

Model

Designation	NLE12.6MN	220-240V/50Hz 1~	Sales code:	105H6377
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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	12,1kg / 26,7lbs		
Motor protection	1# internal		
Winding resistance main	5Ω (at 25°C)		
Winding resistance aux	9,9Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations with NLE12.6MN

	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 NLE12.6MN

	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 NLE12.6MN

	Conf. 1	Conf. 2	Conf. 3
Starting device type	relay	PTC	PTC
Run capacitor	-/-	-/-	4μF
Start capacitor	80μF	-/-	-/-
LRA (locked rotor amps / 4s)	15,6A	16A	16A
RLA (rated load amps / 1s)	2,7A	2,7A	2,7A
Cut in current	21,2A	21,2A	21,2A

Model

Designation

NLE12.6MN

220-240V/50Hz 1~

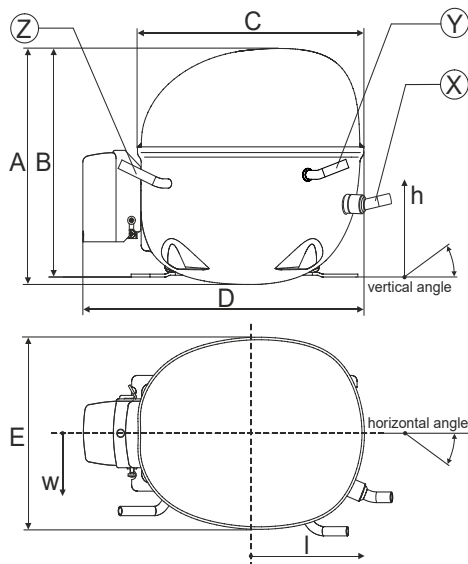
Sales code:

105H6377

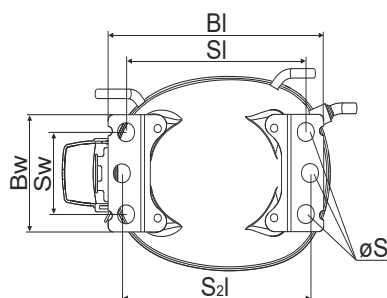
Compressor dimensions

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

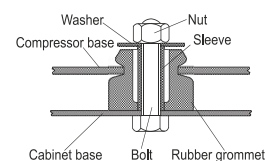


Compressor fixation

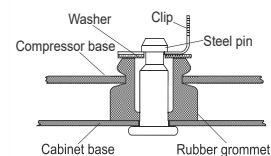


Baseplate	[mm]	[inch]
BI	204	8.03
BW	100	3.94
Small holes	[mm]	[inch]
SI	170	6.7
SW	70	2.76
S2l	178	7
øS	ø 16	ø 0.63

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

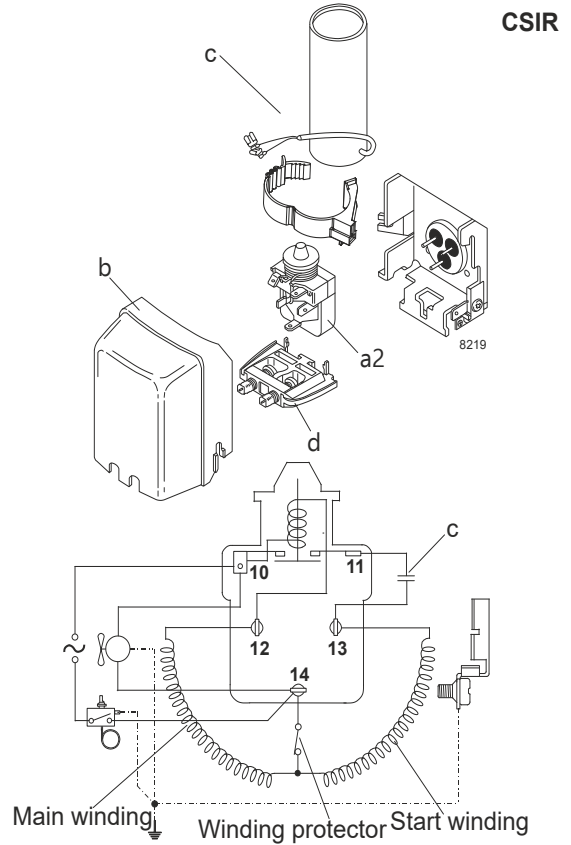
Model

Designation	NLE12.6MN	220-240V/50Hz	Conf. 1	Sales code:	105H6377
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Configuration

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

Electrical accessories / wiring diagram



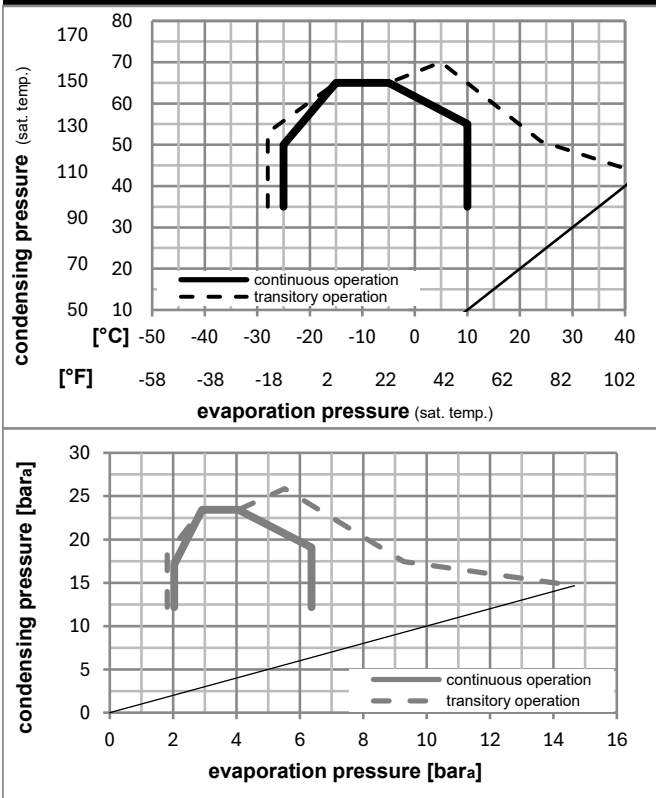
Ambient/ machine room temperatures minimum /maximum

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	117U7011
c	start capacitor (80µF)	117U5015
b	plastic cover	103N2010
d	cord relief	103N1010

Alternative components

b	plastic cover	103N2011
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Model

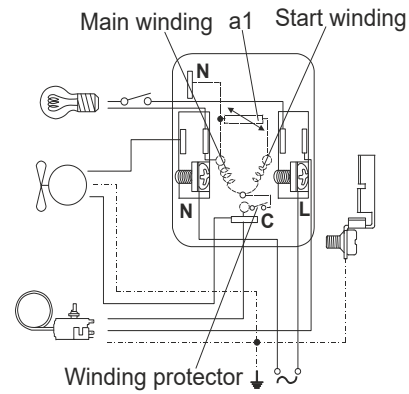
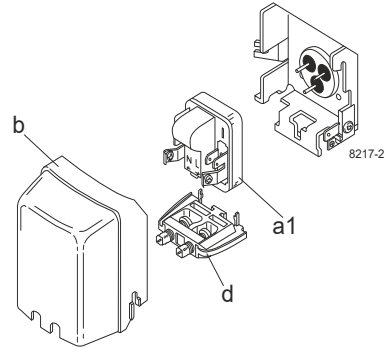
Designation	NLE12.6MN	220-240V/50Hz	Conf. 2	Sales code:	105H6377
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Configuration

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

Electrical accessories / wiring diagram

RSIR



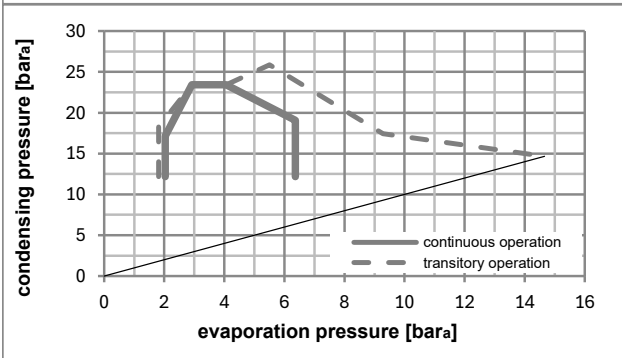
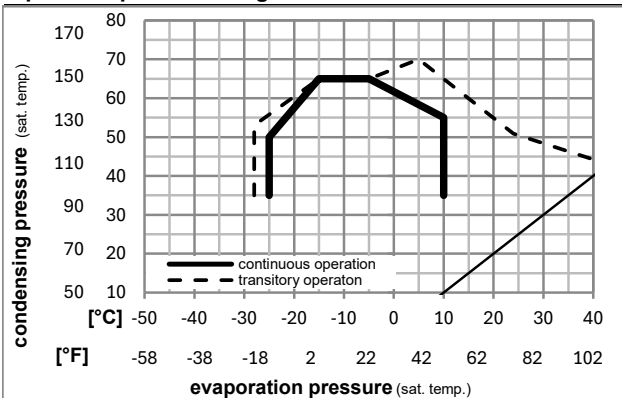
Ambient/ machine room temperatures minimum /maximum

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
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Model

Designation **NLE12.6MN** **220-240V/50Hz** Conf. 2 Sales code: **105H6377**

Optimization + standard conditions

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

		Evaporating pressure (saturation temperature)				Cooling capacity			COP	EER	Power consumption				
		Condensing pressure (saturation temperature)		Return gas temp.	Liquid temp.	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	Ref. mass flow	
[°C]	[°F]	pe	pc	RGT	Tliq							[W]	[A]	[kg/h]	
-7	20	54	130	35	95	1060,9	3623	913,0	1,97	6,74	1,70	537,5	3,10	12,10	ASHRAE MBP
-10	14	55	131	32	90	842,6	2878	725,2	1,66	5,67	1,43	507,7	2,99	10,66	cecomaf MBP
-10	14	45	113	20	68	949,0	3241	816,7	2,05	7,01	1,77	462,3	2,77	11,65	EN12900 MBP
-7	20	49	120	18	65	1004,0	3429	864,0	1,98	6,76	1,70	506,9	2,95	13,04	ARI540 MBP
-10	14	45	113	32	90	987,9	3374	850,2	2,14	7,30	1,84	462,3	2,77	11,30	opt
-25	-13	45	113	32	90	536,2	1831	461,5	1,53	5,21	1,31	351,5	2,41	6,05	opt

Performance tables

R290, 220V/50Hz, 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]	-25	-13	536,2	1831	461,5	1,53	5,21	1,31	351,5	2,41	6,05	
cond. pressure	-20	-4	663,0	2264	570,5	1,71	5,84	1,47	387,9	2,52	7,51	
pc= 45/113	-15	5	813,0	2776	699,6	1,91	6,53	1,65	425,1	2,65	9,25	
return gas temp.	-10	14	987,9	3374	850,2	2,14	7,30	1,84	462,3	2,77	11,30	
RGT= 32/90	0	32	1419,6	4848	1221,7	2,66	9,07	2,29	534,6	3,06	16,47	
liquid temp	5	41	1679,8	5737	1445,6	2,96	10,09	2,54	568,4	3,22	19,65	
Tliq= 45/113	10	50	1971,8	6734	1696,9	3,29	11,23	2,83	599,9	3,39	23,30	
[°C / °F]	-25	-13	451,6	1542	388,7	1,21	4,14	1,04	372,6	2,49	5,62	
cond. pressure	-20	-4	561,6	1918	483,4	1,35	4,62	1,17	414,9	2,64	7,02	
pc= 55/131	-15	5	691,4	2361	595,0	1,50	5,13	1,29	460,1	2,81	8,69	
return gas temp	-10	14	842,6	2878	725,2	1,66	5,67	1,43	507,7	2,99	10,66	
RGT= 32/90	0	32	1216,3	4154	1046,8	2,00	6,84	1,72	607,6	3,39	15,62	
liquid temp	5	41	1442,2	4925	1241,2	2,19	7,48	1,88	658,7	3,61	18,70	
Tliq= 55/131	10	50	1696,5	5794	1460,0	2,39	8,16	2,06	709,7	3,85	22,24	

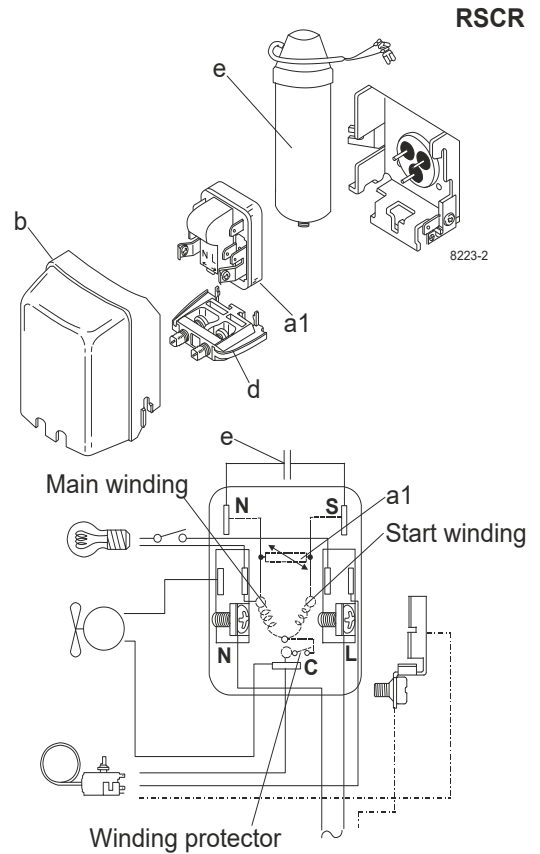
Model

Designation	NLE12.6MN	220-240V/50Hz	Conf. 3	Sales code:	105H6377
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Configuration

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

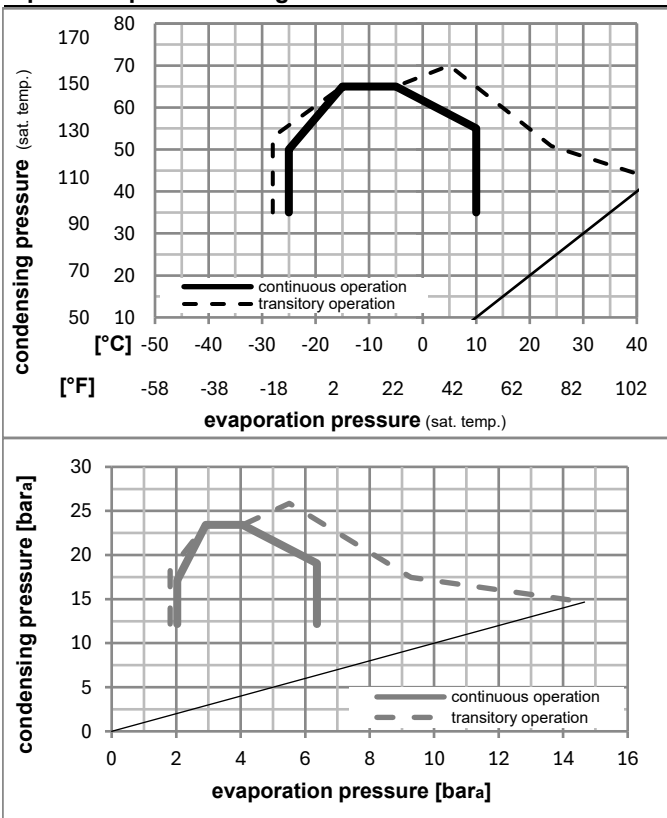
Electrical accessories / wiring diagram



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
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Model

Designation	NLE12.6MN	220-240V/50Hz	Conf. 3	Sales code:	105H6377
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Optimization + standard conditions

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

		Evaporating pressure (saturation temperature)				Cooling capacity			COP	EER	Power consumption				
		Condensing pressure (saturation temperature)									Current consumption		Ref. mass flow		
		Return gas temp.													
		Liquid temp.													
		Cooling capacity													
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	m	
[°C]	[°F]	[°C]	[°F]	[°C]	[°C]							[W]	[A]	[kg/h]	
-7	20	54	130	35	46	1070,3	3655	921,1	2,08	7,12	1,79	513,5	2,78	12,21	ASHRAE MBP
-10	14	55	131	32	55	849,7	2902	731,3	1,75	5,97	1,51	485,8	2,67	10,75	cecomaf MBP
-10	14	45	113	20	45	956,9	3268	823,5	2,16	7,39	1,86	442,5	2,49	11,75	EN12900 MBP
-7	20	49	120	18	49	1012,9	3459	871,7	2,09	7,14	1,80	484,2	2,65	13,15	ARI540 MBP
-10	14	45	113	32	45	996,2	3402	857,3	2,25	7,69	1,94	442,5	2,49	11,40	opt
-25	-13	45	113	32	45	539,2	1842	464,1	1,60	5,47	1,38	336,8	2,10	6,08	opt

Performance tables

R290, 220V/50Hz, 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]	-25	-13	539,2	1842	464,1	1,60	5,47	1,38	336,8	2,10	6,08	
cond. pressure	-20	-4	667,3	2279	574,3	1,79	6,13	1,54	372,1	2,22	7,56	
pc= 45/113	-15	5	819,1	2797	704,9	2,01	6,87	1,73	407,5	2,36	9,32	
return gas temp.	-10	14	996,2	3402	857,3	2,25	7,69	1,94	442,5	2,49	11,40	
RGT= 32/90	0	32	1433,1	4894	1233,3	2,81	9,61	2,42	509,3	2,76	16,62	
liquid temp	5	41	1696,2	5793	1459,8	3,14	10,72	2,70	540,2	2,89	19,84	
Tliq= 45/113	10	50	1991,4	6801	1713,8	3,50	11,96	3,01	568,7	3,01	23,53	
[°C / °F]	-25	-13	454,1	1551	390,8	1,27	4,34	1,09	357,1	2,17	5,65	
cond. pressure	-20	-4	565,3	1931	486,5	1,42	4,85	1,22	397,9	2,32	7,07	
pc= 55/131	-15	5	696,6	2379	599,5	1,58	5,39	1,36	441,0	2,49	8,76	
return gas temp	-10	14	849,7	2902	731,3	1,75	5,97	1,51	485,8	2,67	10,75	
RGT= 32/90	0	32	1227,9	4194	1056,8	2,12	7,25	1,83	578,7	3,07	15,77	
liquid temp	5	41	1456,5	4974	1253,4	2,33	7,95	2,00	625,8	3,27	18,89	
Tliq= 55/131	10	50	1713,5	5852	1474,6	2,55	8,70	2,19	672,8	3,49	22,47	