

## NLE11MNT Energy-optimized Tropical Compressor R290 208-230V 60Hz

### General

Code number	105H6199
Approvals	UL984, CB IEC 60335-2-34
Compressors on pallet	80

### Application

Application	MBP			
	Hz	50	60	
Frequency	Hz	50	60	
Evaporating temperature	°C	-	-25 to 7.2	
Voltage range	V	-	187 to 242	
Max. condensing temperature continuous (short)	°C	-	65 (65)	
Max. winding temperature continuous (short)	°C	-	125 (135)	

### Cooling requirements

Frequency	Hz	50			60		
		LBP	MBP	HBP	LBP	MBP	HBP
32°C		-	-	-	-	F <sub>2</sub>	-
38°C		-	-	-	-	F <sub>2</sub>	-
43°C		-	-	-	-	F <sub>2</sub>	-

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	18.2	17.5
Cut in Current, HST   LST	A	18.2	21.7
Resistance, main   start winding (25°C)	Ω	4.3	15.2

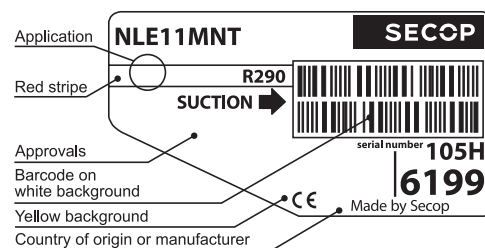
### Design

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

### Dimensions

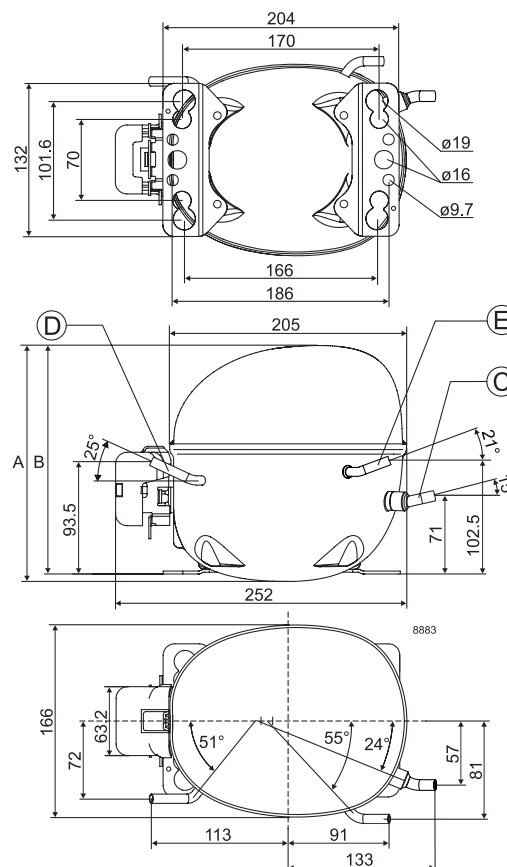
Height	mm	A	203
		B	197
		B1	-
		B2	-
Suction connector	location/I.D. mm   angle	C	8.2   15°
	material   comment		Copper   Rubber plug
Process connector	location/I.D. mm   angle	D	6.5   25°
	material   comment		Copper   Rubber plug
Discharge connector	location/I.D. mm   angle	E	6.5   21°
	material  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

Remarks:



Yellow warning label

- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s (compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary
- SG = Suction gas cooling normally sufficient
- = not applicable in this area



**EN 12900 MBP**

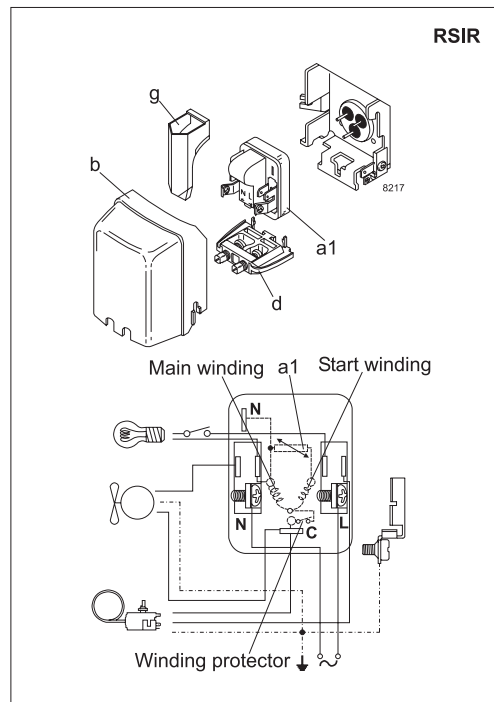
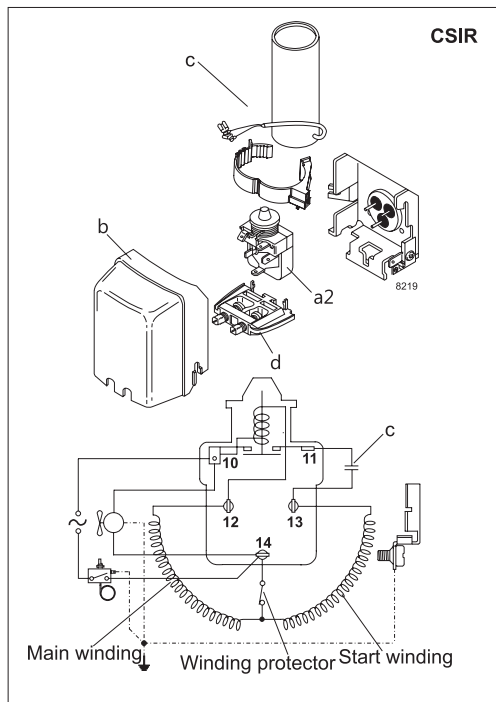
220V, 60Hz, fan cooling F<sub>2</sub>

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					566	611	704	861	1038	1168	1238	1463	1714	1834			
Power cons. in W					385	400	429	472	512	536	548	578	601	609			
Current cons. in A					2.57	2.63	2.73	2.88	3.03	3.12	3.16	3.27	3.35	3.38			
COP in W/W					1.47	1.53	1.64	1.82	2.03	2.18	2.26	2.53	2.85	3.01			

**ASHRAE MBP**

220V, 60Hz, fan cooling F<sub>2</sub>

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					565	611	705	864	1044	1176	1249	1480	1741	1866			
Power cons. in W					405	423	456	506	553	583	598	638	671	684			
Current cons. in A					2.65	2.71	2.83	3.01	3.18	3.29	3.34	3.48	3.60	3.65			
COP in W/W					1.39	1.45	1.55	1.71	1.89	2.02	2.09	2.32	2.59	2.73			



Accessories for	NLE11MNT	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	117U7050
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
	MBP	MBP
Condensing temperature	45°C	54.4°C
Ambient temperature	32°C	35°C
Suction gas temperature	20°C	35°C
Liquid temperature	no subcooling	46.1°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 MBP**

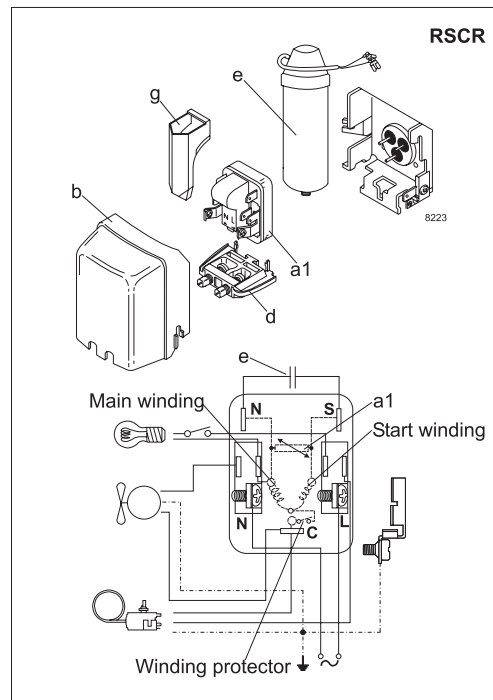
220V, 60Hz, RC 4 µF, ePTC consumption incl., fan cooling F<sub>2</sub>

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					572	618	713	872	1052	1183	1255	1483	1737	1858			
Power cons. in W					368	382	409	449	486	508	519	546	567	574			
Current cons. in A					2.06	2.11	2.2	2.34	2.47	2.55	2.59	2.69	2.78	2.80			
COP in W/W					1.55	1.62	1.74	1.94	2.17	2.33	2.42	2.71	3.06	3.23			

**ASHRAE MBP**

220V, 60Hz, RC 4 µF, ePTC consumption incl., fan cooling F<sub>2</sub>

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					575	622	719	882	1066	1200	1274	1508	1773	1899			
Power cons. in W					386	402	433	479	523	551	564	600	631	642			
Current cons. in A					2.09	2.15	2.26	2.42	2.59	2.69	2.74	2.89	3.01	3.06			
COP in W/W					1.49	1.55	1.66	1.84	2.04	2.18	2.26	2.51	2.81	2.96			



Accessories for	NLE11MNT	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
	MBP	MBP
Condensing temperature	45°C	54.4°C
Ambient temperature	32°C	35°C
Suction gas temperature	20°C	35°C
Liquid temperature	no subcooling	46.1°C

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Snap-on in quantities	Ø: 16 mm	118-1919

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