

NLE11CNLT Energy-optimized Tropical Compressor R290 208-230V 60Hz

General

Code number	105H6109
Approvals	UL984, CB IEC 60335-2-34
Compressors on pallet	80

Application

Application	LBP		
Frequency	Hz	50	60
Evaporating temperature	°C	-	-40 to -10
Voltage range	V	-	187 to 253
Max. condensing temperature continuous (short)	°C	-	65 (65)
Max. winding temperature continuous (short)	°C	-	125 (135)

Cooling requirements

Frequency	Hz	50			60		
Application		LBP	MBP	HBP	LBP	MBP	HBP
32°C		-	-	-	F ₂	-	-
38°C		-	-	-	F ₂	-	-
43°C		-	-	-	F ₂	-	-

Remarks on application:
UL984 approval in preparation (first quarter 2018)

Motor

Motor type	CSIR/RSIR/RSCR		
LRA (rated after 4 sec. UL984), HST LST	A	15.4	15.1
Cut in Current, HST LST	A	15.4	19.9
Resistance, main start winding (25°C)	Ω	5.1	13.0

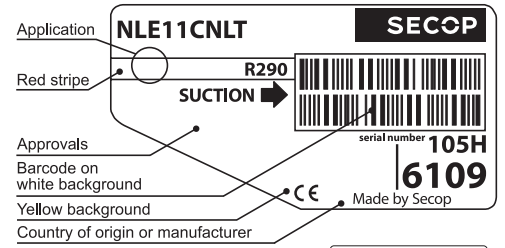
Design

Displacement	cm ³	11.15
Oil quantity (type)	cm ³	300 (polyolester)
Maximum refrigerant charge	g	150
Free gas volume in compressor	cm ³	2360
Weight without electrical equipment	kg	12.2

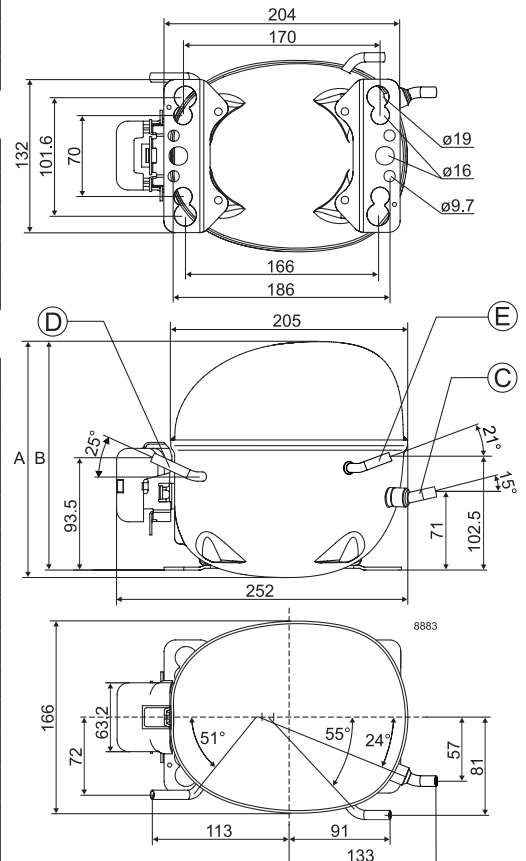
Dimensions

Height	mm	A	203
		B	197
		B1	-
		B2	-
Suction connector	location/I.D. mm angle	C	8.2 15°
	material comment		Copper Rubber plug
Process connector	location/I.D. mm angle	D	6.5 25°
	material comment		Copper Rubber plug
Discharge connector	location/I.D. mm angle	E	6.5 21°
	material comment		Copper Rubber plug
Oil cooler connector	location/I.D. mm angle	F	-
	material comment		-
Connector tolerance	I.D. mm		±0.09

Remarks:



- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s (compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary
- SG = Suction gas cooling normally sufficient
- = not applicable in this area



EN 12900 LBP

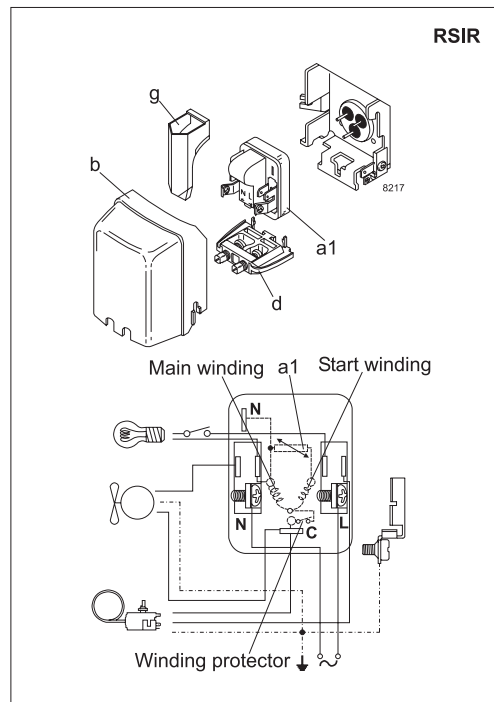
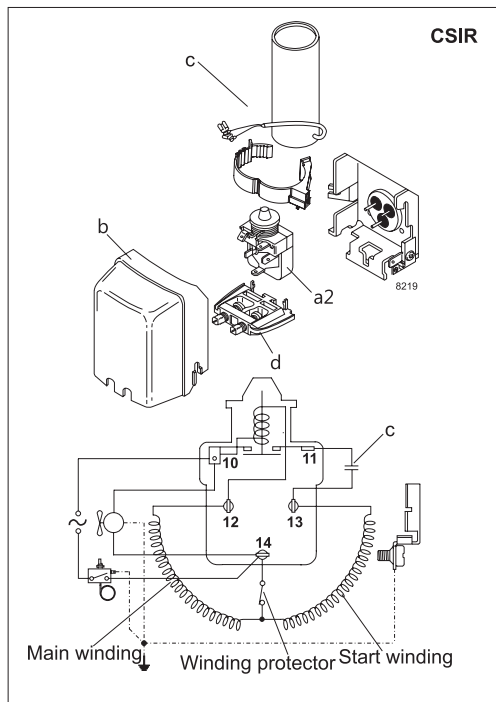
220V, 60Hz, fan cooling F₂

Evap. temp, in °C	-45	-40	-35	-30	-25	-23,3	-20	-15	-10	-6,7	-5	0	5	7,2	10	15	20
Capacity in W		324	383	482	614	665	770	940	1116								
Power cons, in W		253	291	329	367	380	405	443	481								
Current cons, in A		1.82	1.93	2.05	2.18	2.23	2.32	2.47	2.62								
COP in W/W		1.28	1.32	1.47	1.67	1.75	1.90	2.12	2.32								

ASHRAE LBP

220V, 60Hz, fan cooling F₂

Evap. temp, in °C	-45	-40	-35	-30	-25	-23,3	-20	-15	-10	-6,7	-5	0	5	7,2	10	15	20
Capacity in W		403	416	491	617	670	783	979	1193								
Power cons, in W		250	294	340	389	405	438	489	543								
Current cons, in A		1.80	1.93	2.08	2.25	2.32	2.44	2.64	2.86								
COP in W/W		1.61	1.41	1.44	1.59	1.65	1.79	2.00	2.20								



Accessories for	NLE11CNLT	Figure	Code number
ePTC starting device	6.3 mm spade connectors	a1	-
	4.8 mm spade connectors		103N0050
Starting relay	6.3 mm spade connectors	a2	117U7005
Start. capacitor 60 µF	6.3 mm spade connectors	c	117U5014
Cover		b	103N2011
Cord relief		d	103N1010
Protection screen for PTC		g	-

Test conditions	EN 12900	ASHRAE
	LBP	LBP
Condensing temperature	40°C	54.4°C
Ambient temperature	32°C	32.2°C
Suction gas temperature	20°C	32.2°C
Liquid temperature	no subcooling	32.2°C

Mounting accessories	Code number	
Bolt joint for one comp.	Ø: 16 mm	118-1917
Bolt joint in quantities	Ø: 16 mm	118-1918
Snap-on in quantities	Ø: 16 mm	118-1919

EN 12900 LBP

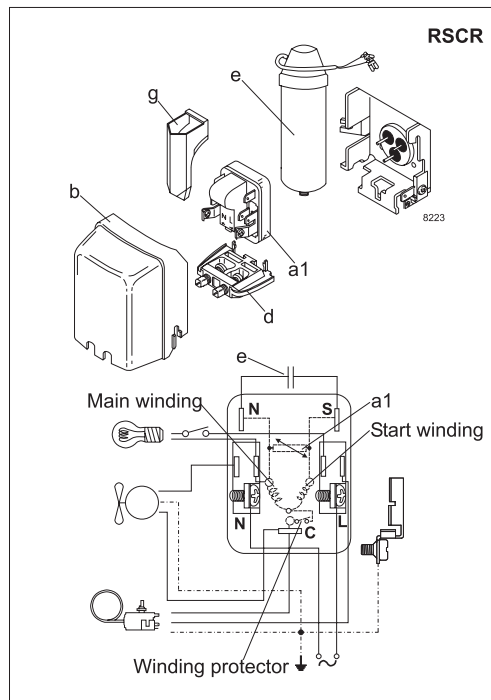
220V, 60Hz, RC 4 µF, ePTC consumption incl., fan cooling F₂

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10	15	20
Capacity in W		334	383	480	613	665	772	946	1125								
Power cons. in W		241	275	310	345	358	382	418	455								
Current cons. in A		1.32	1.44	1.58	1.72	1.77	1.86	2.02	2.18								
COP in W/W		1.39	1.39	1.55	1.78	1.86	2.02	2.26	2.48								

ASHRAE LBP

220V, 60Hz, RC 4 µF, ePTC consumption incl., fan cooling F₂

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10	15	20
Capacity in W		430	428	496	622	675	791	990	1207								
Power cons. in W		243	282	323	367	382	412	460	509								
Current cons. in A		1.33	1.47	1.63	1.80	1.86	1.99	2.19	2.41								
COP in W/W		1.77	1.52	1.53	1.69	1.77	1.92	2.15	2.37								



Accessories for	NLE11CNLT	Figure	Code number
ePTC starting device	6.3 mm spade connectors	a1	-
	4.8 mm spade connectors		103N0050
Run capacitor 4 µF (optional)	4.8 mm spade connectors	e	117-7119
Cover		b	103N2011
Cord relief		d	103N1010
Protection screen for PTC		g	-

Test conditions	EN 12900	ASHRAE
	LBP	LBP
Condensing temperature	40°C	54.4°C
Ambient temperature	32°C	32.2°C
Suction gas temperature	20°C	32.2°C
Liquid temperature	no subcooling	32.2°C

Mounting accessories	Code number	
Bolt joint for one comp.	Ø: 16 mm	118-1917
Bolt joint in quantities	Ø: 16 mm	118-1918
Snap-on in quantities	Ø: 16 mm	118-1919

Nidec GA Compressors accepts no responsibility for possible errors in catalogs, brochures, and other printed material. Nidec GA Compressors 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 Nidec Global Appliance Germany GmbH. All rights reserved. www.secop.com