

Single Pack NLE10MF.2 220-240V 50Hz RSCR

Single pack code number: **195B4280**

Position	Title	Code	Amount
1	Compressor NLE10MF.2	105G6187	1
2	e-PTC starting device (220V, 250hm, 4.8mm)	103N0050	1
3	Run capacitor holder	117-0300	1
4	Run capacitor (4μF 320V, 4.8mm)	117-7119	1
5	Cord relief	103N1010	1
6	Cover	103N2010	1
7	Screw for bracket M4x8mm	117-0301	1
8	Bolt joint for one compressor M6 ø16mm	118-1917	1

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Model

Designation	NLE10MF.2	220-240V/50Hz 1~	Sales code:	105G6187
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R134a
Oil viscosity	19,2cSt	Displacement	10,09cm ³ / 0,62cu.in
Oil quantity	301cm ³ / 10,2fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	600g / 21,2oz		
Free gas volume comp.	2360cm ³ / 79,8fl.oz		
Weight	10,9kg / 24lbs		
Motor protection	1# internal		
Winding resistance main	9,28Ω (at 25°C)		
Winding resistance aux	11,64Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	110°C / 230°F		



General - Configurations with NLE10MF.2

	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	VDE	VDE
Starting torque	HST	LST	LST
Note	- / -		

Applications with NLE10MF.2

	Conf. 1	Conf. 2	Conf. 3
Refrigerant	R134a	R134a	R134a
Application	LBP+MBP	LBP+MBP	LBP+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 NLE10MF.2

	Conf. 1	Conf. 2	Conf. 3
Starting device type	relay	PTC	PTC
Run capacitor	-/-	-/-	4μF
Start capacitor	80μF	-/-	-/-
LRA (locked rotor amps / 4s)	11,3A	10,7A	10,1A
RLA (rated load amps / 1s)	2,15A	2,15A	2,05A
Cut in current	11,3A	15,9A	15,9A
IP class	21	21	21

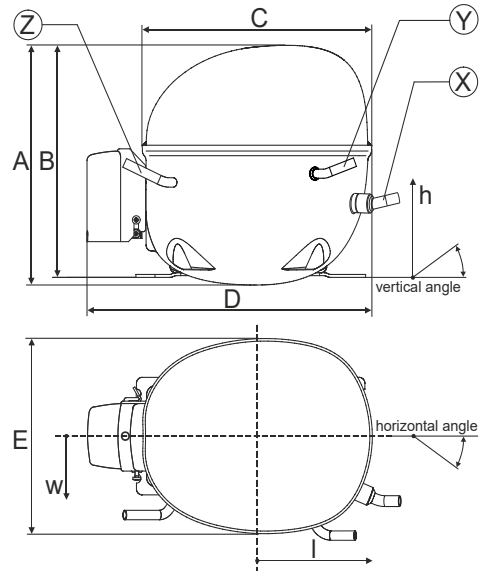
Model

Designation	NLE10MF.2	220-240V/50Hz 1~	Sales code:	105G6187
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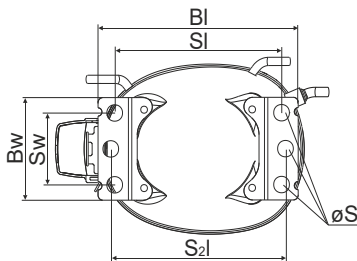
Compressor dimensions

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]	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]	132/69/56	94/99/86	-111/92/72
	[in]	5,2/2,7/2,2	3,7/3,9/3,4	-4,4/3,6/2,8
Straight tube l.	[mm]	12	12	12
	[in]	0,5	0,5	0,5

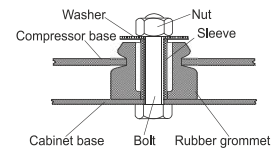


Compressor fixation

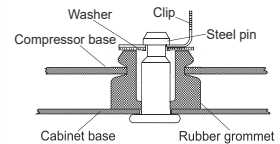


Baseplate	[mm]	[inch]
BI	204	8.03
BW	100	3.94
Small holes		
SI	170	6.7
Sw	70	2.76
S2l	178	7
øS	ø 16	ø 0.63

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

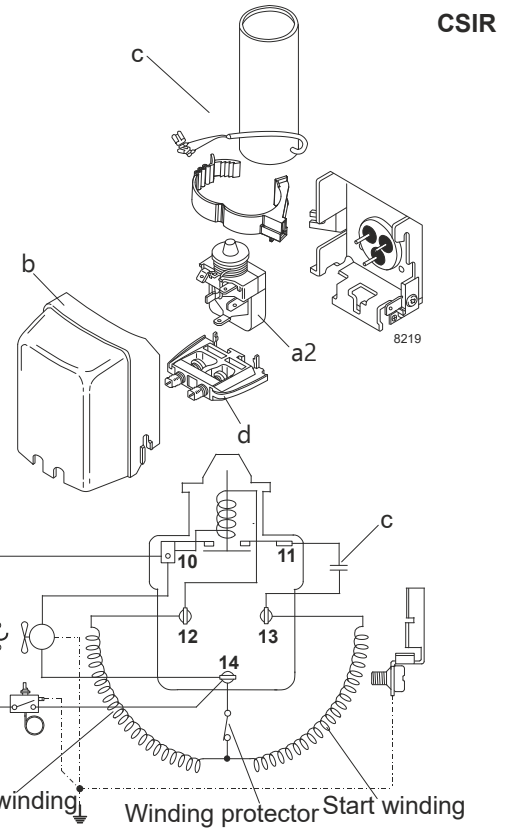
Model

Designation	NLE10MF.2	220-240V/50Hz	Conf. 1	Sales code:	105G6187
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Configuration

Motorconfiguration	CSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R134a
Application	LBP+MBP
Voltage range	198-254V
Starting torque	HST
Approvals	VDE

Electrical accessories / wiring diagram

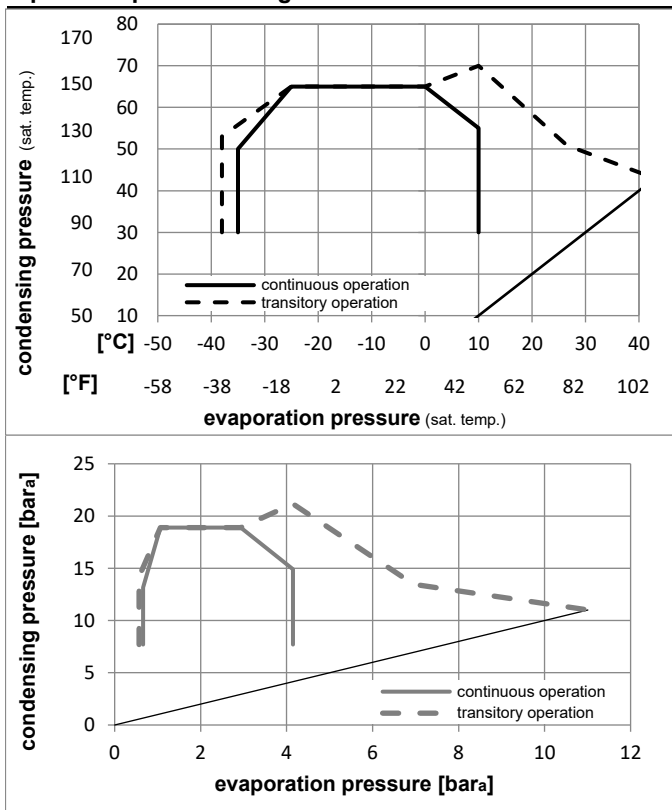


Ambient temperatures / system cooling

Ambient temperature min.:	10°C / 50°F
Ambient temperature max.:	43°C / 110°F

System cooling (n/a: outside limits)			
T ambient	LBP	MBP	HBP
32°C / 90°F	fan 3m/s	fan 3m/s	n/a
38°C / 100°F	fan 3m/s	fan 3m/s	n/a
43°C / 110°F	fan 3m/s	fan 3m/s	n/a

Operation pressure range



Components

a2	assy. relay	117U6002
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 **NLE10MF.2 220-240V/50Hz** Conf. 1 Sales code: **105G6187**

Optimization + standard conditions

220-240V/50Hz 1~, CSIR, fan 3m/s, 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	
[°C]	[°C]	[°C]	[°C]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]		ASHRAE MBP
-6,66	54,4	35	46,1	609,2	2081	524,3	1,94	6,64	1,67	313,4	1,89	13,29		ASHRAE MBP
[°F]	20	130	95	115										
-10	55	32	55	471,1	1609	405,5	1,62	5,54	1,40	290,4	1,81	11,39		cecomaf MBP
[°F]	14	131	89,6	131										
-10	45	20	45	535,9	1830	461,2	1,99	6,79	1,71	269,6	1,75	12,54		EN12900 MBP
[°F]	14	113	68	113										
-6,66	48,9	18,3	48,9	581,4	1986	500,4	1,95	6,65	1,67	298,7	1,84	14,36		ARI540 MBP
[°F]	20	120	65	120										
-10	45	32	45	556,0	1899	478,5	2,06	7,04	1,78	269,6	1,75	12,17		opt
[°F]	14	113	89,6	113										
-25	45	32	45	262,5	897	225,9	1,38	4,72	1,19	190,0	1,52	5,69		opt
[°F]	-13	113	89,6	113										

Performance tables

220-240V/50Hz 1~, CSIR, fan 3m/s, 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]		
[°C / °F]	-35	-31	134,3	459	115,5	0,94	3,21	0,81	143,0	1,43	2,90		
cond. pressure	-25	-13	262,5	897	225,9	1,38	4,72	1,19	190,0	1,52	5,69		
pc= 45/113	-15	5	440,7	1505	379,3	1,82	6,23	1,57	241,7	1,66	9,61		
return gas temp.	-10	14	556,0	1899	478,5	2,06	7,04	1,78	269,6	1,75	12,17		
RGT= 32/90	0	32	853,8	2916	734,8	2,59	8,84	2,23	330,0	1,96	18,88		
liquid temp	5	41	1042,4	3560	897,1	2,87	9,81	2,47	362,9	2,08	23,21		
Tliq= 45/113	10	50	1261,3	4308	1085,5	3,17	10,83	2,73	397,6	2,20	28,30		
[°C / °F]	-35	-31	93,5	319	80,5	0,75	2,56	0,65	124,6	1,40	2,23		
cond. pressure	-25	-13	210,5	719	181,1	1,12	3,83	0,96	187,9	1,51	5,03		
pc= 55/131	-15	5	368,9	1260	317,5	1,45	4,94	1,24	255,0	1,69	8,88		
return gas temp	-10	14	471,1	1609	405,5	1,62	5,54	1,40	290,4	1,81	11,39		
RGT= 32/90	0	32	736,6	2516	633,9	2,02	6,89	1,74	365,3	2,08	18,02		
liquid temp	5	41	905,7	3093	779,5	2,24	7,64	1,92	405,1	2,24	22,32		
Tliq= 55/131	10	50	1103,2	3768	949,4	2,47	8,44	2,13	446,6	2,41	27,42		

Model

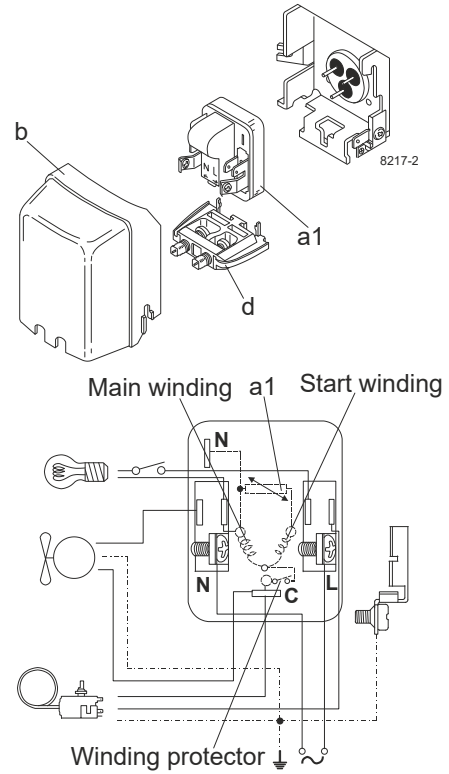
Designation	NLE10MF.2	220-240V/50Hz	Conf. 2	Sales code:	105G6187
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Configuration

Motorconfiguration	RSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R134a
Application	LBP+MBP
Voltage range	198-254V
Starting torque	LST
Approvals	VDE

Electrical accessories / wiring diagram

RSIR

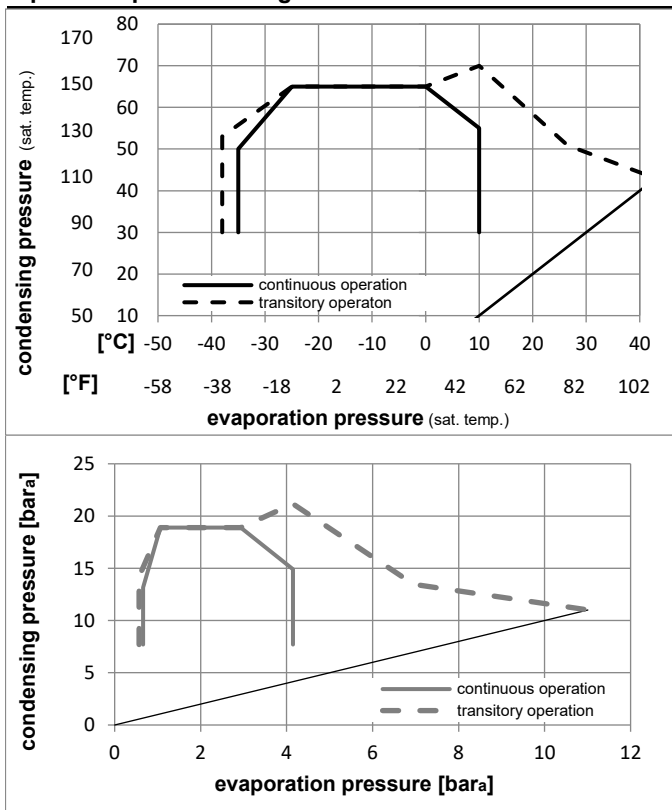


Ambient temperatures / system cooling

Ambient temperature min.:	10°C / 50°F
Ambient temperature max.:	43°C / 110°F

System cooling (n/a: outside limits)			
T ambient	LBP	MBP	HBP
32°C / 90°F	fan 3m/s	fan 3m/s	n/a
38°C / 100°F	fan 3m/s	fan 3m/s	n/a
43°C / 110°F	fan 3m/s	fan 3m/s	n/a

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 **NLE10MF.2 220-240V/50Hz** Conf. **2** Sales code: **105G6187**

Optimization + standard conditions

220-240V/50Hz 1~, RSIR, fan 3m/s, VDE

		Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)						Power consumption			
		Return gas temp.		Liquid temp.		Cooling capacity				COP	EER	P1	Current consumption		Ref. mass flow
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	I	m	
[°C]	[°F]												[A]	[kg/h]	
		-6,66	54,4	35	46,1	609,2	2081	524,3	1,94	6,64	1,67	313,4	1,89	13,29	ASHRAE MBP
		20	130	95	115										
		-10	55	32	55	471,1	1609	405,5	1,62	5,54	1,40	290,4	1,81	11,39	cecomaf MBP
		14	131	89,6	131										
		-10	45	20	45	535,9	1830	461,2	1,99	6,79	1,71	269,6	1,75	12,54	EN12900 MBP
		14	113	68	113										
		-6,66	48,9	18,3	48,9	581,4	1986	500,4	1,95	6,65	1,67	298,7	1,84	14,36	ARI540 MBP
		20	120	65	120										
		-10	45	32	45	556,0	1899	478,5	2,06	7,04	1,78	269,6	1,75	12,17	opt
		14	113	89,6	113										
		-25	45	32	45	262,5	897	225,9	1,38	4,72	1,19	190,0	1,52	5,69	opt
		-13	113	89,6	113										

Performance tables

220-240V/50Hz 1~, RSIR, fan 3m/s, 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]
[°C / °F]		-35	-31	134,3	459	115,5	0,94	3,21	0,81	143,0	1,43	2,90
cond. pressure		-25	-13	262,5	897	225,9	1,38	4,72	1,19	190,0	1,52	5,69
pc= 45/113		-15	5	440,7	1505	379,3	1,82	6,23	1,57	241,7	1,66	9,61
return gas temp.		-10	14	556,0	1899	478,5	2,06	7,04	1,78	269,6	1,75	12,17
RGT= 32/90		0	32	853,8	2916	734,8	2,59	8,84	2,23	330,0	1,96	18,88
liquid temp		5	41	1042,4	3560	897,1	2,87	9,81	2,47	362,9	2,08	23,21
Tliq= 45/113		10	50	1261,3	4308	1085,5	3,17	10,83	2,73	397,6	2,20	28,30
[°C / °F]		-35	-31	93,5	319	80,5	0,75	2,56	0,65	124,6	1,40	2,23
cond. pressure		-25	-13	210,5	719	181,1	1,12	3,83	0,96	187,9	1,51	5,03
pc= 55/131		-15	5	368,9	1260	317,5	1,45	4,94	1,24	255,0	1,69	8,88
return gas temp		-10	14	471,1	1609	405,5	1,62	5,54	1,40	290,4	1,81	11,39
RGT= 32/90		0	32	736,6	2516	633,9	2,02	6,89	1,74	365,3	2,08	18,02
liquid temp		5	41	905,7	3093	779,5	2,24	7,64	1,92	405,1	2,24	22,32
Tliq= 55/131		10	50	1103,2	3768	949,4	2,47	8,44	2,13	446,6	2,41	27,42

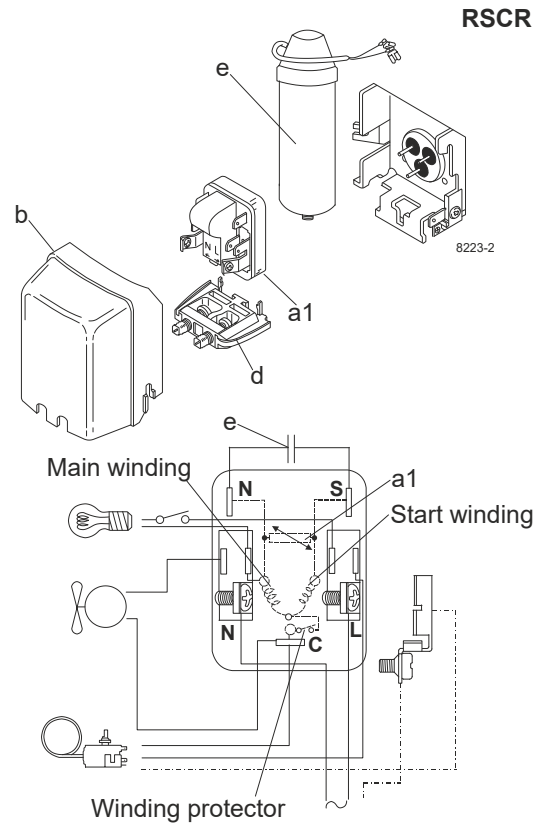
Model

Designation	NLE10MF.2	220-240V/50Hz	Conf. 3	Sales code:	105G6187
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Configuration

Motorconfiguration	RSCR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R134a
Application	LBP+MBP
Voltage range	198-254V
Starting torque	LST
Approvals	VDE

Electrical accessories / wiring diagram

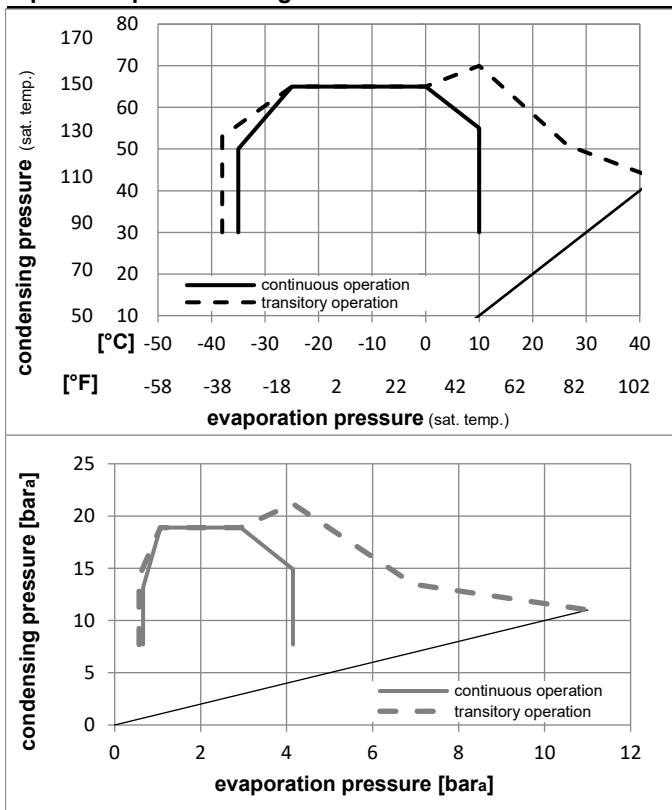


Ambient temperatures / system cooling

Ambient temperature min.:	10°C / 50°F
Ambient temperature max.:	43°C / 110°F

System cooling (n/a: outside limits)			
T ambient	LBP	MBP	HBP
32°C / 90°F	fan 3m/s	fan 3m/s	n/a
38°C / 100°F	fan 3m/s	fan 3m/s	n/a
43°C / 110°F	fan 3m/s	fan 3m/s	n/a

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 **NLE10MF.2 220-240V/50Hz** Conf. **3** Sales code: **105G6187**

Optimization + standard conditions

220-240V/50Hz 1~, RSCR, fan 3m/s, VDE

		Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)						Power consumption			
		Return gas temp.		Liquid temp.		Cooling capacity				COP	EER	P1	I	Ref. mass flow	
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
[°C]	-6,66	54,4	35	46,1	608,5	2078	523,7	2,05	6,99	1,76	297,5	1,79	13,28	ASHRAE MBP	
[°F]	20	130	95	115											
[°C]	-10	55	32	55	470,6	1607	405,0	1,71	5,83	1,47	275,6	1,71	11,38	cecomaf MBP	
[°F]	14	131	89,6	131											
[°C]	-10	45	20	45	535,3	1828	460,7	2,09	7,15	1,80	255,8	1,66	12,53	EN12900 MBP	
[°F]	14	113	68	113											
[°C]	-6,66	48,9	18,3	48,9	580,8	1983	499,8	2,05	7,00	1,76	283,5	1,75	14,35	ARI540 MBP	
[°F]	20	120	65	120											
[°C]	-10	45	32	45	555,4	1897	478,0	2,17	7,41	1,87	255,8	1,66	12,15	opt	
[°F]	14	113	89,6	113											
[°C]	-25	45	32	45	262,2	896	225,7	1,45	4,97	1,25	180,3	1,44	5,68	opt	
[°F]	-13	113	89,6	113											

Performance tables

220-240V/50Hz 1~, RSCR, fan 3m/s, 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]		
[°C / °F]	-35	-31	134,1	458	115,4	0,99	3,38	0,85	135,7	1,36	2,89		
cond. pressure	-25	-13	262,2	896	225,7	1,45	4,97	1,25	180,3	1,44	5,68		
pc= 45/113	-15	5	440,2	1503	378,9	1,92	6,55	1,65	229,4	1,57	9,60		
return gas temp.	-10	14	555,4	1897	478,0	2,17	7,41	1,87	255,8	1,66	12,15		
RGT= 32/90	0	32	852,9	2913	734,0	2,72	9,30	2,34	313,2	1,86	18,86		
liquid temp	5	41	1041,2	3556	896,1	3,02	10,33	2,60	344,4	1,97	23,18		
Tliq= 45/113	10	50	1259,9	4303	1084,3	3,34	11,40	2,87	377,3	2,09	28,27		
[°C / °F]	-35	-31	93,4	319	80,4	0,79	2,70	0,68	118,3	1,33	2,22		
cond. pressure	-25	-13	210,2	718	180,9	1,18	4,03	1,01	178,3	1,43	5,03		
pc= 55/131	-15	5	368,5	1258	317,1	1,52	5,20	1,31	242,0	1,60	8,87		
return gas temp.	-10	14	470,6	1607	405,0	1,71	5,83	1,47	275,6	1,71	11,38		
RGT= 32/90	0	32	735,8	2513	633,2	2,12	7,25	1,83	346,7	1,97	18,00		
liquid temp	5	41	904,8	3090	778,6	2,35	8,04	2,03	384,5	2,12	22,29		
Tliq= 55/131	10	50	1102,0	3764	948,4	2,60	8,88	2,24	423,9	2,28	27,39		

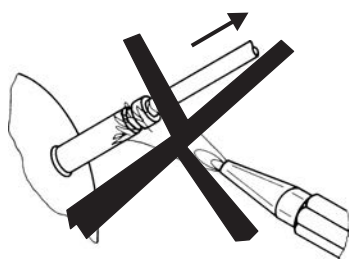


NL Compressors





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)**

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