,28	7,78	1,96	522,6	2,59	15,45		
Tliq= 55/131	10	50	1394,7	4763	1200,3	2,54	8,67	2,18	549,4	2,71	18,29		



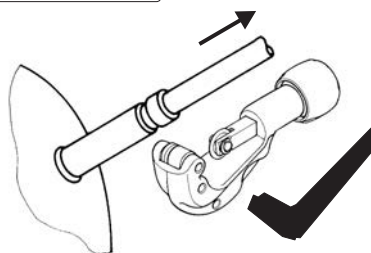
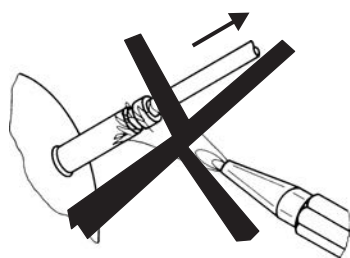
NL Compressors

SECOP





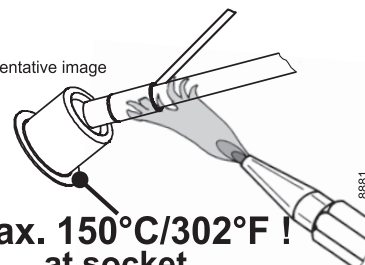
Service/Repair – R600a, R290



8545

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)**

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 subsequent 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. www.secop.com