

Model

Designation	NLE11MN	220-240V/50Hz 1~	Sales code:	105H6177
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R290
Oil viscosity	32cSt	Displacement	11,15cm ³ / 0,68cu.in
Oil quantity	300cm ³ / 10,1fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	400g / 14,1oz		
Free gas volume comp.	2360cm ³ / 79,8fl.oz		
Weight	11,8kg / 26lbs		
Motor protection	1# internal		
Winding resistance main	4,94Ω (at 25°C)		
Winding resistance aux	8,89Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations with NLE11MN

	Conf. 1	Conf. 2	Conf. 3
Motor configuration	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	CCC, EAC, VDE	CCC, EAC, VDE	CCC, EAC, VDE
Starting torque	HST	LST	LST
Note	- / -		

Applications with NLE11MN

	Conf. 1	Conf. 2	Conf. 3
Refrigerant	R290	R290	R290
Application	MBP	MBP	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

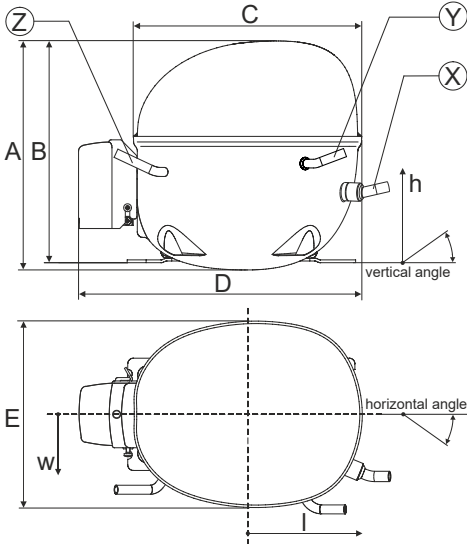
Electrical data - Configurations with NLE11MN

	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))	13,65A	14,45A	14,2A
RLA (rated load amps / 1s/ U(N))	2,8A	2,8A	2,5A
Cut in current (U(N))	13,65A	19,4A	19,4A

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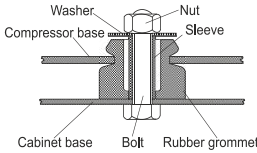
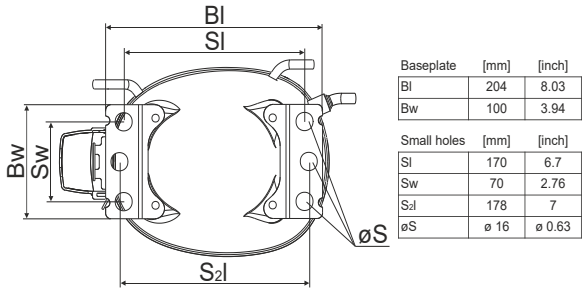
Compressor dimensions

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]	ø i 8,11-8,29	ø i 6,11-6,29	ø i 6,11-6,29
(i:inside, o:outside) [in]	ø i 0,32-0,33	ø i 0,24-0,25	ø i 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

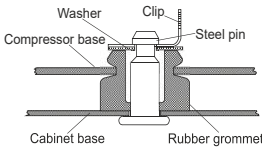


Compressor fixation

Bolt joint



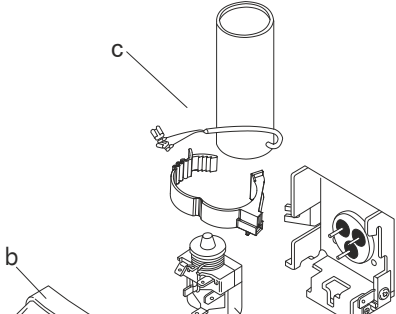
Snap-on



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

Application notes

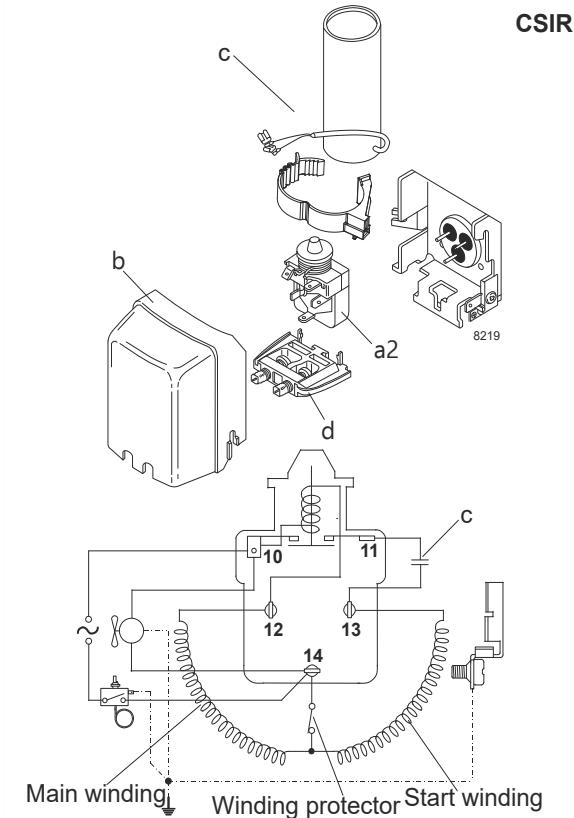
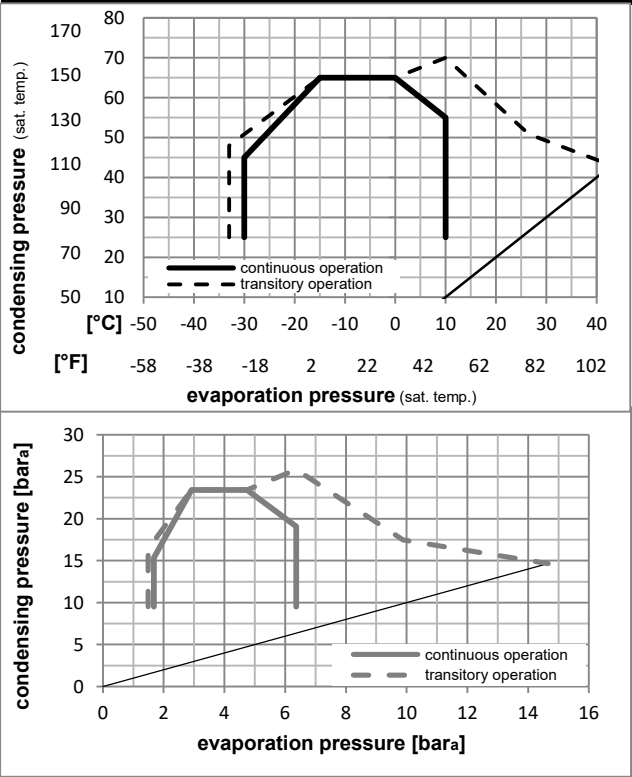
Provision for PE Grounding is located at the PE Stamp on the compressor

Model				
Designation	NLE11MN	220-240V/50Hz	Conf. 1	Sales code: 105H6177
Configuration		Electrical accessories / wiring diagram		
Motor configuration	CSIR			
Power supply (nominal)	220-240V/50Hz 1~			
Refrigerant	R290			
Application	MBP			
Voltage range	198-254V			
Starting torque	HST			
Approvals	CCC			
	EAC			
	VDE			

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	117U7005
c	start capacitor (80µF)	117U5015
b	plastic cover	103N2010
d	cord relief	103N1010

Alternative components

b	plastic cover	103N2011
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Model

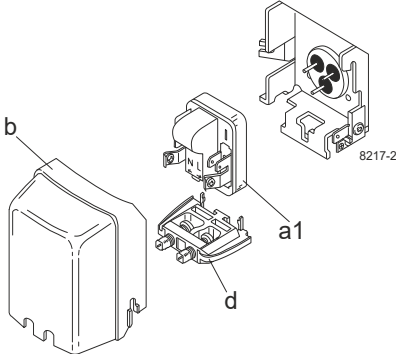
Designation **NLE11MN** **220-240V/50Hz** Conf. 1 Sales code: **105H6177**

Optimization + standard conditions

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

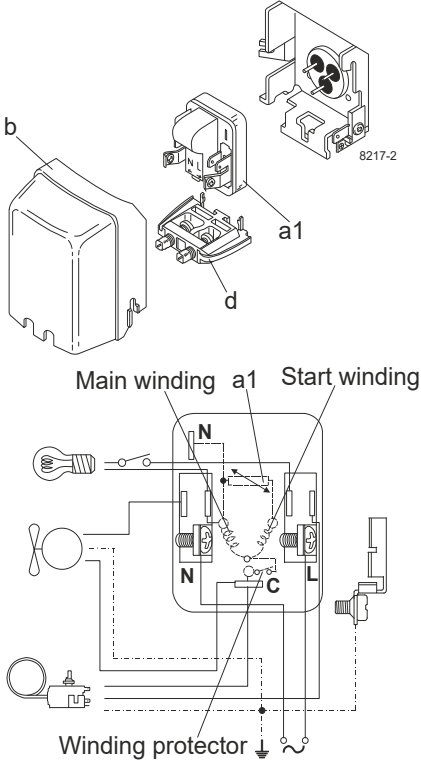
Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)						Power consumption			
					Return gas temp.						Current consumption			
					Liquid temp.						Ref. mass flow			
					Cooling capacity						COP			
					EER						P1			
					[W]						I			
					[Btu/h]						m			
					[kcal/h]						[kg/h]			
					[W/W]						[W]			
					[Btu/Wh]						[A]			
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Model				
Designation	NLE11MN	220-240V/50Hz	Conf. 2	Sales code: 105H6177

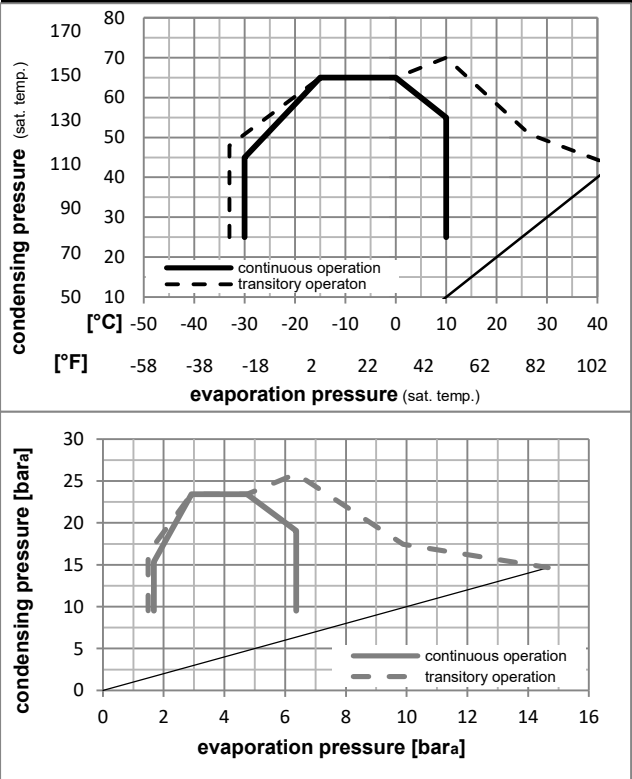
Configuration		Electrical accessories / wiring diagram		
Motor configuration	eRSIR	RSIR 		
Power supply (nominal)	220-240V/50Hz 1~			
Refrigerant	R290			
Application	MBP			
Voltage range	198-254V			
Starting torque	LST			
Approvals	CCC			
	EAC			
	VDE			

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, 25Ohm, 4.8mm)	103N0050
b	plastic cover	103N2010
d	cord relief	103N1010

Alternative components	
b	plastic cover 103N2011

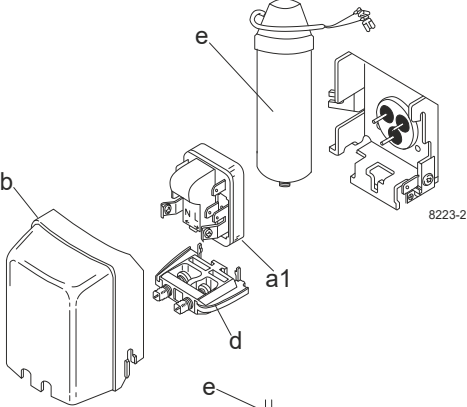
Model

Designation **NLE11MN** **220-240V/50Hz** Conf. 2 Sales code: **105H6177**

Optimization + standard conditions

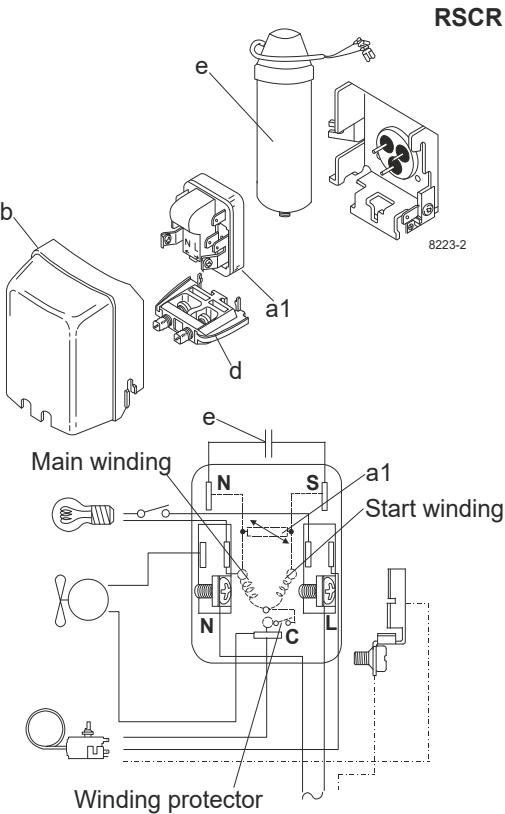
R290, 220V/50Hz, eRSIR, fan 3m/s, CCC, EAC, VDE

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)						Power consumption			
					Return gas temp.						Current consumption			
					Liquid temp.						Ref. mass flow			
					Cooling capacity						COP			
					EER						P1			
											I			
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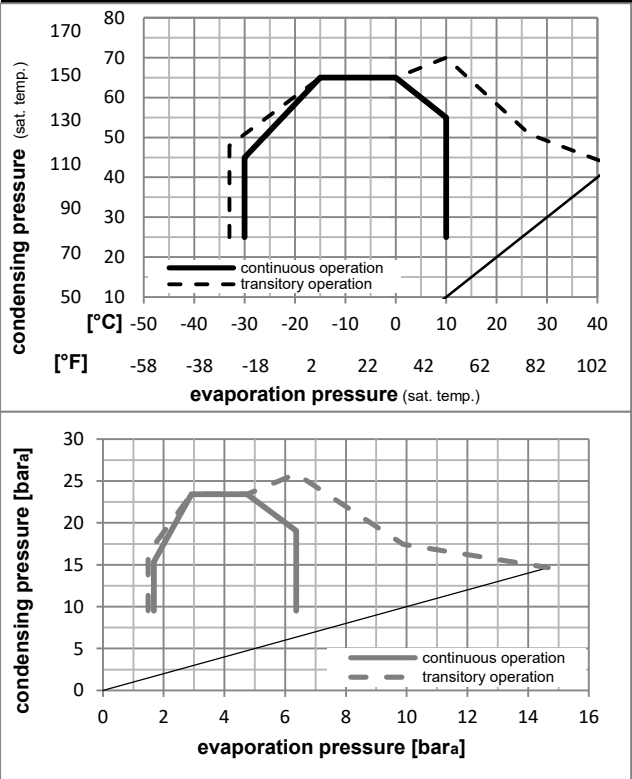
Model				
Designation	NLE11MN	220-240V/50Hz	Conf. 3	Sales code: 105H6177
Configuration		Electrical accessories / wiring diagram		
Motor configuration	eRSCR	RSCR 		
Power supply (nominal)	220-240V/50Hz 1~			
Refrigerant	R290			
Application	MBP			
Voltage range	198-254V			
Starting torque	LST			
Approvals	CCC			
	EAC			
	VDE			

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, 25Ohm, 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 **NLE11MN** **220-240V/50Hz** Conf. 3 Sales code: **105H6177**

Optimization + standard conditions

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

		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		[W]	[A]	[kg/h]																					
[°C]	[°F]	-7	54	35	46	986,3	3368	848,8	2,11	7,21	1,82	467,4	2,74	11,25		ASHRAE MBP																								
[°C]	[°F]	20	130	95	115																																			
[°C]	[°F]	-10	55	32	55	784,8	2680	675,4	1,77	6,03	1,52	444,2	2,64	9,93		cecomaf MBP																								
[°C]	[°F]	14	131	90	131																																			
[°C]	[°F]	-10	45	20	45	873,1	2982	751,4	2,16	7,37	1,86	404,7	2,52	10,72		EN12900 MBP																								
[°C]	[°F]	14	113	68	113																																			
[°C]	[°F]	-7	49	18	49	927,2	3167	798,0	2,10	7,17	1,81	441,8	2,65	12,04		ARI540 MBP																								
[°C]	[°F]	20	120	65	120																																			
[°C]	[°F]	-10	45	32	45	909,0	3104	782,3	2,25	7,67	1,93	404,7	2,52	10,40		opt																								
[°C]	[°F]	14	113	90	113																																			
[°C]	[°F]	-25	45	32	45	491,0	1677	422,5	1,58	5,41	1,36	309,9	2,18	5,54		opt																								
[°C]	[°F]	-13	113	90	113																																			

Performance tables

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

	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]	[W]	[A]	[kg/h]	[W]	[A]	[kg/h]	[W]	[A]	[kg/h]
[°C / °F]	-30	-22	391,3	1336	336,7	1,40	4,79	1,21	278,9	2,10	4,40									
cond. pressure	-25	-13	491,0	1677	422,5	1,58	5,41	1,36	309,9	2,18	5,54									
pc= 45/113	-15	5	748,6	2556	644,2	2,00	6,84	1,72	373,8	2,40	8,52									
return gas temp.	-10	14	909,0	3104	782,3	2,25	7,67	1,93	404,7	2,52	10,40									
RGT= 32/90	0	32	1299,1	4437	1118,0	2,83	9,66	2,43	459,2	2,73	15,07									
liquid temp	5	41	1531,4	5230	1317,9	3,18	10,87	2,74	480,9	2,80	17,92									
Tliq= 45/113	10	50	1790,1	6113	1540,6	3,60	12,29	3,10	497,6	2,84	21,15									
[°C / °F]	-30	-22	340,6	1163	293,1	1,18	4,01	1,01	289,8	2,13	4,22									
cond. pressure	-25	-13	424,6	1450	365,4	1,30	4,44	1,12	326,8	2,22	5,29									
pc= 55/131	-15	5	645,5	2205	555,5	1,59	5,44	1,37	405,0	2,49	8,12									
return gas temp	-10	14	784,8	2680	675,4	1,77	6,03	1,52	444,2	2,64	9,93									
RGT= 32/90	0	32	1127,3	3850	970,2	2,18	7,43	1,87	518,0	2,94	14,48									
liquid temp	5	41	1333,0	4552	1147,2	2,42	8,27	2,08	550,5	3,07	17,28									
Tliq= 55/131	10	50	1563,3	5339	1345,4	2,70	9,23	2,32	578,7	3,18	20,50									