

## Single Pack NLE10MF 220-240V 50Hz CSIR

Single pack code number: **195B4504**

Position	Title	Code	Amount
1	Compressor NLE10MF	105G6888	1
2	Starting relay	117U6003	1
3	Starting capacitor (80 $\mu$ F 220V, 6.3mm)	117U5015	1
4	Cord relief	103N1010	1
5	Cover	103N2011	1
6	Bolt joint for one compressor   M6   $\varnothing$ 16mm	118-1917	1

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**Model**

Designation	<b>NLE10MF</b>	<b>220-240V/50Hz 1~</b>	Sales code:	<b>105G6888</b>
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**Compressor design**

Oil type	Polyolester	Refrigerant(s)	<b>R134a</b>
Oil viscosity	19,2cSt	Displacement	10,09cm <sup>3</sup> / 0,62cu.in
Oil quantity	301cm <sup>3</sup> / 10,2fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	400g / 14,1oz		
Free gas volume comp.	2360cm <sup>3</sup> / 79,8fl.oz		
Weight	10,5kg / 23,1lbs		
Motor protection	1# internal		
Winding resistance main	6,1Ω (at 25°C)		
Winding resistance aux	16Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	110°C / 230°F		



**General - Configurations with NLE10MF**

	<b>Conf. 1</b>	<b>Conf. 2</b>
Motorconfiguration	CSIR	RSIR
Power supply (nominal)	220-240V/50Hz	220-240V/50Hz
Number of phases	1	1
Voltage range	198-254V	198-254V
Approvals	VDE	VDE
Starting torque	HST	LST
Note	- / -	

**Applications with NLE10MF**

	<b>Conf. 1</b>	<b>Conf. 2</b>
Refrigerant	R134a	R134a
Application	LBP+MBP	LBP+MBP
System cooling	fan 1,5m/s	fan 1,5m/s
Hot gas defrost	-/-	-/-
Long interval pull down	OK	OK

**Electrical data - Configurations with NLE10MF**

	<b>Conf. 1</b>	<b>Conf. 2</b>
Starting device type	relay	PTC
Run capacitor	-/-	-/-
Start capacitor	80μF	-/-
LRA (locked rotor amps / 4s)	13,7A	12,1A
RLA (rated load amps / 1s)	2,5A	2,5A
Cut in current	13,7A	15,6A
IP class	21	21

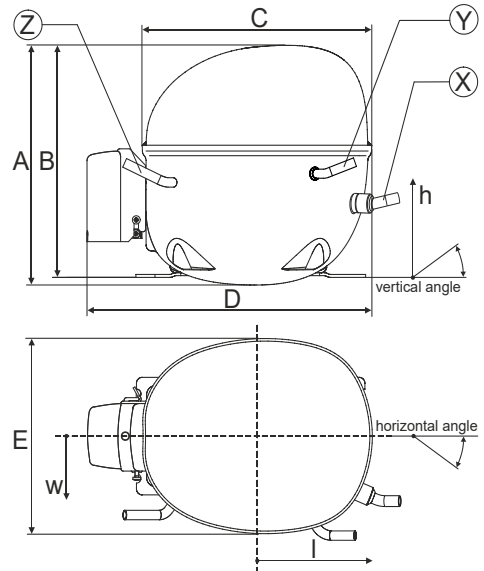
**Model**

Designation	<b>NLE10MF</b>	<b>220-240V/50Hz 1~</b>	Sales code:	<b>105G6888</b>
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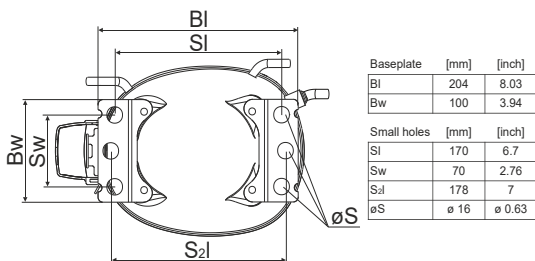
**Compressor dimensions**

<b>Housing</b>	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

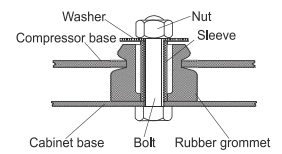
<b>Connectors</b>		<b>Suction</b>	<b>Discharge</b>	<b>Process</b>
		<b>X</b>	<b>Y</b>	<b>Z</b>
Diameter	[mm]	øi 8,11-8,29	øi 6,11-6,29	øi 6,11-6,29
(i:inside, o:outside)	[in]	øi 0,32-0,33	øi 0,24-0,25	øi 0,24-0,25
Material		copper	copper	copper
Horizontal angle	±2°	0°	0°	0°
Vertical angle	±2°	15°	35°	155°
Position l/h/w	[mm]	126/76/78	133/103/54	-107/94/72
	[in]	5/3/3,1	5,2/4/2,1	-4,2/3,7/2,8
Straight tube l.	[mm]	12	12	12
	[in]	0,5	0,5	0,5



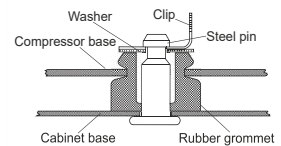
**Compressor fixation**



**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

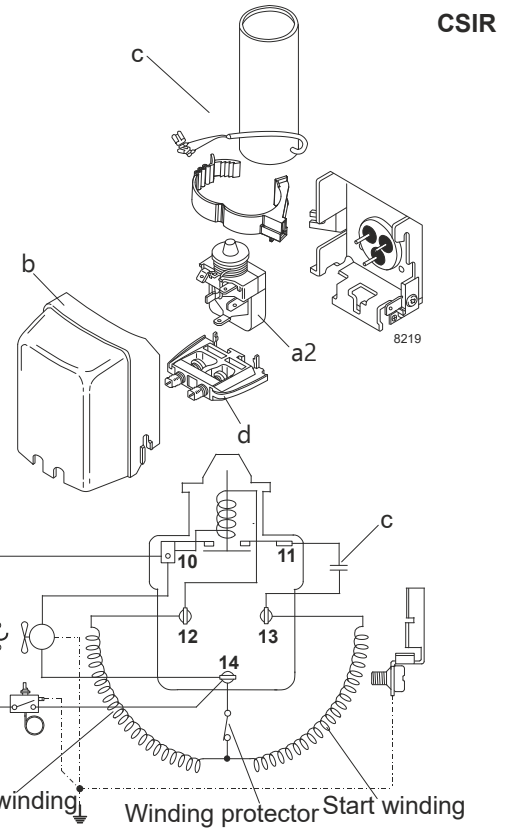
**Model**

Designation	<b>NLE10MF</b>	<b>220-240V/50Hz</b>	<b>Conf. 1</b>	Sales code:	<b>105G6888</b>
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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**

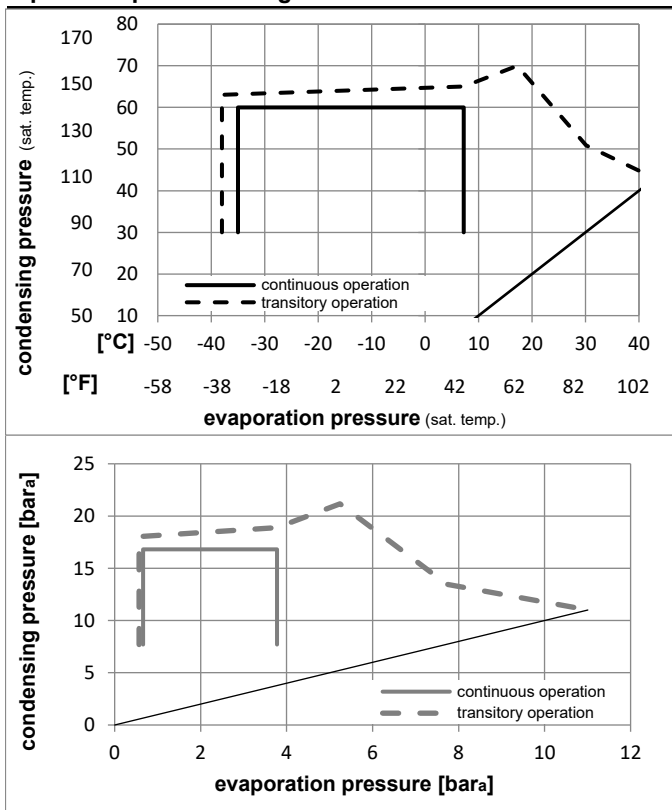


**Ambient temperatures / system cooling**

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 1,5m/s	fan 1,5m/s	n/a
38°C / 100°F	fan 1,5m/s	fan 1,5m/s	n/a
43°C / 110°F	fan 1,5m/s	fan 1,5m/s	n/a

**Operation pressure range**



**Components**

a2	assy. relay	117U6003
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 220-240V/50Hz** Conf. 1 Sales code: **105G6888**

**Optimization + standard conditions**

220-240V/50Hz 1~, CSIR, fan 1,5m/s, VDE

	Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)						Power consumption			ASHRAE MBP
	pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P1	I	Ref. mass flow		
	[°C]	[°C]	[°C]	[°C]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
	-6,66	54,4	35	46,1	568,9	1943	489,6	1,71	5,84	1,47	332,8	2,10	12,41	ASHRAE MBP
	[°F]	20	130	95	115									
	-10	55	32	55	439,5	1501	378,3	1,43	4,87	1,23	308,0	2,00	10,63	cecomaf MBP
	[°F]	14	131	89,6	131									
	-10	45	20	45	495,8	1693	426,7	1,69	5,78	1,46	292,9	1,92	11,61	EN12900 MBP
	[°F]	14	113	68	113									
	-6,66	48,9	18,3	48,9	540,5	1846	465,2	1,68	5,73	1,44	322,3	2,05	13,35	ARI540 MBP
	[°F]	20	120	65	120									
	-10	45	32	45	514,4	1757	442,7	1,76	6,00	1,51	292,9	1,92	11,26	opt
	[°F]	14	113	89,6	113									
	-25	45	32	45	237,1	810	204,0	1,21	4,14	1,04	195,5	1,62	5,14	opt
	[°F]	-13	113	89,6	113									

**Performance tables**

220-240V/50Hz 1~, CSIR, fan 1,5m/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	120,6	412	103,8	0,88	3,01	0,76	136,9	1,52	2,60
cond. pressure	-25	-13	237,1	810	204,0	1,21	4,14	1,04	195,5	1,62	5,14
pc= 45/113	-15	5	405,0	1383	348,6	1,56	5,33	1,34	259,7	1,80	8,83
return gas temp.	-10	14	514,4	1757	442,7	1,76	6,00	1,51	292,9	1,92	11,26
RGT= 32/90	-5	23	643,9	2199	554,2	1,97	6,74	1,70	326,5	2,05	14,16
liquid temp	0	32	796,0	2719	685,1	2,21	7,55	1,90	360,0	2,21	17,60
Tliq= 45/113	7,2	45	1059,6	3619	911,9	2,60	8,88	2,24	407,5	2,48	23,67
[°C / °F]	-35	-31	88,0	301	75,7	0,66	2,25	0,57	133,7	1,43	2,09
cond. pressure	-25	-13	194,5	664	167,4	0,98	3,36	0,85	197,9	1,60	4,65
pc= 55/131	-15	5	343,2	1172	295,4	1,27	4,34	1,09	270,0	1,84	8,26
return gas temp	-10	14	439,5	1501	378,3	1,43	4,87	1,23	308,0	2,00	10,63
RGT= 32/90	-5	23	553,7	1891	476,5	1,60	5,45	1,37	346,9	2,17	13,46
liquid temp	0	32	688,1	2350	592,2	1,78	6,08	1,53	386,3	2,36	16,83
Tliq= 55/131	7,2	45	922,1	3149	793,6	2,08	7,11	1,79	443,1	2,67	22,81

**Model**

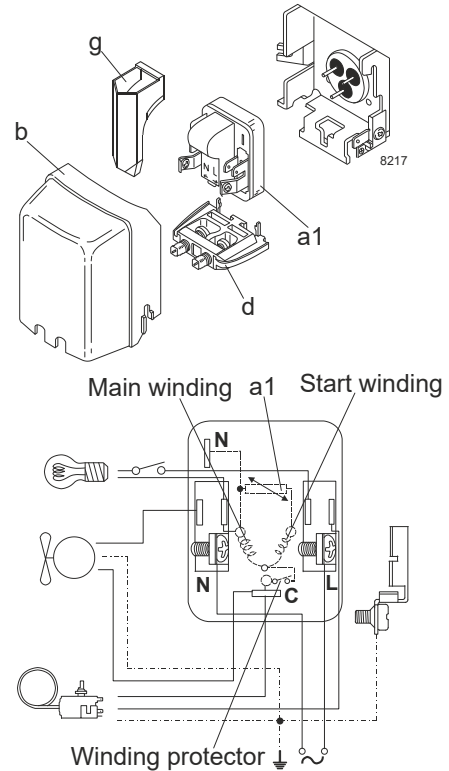
Designation	<b>NLE10MF</b>	<b>220-240V/50Hz</b>	<b>Conf. 2</b>	Sales code:	<b>105G6888</b>
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**Configuration**

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

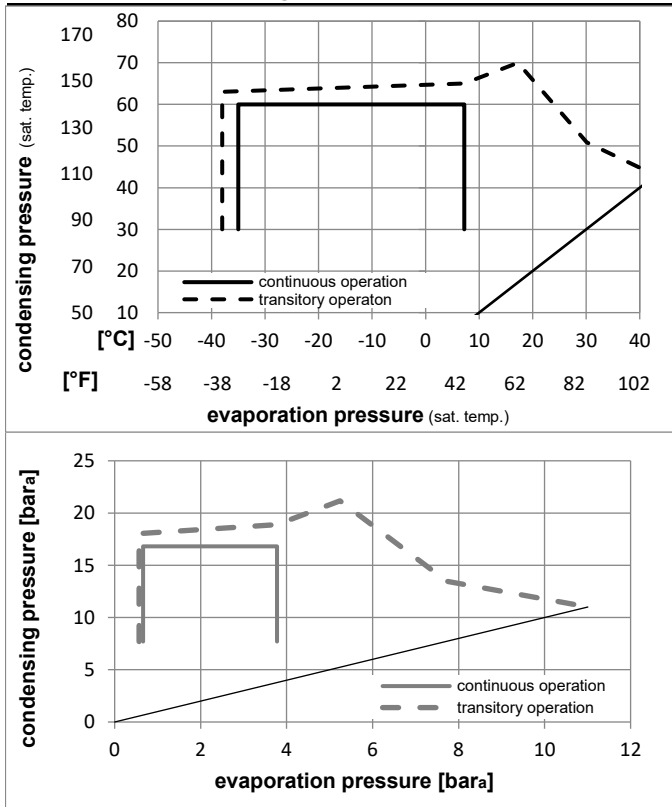


**Ambient temperatures / system cooling**

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 1,5m/s	fan 1,5m/s	n/a
38°C / 100°F	fan 1,5m/s	fan 1,5m/s	n/a
43°C / 110°F	fan 1,5m/s	fan 1,5m/s	n/a

**Operation pressure range**



**Components**

a1	PTC starter (220V, 250hm, 4.8mm)	103N0018
b	plastic cover	103N2010
d	cord relief	103N1010
g	protection screen for PTC	103N0476

**Alternative components**

a1	PTC starter (220V, 250hm, 6.3mm)	103N0011
b	plastic cover	103N2011
d	cord relief	103N1010
g	protection screen for PTC	103N0476

**Model**

Designation **NLE10MF 220-240V/50Hz** Conf. **2** Sales code: **105G6888**

**Optimization + standard conditions**

220-240V/50Hz 1~, RSIR, fan 1,5m/s, VDE

	Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)						Power consumption			ASHRAE MBP				
	pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P1	I	Ref. mass flow						
	[°C]	[°F]	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]					
	-6,66	20	54,4	130	35	95	46,1	115	568,9	1943	489,6	1,71	5,84	1,47	332,8	2,10	12,41	ASHRAE MBP
	-10	14	55	131	32	89,6	55	131	439,5	1501	378,3	1,43	4,87	1,23	308,0	2,00	10,63	cecomaf MBP
	-10	14	45	113	20	68	45	113	495,8	1693	426,7	1,69	5,78	1,46	292,9	1,92	11,61	EN12900 MBP
	-6,66	20	48,9	120	18,3	65	48,9	120	540,5	1846	465,2	1,68	5,73	1,44	322,3	2,05	13,35	ARI540 MBP
	-10	14	45	113	32	89,6	45	113	514,4	1757	442,7	1,76	6,00	1,51	292,9	1,92	11,26	opt
	-25	-13	45	113	32	89,6	45	113	237,1	810	204,0	1,21	4,14	1,04	195,5	1,62	5,14	opt

**Performance tables**

220-240V/50Hz 1~, RSIR, fan 1,5m/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]
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RGT= 32/90	-5	23	643,9	2199	554,2	1,97	6,74	1,70	326,5	2,05	14,16
liquid temp	0	32	796,0	2719	685,1	2,21	7,55	1,90	360,0	2,21	17,60
Tliq= 45/113	7,2	45	1059,6	3619	911,9	2,60	8,88	2,24	407,5	2,48	23,67
[°C / °F]	-35	-31	88,0	301	75,7	0,66	2,25	0,57	133,7	1,43	2,09
cond. pressure	-25	-13	194,5	664	167,4	0,98	3,36	0,85	197,9	1,60	4,65
pc= 55/131	-15	5	343,2	1172	295,4	1,27	4,34	1,09	270,0	1,84	8,26
return gas temp	-10	14	439,5	1501	378,3	1,43	4,87	1,23	308,0	2,00	10,63
RGT= 32/90	-5	23	553,7	1891	476,5	1,60	5,45	1,37	346,9	2,17	13,46
liquid temp	0	32	688,1	2350	592,2	1,78	6,08	1,53	386,3	2,36	16,83
Tliq= 55/131	7,2	45	922,1	3149	793,6	2,08	7,11	1,79	443,1	2,67	22,81



# NL Compressors

**SECOP**







## 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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