

Single Pack NLE12.6CNL 220-240V 50Hz CSIR

Codice Imballo Singolo: **195B4777**

Posizione	Titolo	Codice	Quantità
1	Compressor NLE12.6CNL	105H6378	1
2	e-PTC starting device (220V, 250hm, 4.8mm)	103N0050	1
3	Run capacitor holder	117-0300	1
4	Screw for bracket M4x8mm	117-0301	1
5	Run capacitor (4µF 320V, 4.8mm)	117-7119	1
6	Cord relief	103N1010	1
7	Cover	103N2010	1
8	Bolt joint for one compressor M6 ø16mm	118-1917	1

Secop GmbH • Lise-Meitner-Straße 29 • 24941 Flensburg, Germany • Tel: +49 46149410 • 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

Designation	NLE12.6CNL	220-240V/50Hz 1~	Sales code:	105H6378
-------------	-------------------	------------------	-------------	-----------------

Compressor design

Oil type	Polyolester	Refrigerant(s)	R290
Oil viscosity	32cSt	Displacement	12,55cm ³ / 0,77cu.in
Oil quantity	298cm ³ / 10,1fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	300g / 10,6oz		
Free gas volume comp.	2360cm ³ / 79,8fl.oz		
Weight	11,8kg / 26lbs		
Motor protection	1# internal		
Winding resistance main	5,9Ω (at 25°C)		
Winding resistance aux	10,8Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations with NLE12.6CNL

	Conf. 1	Conf. 2	Conf. 3
Motorconfiguration	CSIR	eRSIR	eRSCR
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	VDE, CCC	VDE, CCC
Starting torque	HST	LST	LST
Note	- / -		

Applications with NLE12.6CNL

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

Electrical data - Configurations with NLE12.6CNL

	Conf. 1	Conf. 2	Conf. 3
Starting device type	relay	e-PTC	e-PTC
Run capacitor	-/-	-/-	4μF
Start capacitor	80μF	-/-	-/-
LRA (locked rotor amps / 4s/ U(N))	14,2A		15,3A
RLA (rated load amps / 1s/ U(N))	2,7A	-/-A	2,7A
Cut in current (U(N))			19,2A

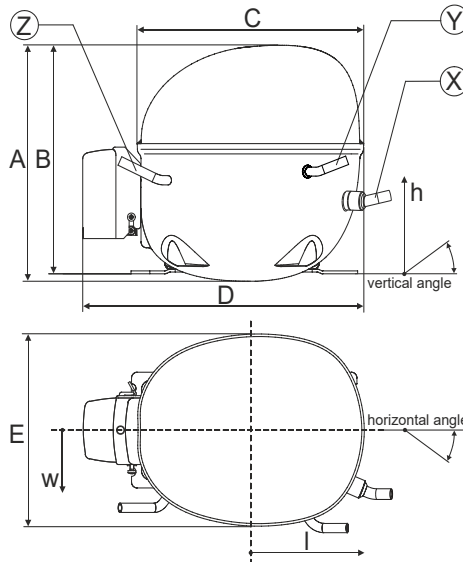
Model

Designation	NLE12.6CNL	220-240V/50Hz 1~	Sales code:	105H6378
-------------	-------------------	------------------	-------------	-----------------

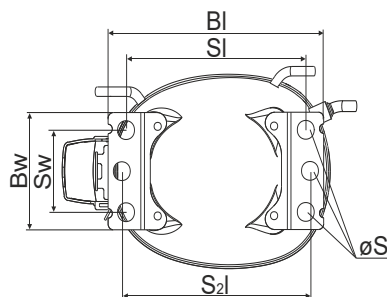
Compressor dimensions

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	Discharge	Process
		X	Y	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]	132/69/57	94/102/81	-109/94/72
	[in]	5,2/2,7/2,2	3,7/4/3,2	-4,3/3,7/2,8
Straight tube l.	[mm]	12	12	12
	[in]	0,5	0,5	0,5

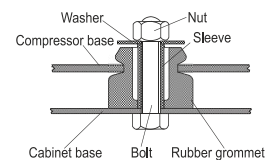


Compressor fixation

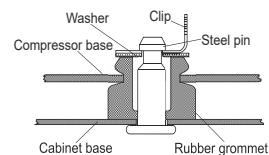


Baseplate	[mm]	[inch]
BI	204	8.03
BW	100	3.94
Small holes		
	[mm]	[inch]
SI	170	6.7
Sw	70	2.76
S2l	178	7
øS	ø 16	ø 0.63

Bolt joint



Snap-on



Mounting accessories

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

Application notes

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

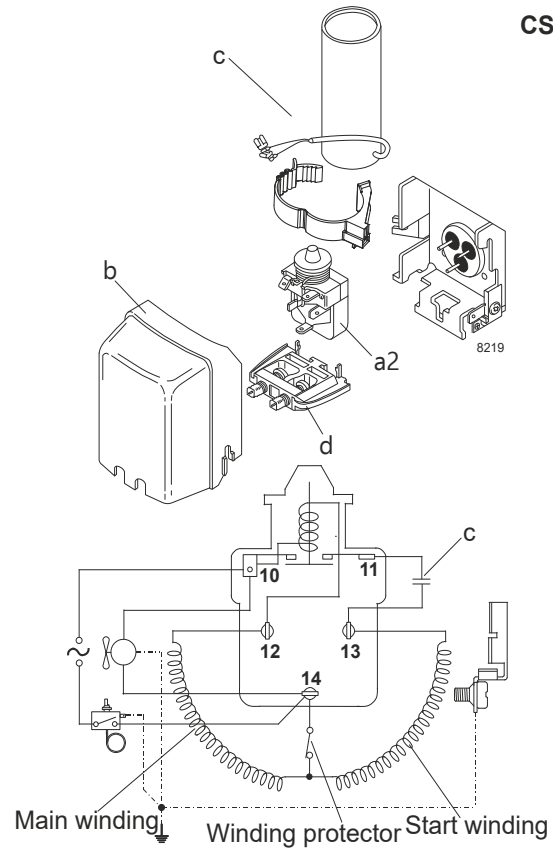
Model

Designation	NLE12.6CNL	220-240V/50Hz	Conf. 1	Sales code:	105H6378
-------------	-------------------	----------------------	----------------	-------------	-----------------

Configuration

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

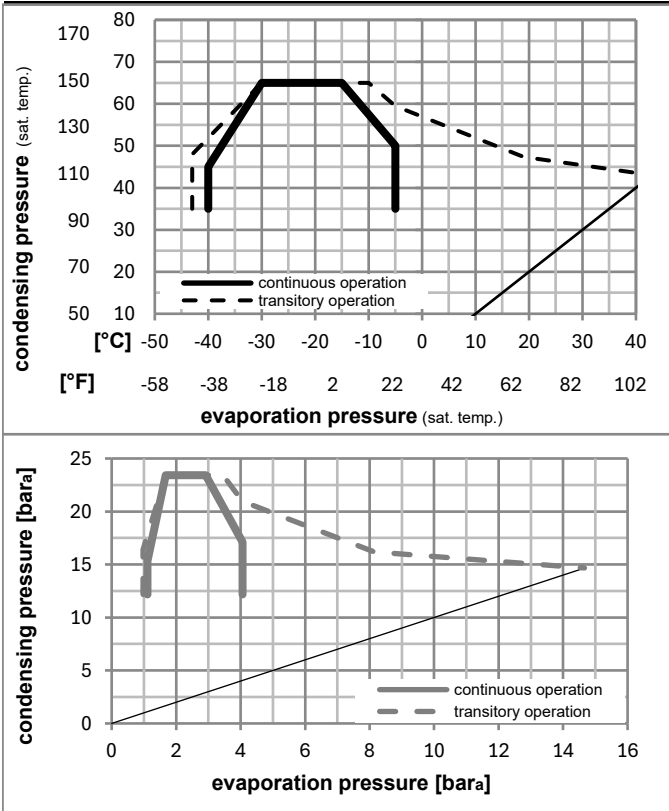
Electrical accessories / wiring diagram



Ambient/ machine room temperatures minimum /maximum

Ambient temperature range:	10 - 43°C / 50 - 110°F
Machine room temperature range:	10 - 48°C / 50 - 119°F
Compressor cooling:	fan 3m/s

Operation pressure range



Components

a2	relay	117U7003
c	start capacitor (80μF)	117U5015
b	plastic cover	103N2010
d	cord relief	103N1010

Alternative components

a2	relay	117U7053
c	start capacitor (80μF)	117U5079
b	plastic cover	103N2011

Model

Designation **NLE12.6CNL** **220-240V/50Hz** Conf. 1 Sales code: **105H6378**

Optimization + standard conditions

R290, 220V/50Hz, CSIR, fan 3m/s, VDE, CCC

	pe	pc	RGT	Tliq	Cooling capacity	COP	EER	P1	I	Ref. mass flow	
	[°C]	[°C]	[°C]	[°C]	[W]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
ASHRAE LBP	-23	54	32	32	609,8	1,62	5,55	375,5	2,24	6,18	
	[-10]	[130]	[90]	[90]							
cecomaf LBP	-25	55	32	55	459,7	1,27	4,33	362,2	2,19	5,72	
	[-13]	[131]	[90]	[131]							
EN12900 LBP	-35	40	20	40	354,2	1,33	4,55	265,6	1,87	4,05	
	[-31]	[104]	[68]	[104]							
ARI540 LBP	-23	49	4,4	49	493,6	1,36	4,64	363,1	2,20	6,84	
	[-10]	[120]	[40]	[120]							
AHAM LBP	-23	41	32	32	659,7	1,91	6,53	345,0	2,13	6,68	
	[-10]	[105]	[90]	[90]							
opt	-35	45	32	45	338,9	1,25	4,28	270,4	1,89	3,80	
	[-31]	[113]	[90]	[113]							

Performance tables

R290, 220V/50Hz, CSIR, fan 3m/s, VDE, CCC

	pe	Cooling capacity	COP	EER	P1	I	m
	[°C]	[W]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-40	258,9	1,11	3,78	233,9	1,78	2,89
cond. pressure	-35	338,9	1,25	4,28	270,4	1,89	3,80
pc= 45/113	-30	430,1	1,41	4,80	306,1	2,00	4,83
return gas temp.	-25	536,4	1,57	5,36	341,9	2,12	6,05
RGT= 32/90	-20	661,6	1,75	5,97	378,6	2,26	7,49
liquid temp	-15	809,3	1,94	6,63	417,1	2,41	9,21
Tliq= 45/113	-5	1187,9	2,36	8,07	503,0	2,78	13,68
[°C / °F]	-40	215,7	0,91	3,09	238,1	1,77	2,66
cond. pressure	-35	287,2	1,03	3,52	279,0	1,90	3,55
pc= 55/131	-30	367,3	1,15	3,92	320,1	2,04	4,56
return gas temp	-25	459,7	1,27	4,33	362,2	2,19	5,72
RGT= 32/90	-20	568,3	1,40	4,78	406,1	2,36	7,11
liquid temp	-15	696,7	1,54	5,25	452,8	2,55	8,76
Tliq= 55/131	-5	1028,4	1,84	6,30	557,8	3,00	13,10

Model

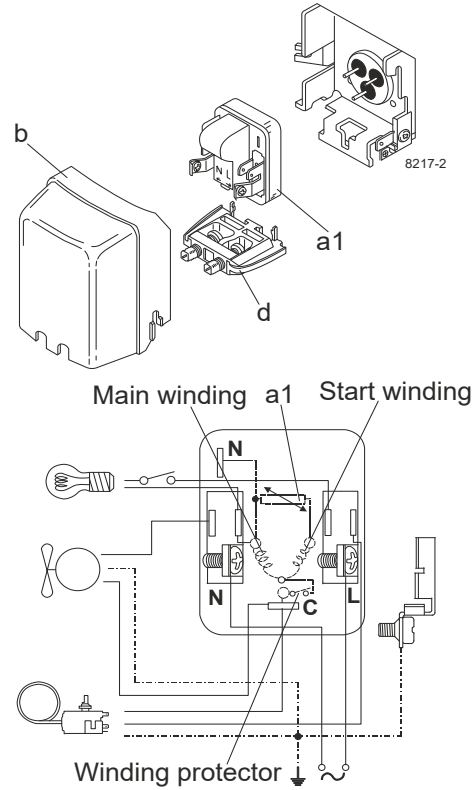
Designation	NLE12.6CNL	220-240V/50Hz	Conf. 2	Sales code:	105H6378
-------------	-------------------	----------------------	----------------	-------------	-----------------

Configuration

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

Electrical accessories / wiring diagram

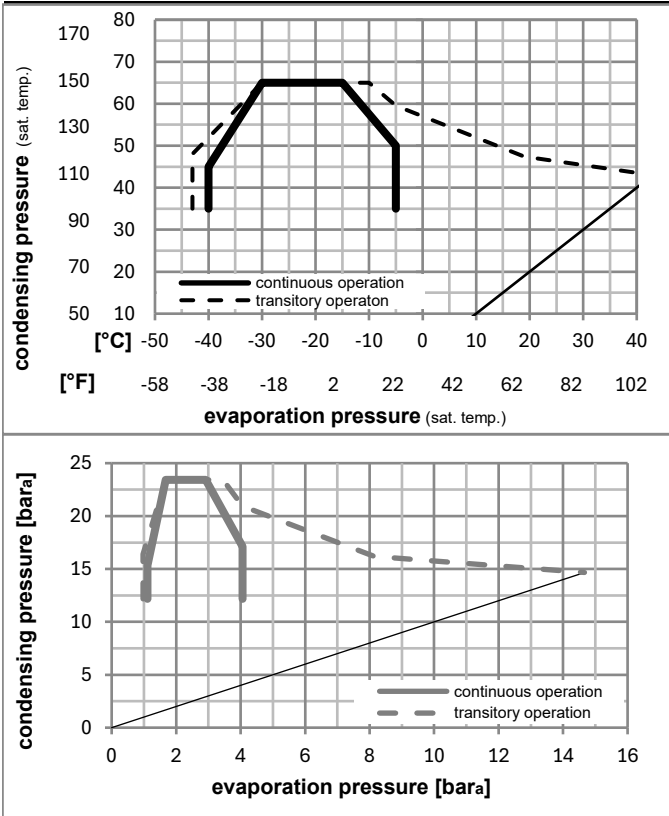
RSIR



Ambient/ machine room temperatures minimum /maximum

Ambient temperature range:	10 - 43°C / 50 - 110°F
Machine room temperature range:	10 - 48°C / 50 - 119°F
Compressor cooling:	fan 3m/s

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 **NLE12.6CNL** **220-240V/50Hz** Conf. 2 Sales code: **105H6378**

Optimization + standard conditions

R290, 220V/50Hz, eRSIR, fan 3m/s, VDE, CCC

	Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)			Return gas temp.	Liquid temp.	Cooling capacity	COP	EER	Power consumption			Ref. mass flow
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]						P1	I	m	
[°C]	-23	54	32	32	609,8	2083	524,8	1,62	5,55	1,40	375,5	2,24	6,18	ASHRAE LBP		
[°F]	-10	130	90	90												
[°C]	-25	55	32	55	459,7	1570	395,6	1,27	4,33	1,09	362,2	2,19	5,72	cecomaf LBP		
[°F]	-13	131	90	131												
[°C]	-35	40	20	40	354,2	1210	304,8	1,33	4,55	1,15	265,6	1,87	4,05	EN12900 LBP		
[°F]	-31	104	68	104												
[°C]	-23	49	4,4	49	493,6	1686	424,8	1,36	4,64	1,17	363,1	2,20	6,84	ARI540 LBP		
[°F]	-10	120	40	120												
[°C]	-23	41	32	32	659,7	2253	567,8	1,91	6,53	1,65	345,0	2,13	6,68	AHAM LBP		
[°F]	-10	105	90	90												
[°C]	-35	45	32	45	338,9	1157	291,6	1,25	4,28	1,08	270,4	1,89	3,80	opt		
[°F]	-31	113	90	113												

Performance tables

R290, 220V/50Hz, eRSIR, fan 3m/s, VDE, CCC

	pe		Cooling capacity			COP	EER	P1	I	m	
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]				[kcal/Wh]
[°C / °F]	-40	-40	258,9	884	222,8	1,11	3,78	0,95	233,9	1,78	2,89
cond. pressure	-35	-31	338,9	1157	291,6	1,25	4,28	1,08	270,4	1,89	3,80
pc= 45/113	-30	-22	430,1	1469	370,2	1,41	4,80	1,21	306,1	2,00	4,83
return gas temp.	-25	-13	536,4	1832	461,6	1,57	5,36	1,35	341,9	2,12	6,05
RGT= 32/90	-20	-4	661,6	2259	569,4	1,75	5,97	1,50	378,6	2,26	7,49
liquid temp	-15	5	809,3	2764	696,5	1,94	6,63	1,67	417,1	2,41	9,21
Tliq= 45/113	-5	23	1187,9	4057	1022,3	2,36	8,07	2,03	503,0	2,78	13,68
[°C / °F]	-40	-40	215,7	737	185,7	0,91	3,09	0,78	238,1	1,77	2,66
cond. pressure	-35	-31	287,2	981	247,2	1,03	3,52	0,89	279,0	1,90	3,55
pc= 55/131	-30	-22	367,3	1254	316,1	1,15	3,92	0,99	320,1	2,04	4,56
return gas temp	-25	-13	459,7	1570	395,6	1,27	4,33	1,09	362,2	2,19	5,72
RGT= 32/90	-20	-4	568,3	1941	489,1	1,40	4,78	1,20	406,1	2,36	7,11
liquid temp	-15	5	696,7	2379	599,6	1,54	5,25	1,32	452,8	2,55	8,76
Tliq= 55/131	-5	23	1028,4	3512	885,1	1,84	6,30	1,59	557,8	3,00	13,10

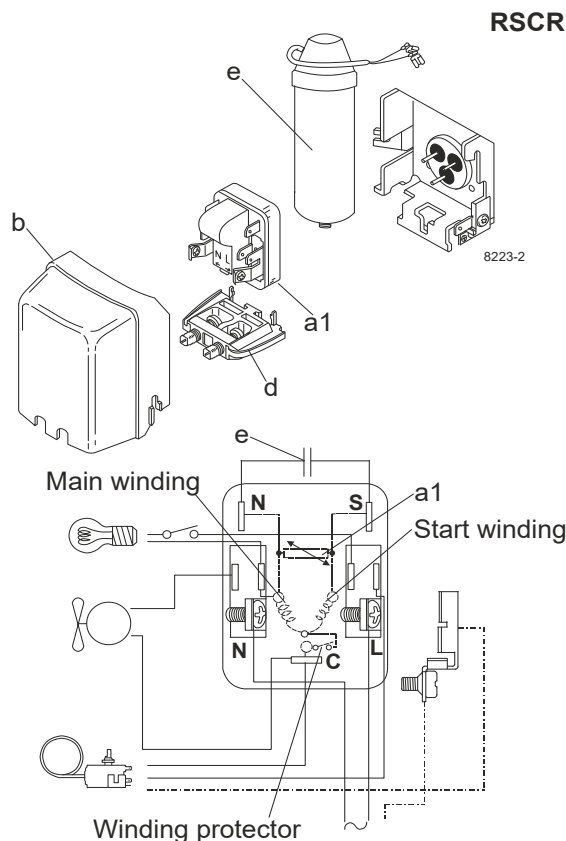
Model

Designation	NLE12.6CNL	220-240V/50Hz	Conf. 3	Sales code:	105H6378
-------------	-------------------	----------------------	----------------	-------------	-----------------

Configuration

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

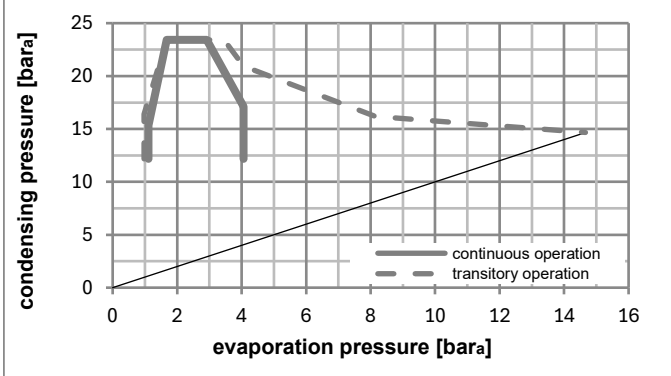
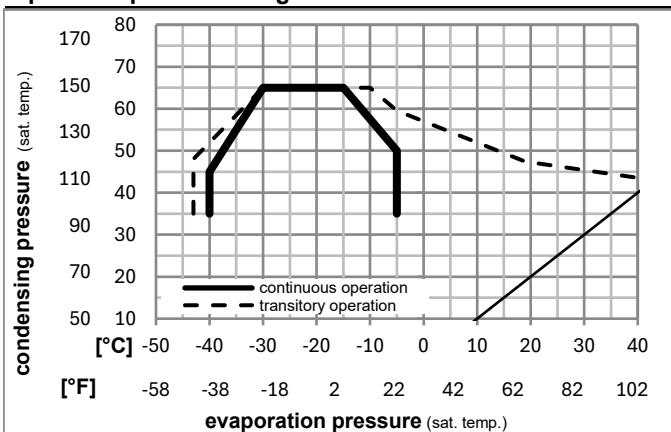
Electrical accessories / wiring diagram



Ambient/ machine room temperatures minimum /maximum

Ambient temperature range:	10 - 43°C / 50 - 110°F
Machine room temperature range:	10 - 48°C / 50 - 119°F
Compressor cooling:	fan 3m/s

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 **NLE12.6CNL** **220-240V/50Hz** Conf. 3 Sales code: **105H6378**

Optimization + standard conditions

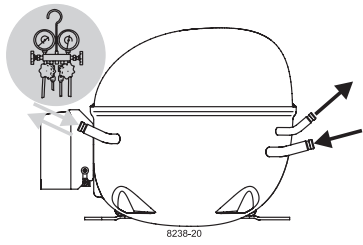
R290, 220V/50Hz, eRSCR, fan 3m/s, VDE, CCC

	Evaporating pressure (saturation temperature)				Cooling capacity			COP	EER	P1	Power consumption		Ref. mass flow	
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]				Current consumption	l		
	[°C]	[°C]	[°C]	[°C]				[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
ASHRAE LBP	-23	54	32	32	613,3	2095	527,8	1,69	5,77	1,45	363,0	2,17	6,21	
	[°F]													
cecomaf LBP	-25	55	32	55	462,1	1578	397,7	1,32	4,51	1,14	350,2	2,12	5,75	
	[°F]													
EN12900 LBP	-35	40	20	40	352,8	1205	303,6	1,39	4,76	1,20	253,2	1,79	4,03	
	[°F]													
ARI540 LBP	-23	49	4,4	49	496,5	1696	427,3	1,41	4,83	1,22	351,0	2,13	6,88	
	[°F]													
AHAM LBP	-23	41	32	32	663,8	2267	571,2	1,99	6,79	1,71	333,7	2,06	6,72	
	[°F]													
opt	-35	45	32	45	337,5	1153	290,5	1,31	4,47	1,13	257,7	1,80	3,78	
	[°F]													

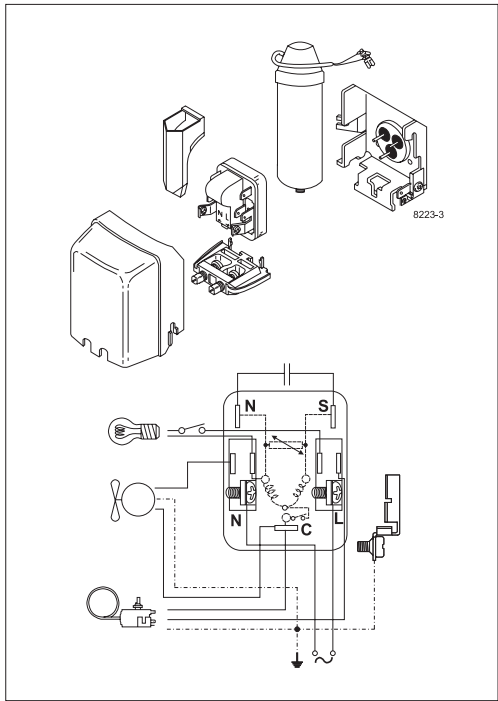
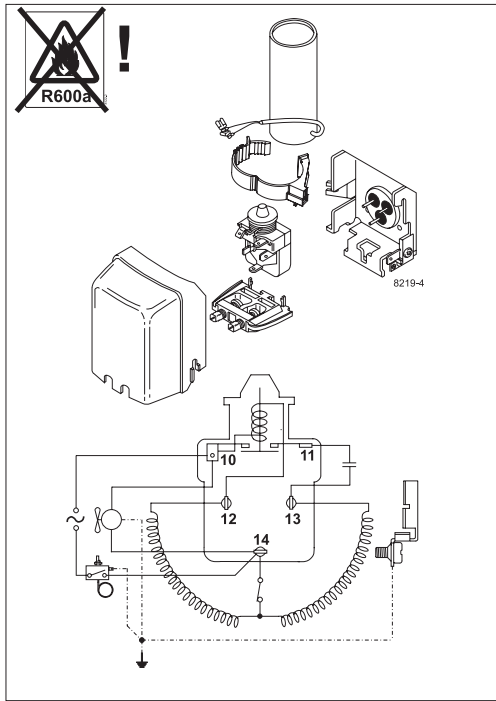
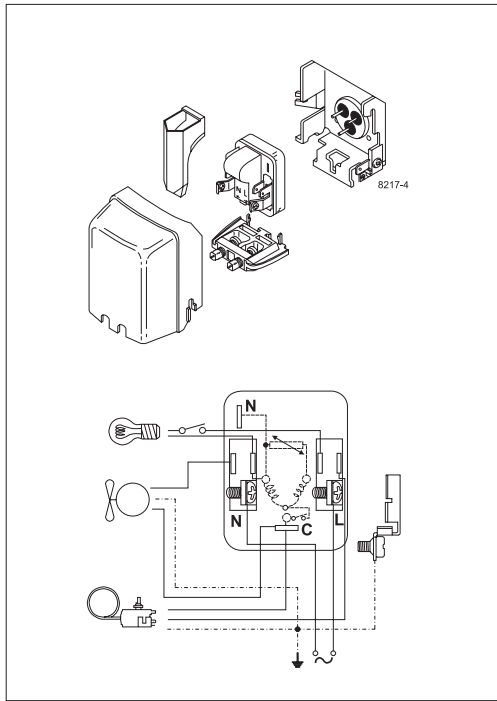
Performance tables

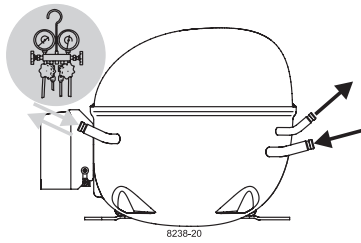
R290, 220V/50Hz, eRSCR, fan 3m/s, VDE, CCC

	pe		Cooling capacity			COP	EER	P1	l	m	
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]						
[°C / °F]	-40	-40	255,5	873	219,9	1,18	4,02	1,01	217,0	1,66	2,86
cond. pressure	-35	-31	337,5	1153	290,5	1,31	4,47	1,13	257,7	1,80	3,78
pc= 45/113	-30	-22	430,9	1472	370,8	1,46	4,99	1,26	295,1	1,93	4,84
return gas temp.	-25	-13	539,3	1842	464,1	1,63	5,57	1,40	330,6	2,05	6,08
RGT= 32/90	-20	-4	666,1	2275	573,3	1,82	6,22	1,57	365,5	2,18	7,54
liquid temp	-15	5	815,0	2783	701,4	2,03	6,94	1,75	401,0	2,32	9,27
Tliq= 45/113	-5	23	1193,1	4075	1026,8	2,49	8,51	2,14	479,1	2,65	13,74
[°C / °F]	-40	-40	213,2	728	183,5	0,97	3,30	0,83	220,9	1,65	2,63
cond. pressure	-35	-31	286,1	977	246,3	1,08	3,67	0,93	265,9	1,81	3,54
pc= 55/131	-30	-22	367,9	1257	316,6	1,19	4,07	1,03	308,6	1,97	4,56
return gas temp	-25	-13	462,1	1578	397,7	1,32	4,51	1,14	350,2	2,12	5,75
RGT= 32/90	-20	-4	572,1	1954	492,4	1,46	4,98	1,26	392,0	2,28	7,16
liquid temp	-15	5	701,6	2396	603,8	1,61	5,51	1,39	435,2	2,45	8,82
Tliq= 55/131	-5	23	1033,1	3528	889,1	1,94	6,64	1,67	531,4	2,86	13,16

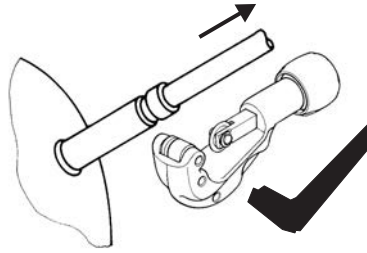
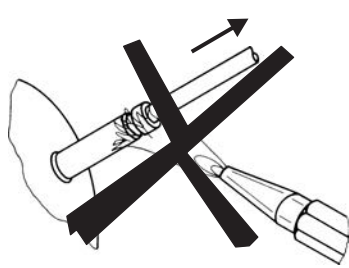


NL Compressors





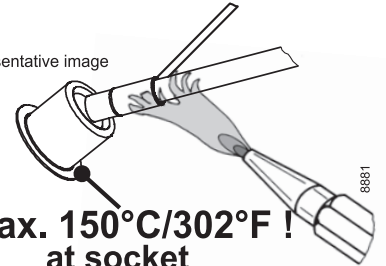
Service/Repair – R600a, R290



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 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. www.secop.com