

## Single Pack NL8.4MF 220-240V 50Hz / 208-230V 60Hz CSIR

Single pack code number: **195B4347**

Position	Title	Code	Amount
1	Compressor NL8.4MF	105G7802	1
2	Starting relay	117U6016	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>NL8.4MF</b>	<b>220-240V/50Hz 1~ 208-230V/60Hz 1~</b>	Sales code:	<b>105G7802</b>
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**Compressor design**

Oil type	Polyolester	Refrigerant(s)	<b>R134a, R513A</b>
Oil viscosity	32cST	Displacement	8,35cm <sup>3</sup> / 0,51cu.in
Oil quantity	268cm <sup>3</sup> / 9,1fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	600g / 21,2oz		
Free gas volume comp.	2360cm <sup>3</sup> / 79,8fl.oz		
Weight	10,5kg / 23,1lbs		
Motor protection	1# internal		
Winding resistance main	7,1Ω (at 25°C)		
Winding resistance aux	9,6Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



**General - Configurations with NL8.4MF**

	<b>Conf. 1</b>	<b>Conf. 2</b>	<b>Conf. 3</b>	<b>Conf. 4</b>	<b>Conf. 5</b>
Motorconfiguration	RSIR	CSIR	CSIR	CSIR	CSIR
Power supply (nominal)	220-240V/50Hz	220-240V/50Hz	208-230V/60Hz	220-240V/50Hz	208-230V/60Hz
Number of phases	1	1	1	1	1
Voltage range	187-254V	187-254V	187-254V	187-254V	187-253V
Approvals	VDE, CCC, EAC, UL	VDE, CCC, EAC, UL	CCC, EAC, UL	VDE, CCC, UL	CCC, UL
Starting torque	LST	HST	HST	HST	HST
Note	No RSIR for 60Hz operation.				

**Applications with NL8.4MF**

	<b>Conf. 1</b>	<b>Conf. 2</b>	<b>Conf. 3</b>	<b>Conf. 4</b>	<b>Conf. 5</b>
Refrigerant	R134a	R134a	R134a	R513A	R513A
Application	MBP+HBP	MBP+HBP	LBP+MBP	MBP+HBP	LBP+MBP
System cooling	fan 1,5m/s	fan 1,5m/s	fan 1,5m/s	fan 1,5m/s	fan 1,5m/s
Hot gas defrost	-/-	-/-	-/-	-/-	-/-
Long interval pull down	OK	OK	OK	OK	OK

**Electrical data - Configurations with NL8.4MF**

	<b>Conf. 1</b>	<b>Conf. 2</b>	<b>Conf. 3</b>	<b>Conf. 4</b>	<b>Conf. 5</b>
Starting device type	PTC	relay	relay	relay	relay
Run capacitor	-/-	-/-	-/-	-/-	-/-
Start capacitor	-/-	80μF	80μF	80μF	80μF
LRA (locked rotor amps / 4s)	10,8A	10,6A	10,3A	10,6A	10,3A
RLA (rated load amps / 1s)	2,2A	2,2A	1,9A	2,2A	1,9A
Cut in current	16,3A	10,6A	10,3A	10,6A	10,3A

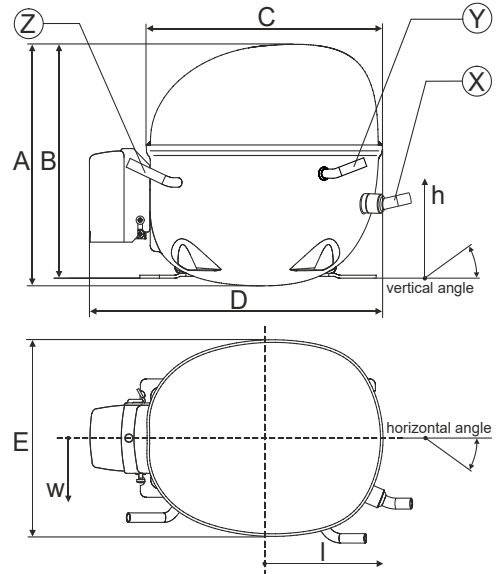
**Model**

Designation **NL8.4MF** 220-240V/50Hz 1~ 208-230V/60Hz 1~ Sales code: **105G7802**

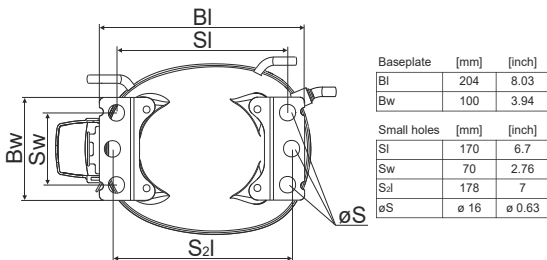
**Compressor dimensions**

<b>Housing</b>	A Height	197mm / 7,76in
	B Height	191mm / 7,52in
	C Length shell	205mm / 8,07in
	D Length w. cover	254mm / 10in
	E Width	166mm / 6,54in

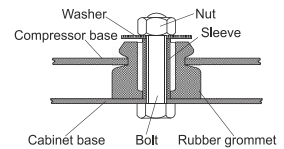
<b>Connectors</b>		<b>Suction</b>	<b>Discharge</b>	<b>Process</b>
		<b>X</b>	<b>Y</b>	<b>Z</b>
Diameter	[mm]	øi 8,11-8,29	øi 6,11-6,29	øi 6,11-6,29
	(i:inside, o:outside) [in]	øi 0,32-0,33	øi 0,24-0,25	øi 0,24-0,25
Material		copper	copper	copper
Horizontal angle	±2°	0°	0°	0°
Vertical angle	±2°	15°	35°	155°
Position l/h/w	[mm]	126/76/78	133/103/54	-107/94/72
	[in]	4,9/3/3,1	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



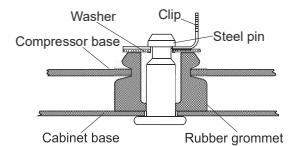
**Compressor fixation**



**Bolt joint**



**Snap-on**



<b>Mounting accessories</b>	one comp.	multi pack
Bolt joint   M6   ø16mm	118-1917	118-1918
Bolt joint   ø1/4"   ø16mm	118-1946	
Bolt joint   ø1/4"   ø19mm	118-1949	
Snap-on   ø7,3   ø16mm	118-1947	118-1919

**Model**

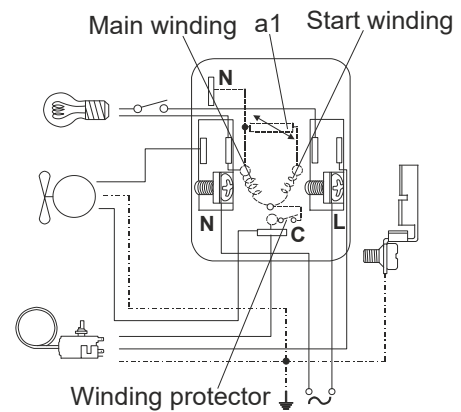
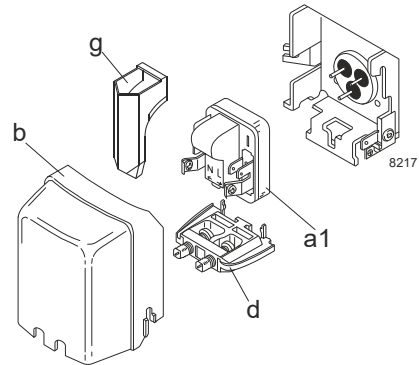
Designation	<b>NL8.4MF</b>	<b>220-240V/50Hz</b>	<b>Conf. 1</b>	Sales code:	<b>105G7802</b>
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**Configuration**

Motorconfiguration	RSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R134a
Application	MBP+HBP
Voltage range	187-254V
Starting torque	LST
Approvals	VDE CCC EAC UL

**Electrical accessories / wiring diagram**

RSIR

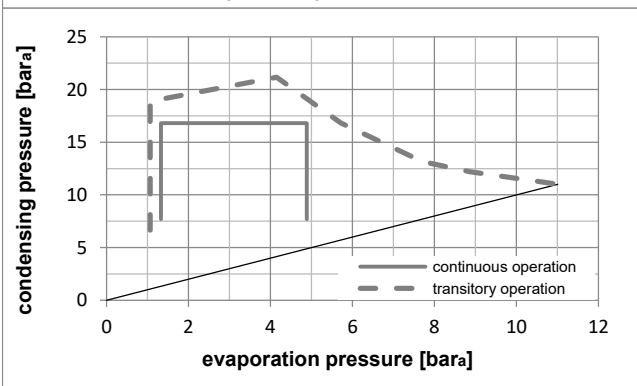
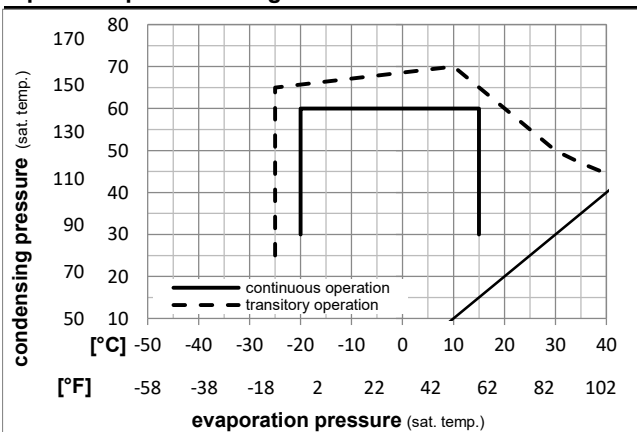


**Ambient temperatures / system cooling**

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	n/a	fan 1,5m/s	fan 1,5m/s
38°C / 100°F	n/a	fan 3m/s	fan 3m/s
43°C / 110°F	n/a	fan 3m/s	fan 3m/s

**Operation pressure range**



Components

a1	PTC starter (220V, 250hm, 4.8mm)	103N0018
b	plastic cover	103N2011
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 **NL8.4MF 220-240V/50Hz** Conf. 1 Sales code: **105G7802**

**Optimization + standard conditions**

R134a, 220V/50Hz, RSIR, fan 1,5m/s, VDE, CCC, EAC, UL

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)					Power consumption				
					Return gas temp.					Current consumption				
					Liquid temp.					Ref. mass flow				
					Cooling capacity					COP EER				
pe	pc	RGT	Tliq		[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	m	
[°C]	[°C]		[°C]	[°C]							[W]	[A]	[kg/h]	
[°C]	7,22	54,4	35	46,1	822,7	2810	708,0	2,27	7,76	1,95	362,2	2,27	18,25	ASHRAE HBP
[°F]	45	130	95	115										HBP
[°C]	5	55	32	55	678,8	2318	584,2	1,94	6,64	1,67	349,2	2,20	16,73	cecomaf HBP
[°F]	41	131	89,6	131										HBP
[°C]	5	50	20	50	702,4	2399	604,5	2,09	7,12	1,79	336,7	2,16	17,70	EN12900 HBP
[°F]	41	122	68	122										HBP
[°C]	-6,66	54,4	35	46,1	457,0	1561	393,3	1,64	5,61	1,41	278,3	1,96	9,97	ASHRAE MBP
[°F]	20	130	95	115										MBP
[°C]	-10	55	32	55	353,4	1207	304,1	1,36	4,63	1,17	260,8	1,92	8,54	cecomaf MBP
[°F]	14	131	89,6	131										MBP
[°C]	-10	45	20	45	399,9	1366	344,1	1,61	5,51	1,39	247,7	1,91	9,36	EN12900 MBP
[°F]	14	113	68	113										MBP

**Performance tables**

R134a, 220V/50Hz, RSIR, fan 1,5m/s, VDE, CCC, EAC, UL

	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]	-20	-4	251,5	859	216,4	1,24	4,24	1,07	202,5	1,83	5,46		
cond. pressure	-15	5	325,7	1112	280,3	1,45	4,95	1,25	224,8	1,87	7,10		
pc= 45/113	-10	14	414,8	1417	357,0	1,67	5,72	1,44	247,7	1,91	9,08		
return gas temp.	-5	23	520,8	1779	448,2	1,92	6,55	1,65	271,7	1,95	11,45		
RGT= 32/90	0	32	645,5	2205	555,5	2,17	7,42	1,87	297,1	2,02	14,28		
liquid temp	5	41	790,8	2701	680,6	2,44	8,33	2,10	324,3	2,13	17,61		
Tliq= 45/113	15	59	1150,8	3930	990,4	2,99	10,20	2,57	385,2	2,50	26,07		
[°C / °F]	-20	-4	213,0	728	183,3	1,02	3,49	0,88	208,5	1,84	5,11		
cond. pressure	-15	5	276,8	945	238,2	1,18	4,04	1,02	234,2	1,88	6,66		
pc= 55/131	-10	14	353,4	1207	304,1	1,36	4,63	1,17	260,8	1,92	8,54		
return gas temp	-5	23	444,7	1519	382,7	1,54	5,26	1,33	288,6	1,98	10,81		
RGT= 32/90	0	32	552,5	1887	475,5	1,74	5,94	1,50	317,9	2,07	13,51		
liquid temp	5	41	678,8	2318	584,2	1,94	6,64	1,67	349,2	2,20	16,73		
Tliq= 55/131	15	59	994,4	3396	855,8	2,37	8,11	2,04	418,7	2,65	24,98		

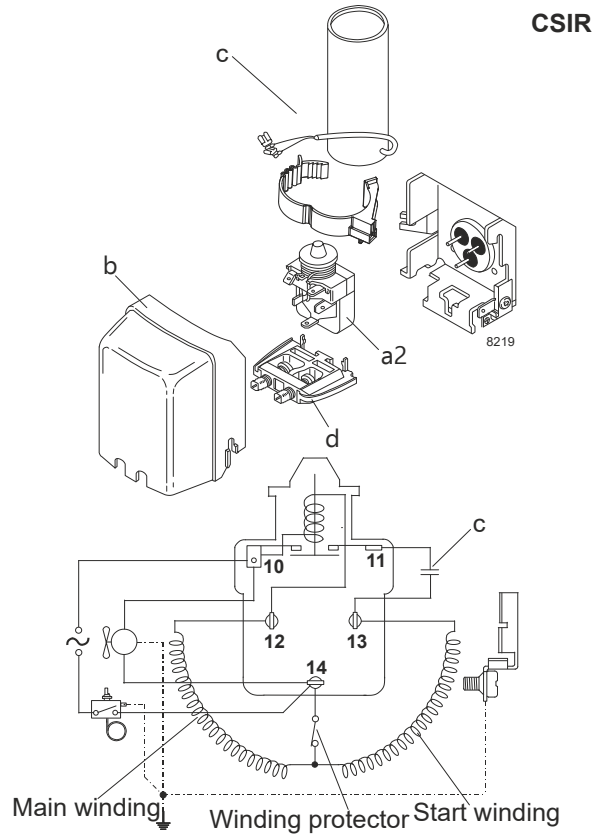
## Model

Designation	<b>NL8.4MF</b>	<b>220-240V/50Hz</b>	<b>Conf. 2</b>	Sales code:	<b>105G7802</b>
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## Configuration

Motorconfiguration	CSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R134a
Application	MBP+HBP
Voltage range	187-254V
Starting torque	HST
Approvals	VDE CCC EAC UL

## Electrical accessories / wiring diagram

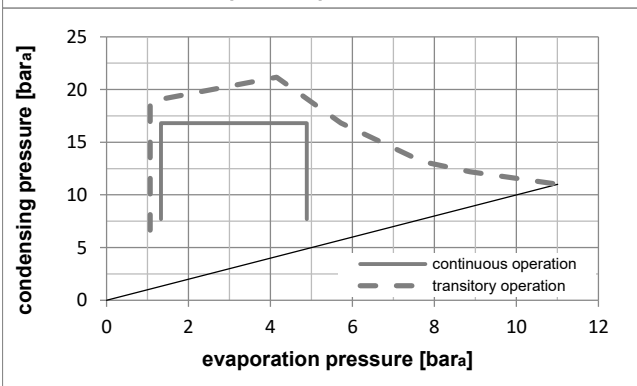
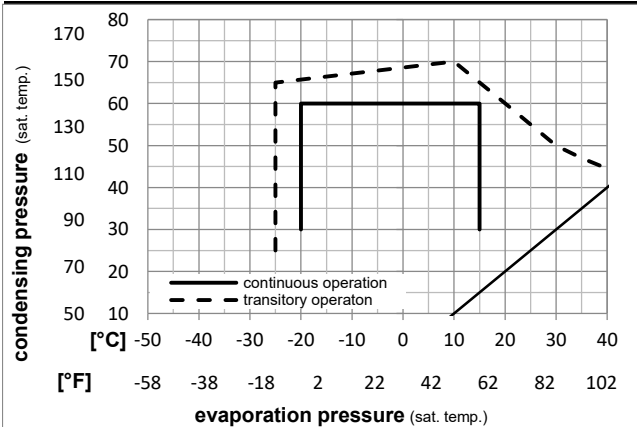


## Ambient temperatures / system cooling

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	n/a	fan 1,5m/s	fan 1,5m/s
38°C / 100°F	n/a	fan 3m/s	fan 3m/s
43°C / 110°F	n/a	fan 3m/s	fan 3m/s

## Operation pressure range



## Components

a2	relay	117U6016
c	start capacitor (80µF)	117U5015
b	plastic cover	103N2011
d	cord relief	103N1010

**Model**

Designation	<b>NL8.4MF</b>	<b>220-240V/50Hz</b>	<b>Conf. 2</b>	Sales code:	<b>105G7802</b>
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**Optimization + standard conditions**

R134a, 220V/50Hz, CSIR, fan 1,5m/s, VDE, CCC, EAC, UL

Evaporating pressure (saturation temperature)		Condensing pressure (saturation temperature)				Cooling capacity						Power consumption			ASHRAE HBP
		Return gas temp.				COP						Current consumption			
		Liquid temp.				EER						Ref. mass flow			
		Cooling capacity				P1						I			
		m				[W]						[A]			
		[kg/h]				[W]						[A]			
		[kg/h]				[W]						[A]			
		[kg/h]				[W]						[A]			
[°C]	7,22	54,4	35	46,1	822,7	2810	708,0	2,27	7,76	1,95	362,2	2,27	18,25	ASHRAE HBP	
[°F]	45	130	95	115											
[°C]	5	55	32	55	678,8	2318	584,2	1,94	6,64	1,67	349,2	2,20	16,73	cecomaf HBP	
[°F]	41	131	89,6	131											
[°C]	5	50	20	50	702,4	2399	604,5	2,09	7,12	1,79	336,7	2,16	17,70	EN12900 HBP	
[°F]	41	122	68	122											
[°C]	-6,7	54,4	35	46,1	457,0	1561	393,3	1,64	5,61	1,41	278,3	1,96	9,97	ASHRAE MBP	
[°F]	20	130	95	115											
[°C]	-10	55	32	55	353,4	1207	304,1	1,36	4,63	1,17	260,8	1,92	8,54	cecomaf MBP	
[°F]	14	131	89,6	131											
[°C]	-10	45	20	45	399,9	1366	344,1	1,61	5,51	1,39	247,7	1,91	9,36	EN12900 MBP	
[°F]	14	113	68	113											

**Performance tables**

R134a, 220V/50Hz, CSIR, fan 1,5m/s, VDE, CCC, EAC, UL

	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]	-20	-4	251,5	859	216,4	1,24	4,24	1,07	202,5	1,83	5,46		
cond. pressure	-15	5	325,7	1112	280,3	1,45	4,95	1,25	224,8	1,87	7,10		
pc= 45/113	-10	14	414,8	1417	357,0	1,67	5,72	1,44	247,7	1,91	9,08		
return gas temp.	-5	23	520,8	1779	448,2	1,92	6,55	1,65	271,7	1,95	11,45		
RGT= 32/90	0	32	645,5	2205	555,5	2,17	7,42	1,87	297,1	2,02	14,28		
liquid temp	5	41	790,8	2701	680,6	2,44	8,33	2,10	324,3	2,13	17,61		
Tliq= 45/113	15	59	1150,8	3930	990,4	2,99	10,20	2,57	385,2	2,50	26,07		
[°C / °F]	-20	-4	213,0	728	183,3	1,02	3,49	0,88	208,5	1,84	5,11		
cond. pressure	-15	5	276,8	945	238,2	1,18	4,04	1,02	234,2	1,88	6,66		
pc= 55/131	-10	14	353,4	1207	304,1	1,36	4,63	1,17	260,8	1,92	8,54		
return gas temp	-5	23	444,7	1519	382,7	1,54	5,26	1,33	288,6	1,98	10,81		
RGT= 32/90	0	32	552,5	1887	475,5	1,74	5,94	1,50	317,9	2,07	13,51		
liquid temp	5	41	678,8	2318	584,2	1,94	6,64	1,67	349,2	2,20	16,73		
Tliq= 55/131	15	59	994,4	3396	855,8	2,37	8,11	2,04	418,7	2,65	24,98		

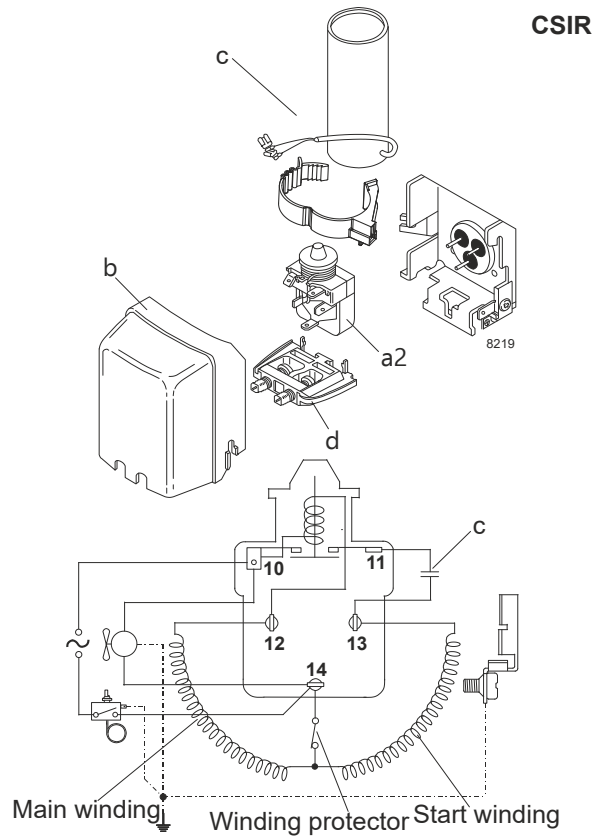
### Model

Designation	<b>NL8.4MF</b>	<b>208-230V/60Hz</b>	<b>Conf. 3</b>	Sales code:	<b>105G7802</b>
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### Configuration

Motorconfiguration	CSIR
Power supply (nominal)	208-230V/60Hz 1~
Refrigerant	R134a
Application	LBP+MBP
Voltage range	187-254V
Starting torque	HST
Approvals	CCC
	EAC
	UL

### Electrical accessories / wiring diagram

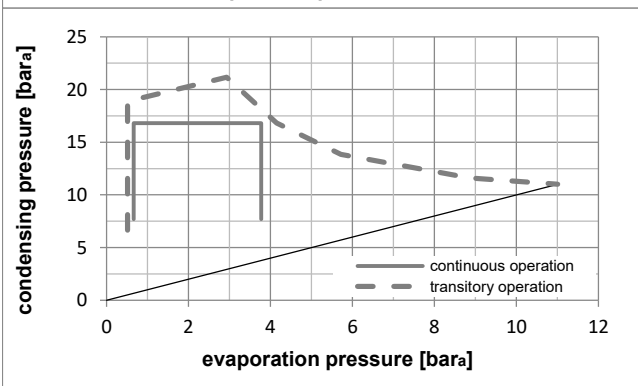
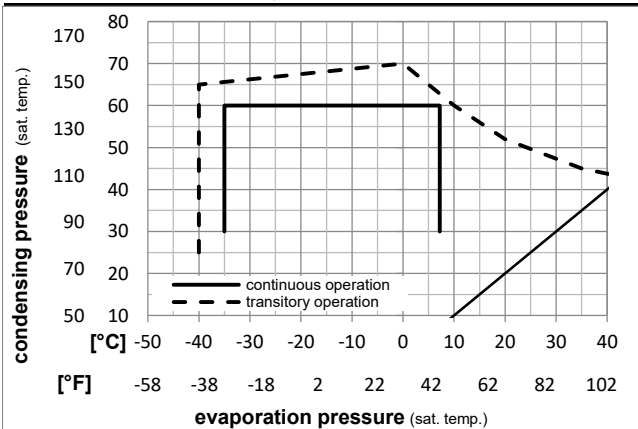


### Ambient temperatures / system cooling

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	relay	117U6016
c	start capacitor (80µF)	117U5015
b	plastic cover	103N2011
d	cord relief	103N1010



**Model**

Designation	<b>NL8.4MF</b>	<b>208-230V/60Hz</b>	<b>Conf. 3</b>	Sales code:	<b>105G7802</b>
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**Optimization + standard conditions**

R134a, 220V/60Hz, CSIR, fan 1,5m/s, CCC, EAC, UL

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]															[W]	[A]					[kg/h]	
7,22	54,4	35	46,1			993,0	3391	854,6	2,19	7,48	1,89	453,3	2,44	22,03									ASHRAE HBP
45	130	95	115																				
5	55	32	55			817,9	2793	703,9	1,87	6,39	1,61	437,3	2,37	20,15									cecomaf HBP
41	131	89,6	131																				
5	50	20	50			852,1	2910	733,3	2,05	7,00	1,76	415,8	2,30	21,47									EN12900 HBP
41	122	68	122																				
-6,66	54,4	35	46,1			546,8	1867	470,6	1,62	5,53	1,39	337,6	1,96	11,93									ASHRAE MBP
20	130	95	115																				
-10	55	32	55			419,6	1433	361,1	1,35	4,61	1,16	310,9	1,86	10,15									cecomaf MBP
14	131	89,6	131																				
-10	45	20	45			483,8	1652	416,4	1,65	5,63	1,42	293,4	1,80	11,33									EN12900 MBP
14	113	68	113																				

**Performance tables**

R134a, 220V/60Hz, CSIR, fan 1,5m/s, CCC, EAC, UL

[°C / °F]	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]
-35	-31	114,7	392	98,7	0,91	3,10	0,78	126,2	1,28	2,47	
cond. pressure	-25	-13	227,0	775	195,3	1,19	4,05	1,02	191,2	1,46	4,92
pc= 45/113	-15	5	393,2	1343	338,4	1,52	5,19	1,31	259,0	1,68	8,57
return gas temp.	-10	14	502,0	1714	432,0	1,71	5,84	1,47	293,4	1,80	10,99
RGT= 32/90	-5	23	630,7	2154	542,8	1,92	6,57	1,65	328,0	1,94	13,87
liquid temp	0	32	781,5	2669	672,6	2,16	7,36	1,85	362,6	2,08	17,28
Tliq= 45/113	7,2	45	1041,9	3558	896,7	2,53	8,64	2,18	412,0	2,30	23,27
-35	-31	76,5	261	65,9	0,69	2,37	0,60	110,3	1,22	1,82	
cond. pressure	-25	-13	178,6	610	153,7	0,95	3,24	0,82	188,0	1,45	4,27
pc= 55/131	-15	5	324,7	1109	279,4	1,21	4,12	1,04	269,3	1,72	7,82
return gas temp	-10	14	419,6	1433	361,1	1,35	4,61	1,16	310,9	1,86	10,15
RGT= 32/90	-5	23	532,0	1817	457,9	1,51	5,15	1,30	352,9	2,02	12,93
liquid temp	0	32	664,0	2268	571,5	1,68	5,74	1,45	395,1	2,19	16,24
Tliq= 55/131	7,2	45	893,0	3050	768,5	1,96	6,69	1,69	455,9	2,45	22,09

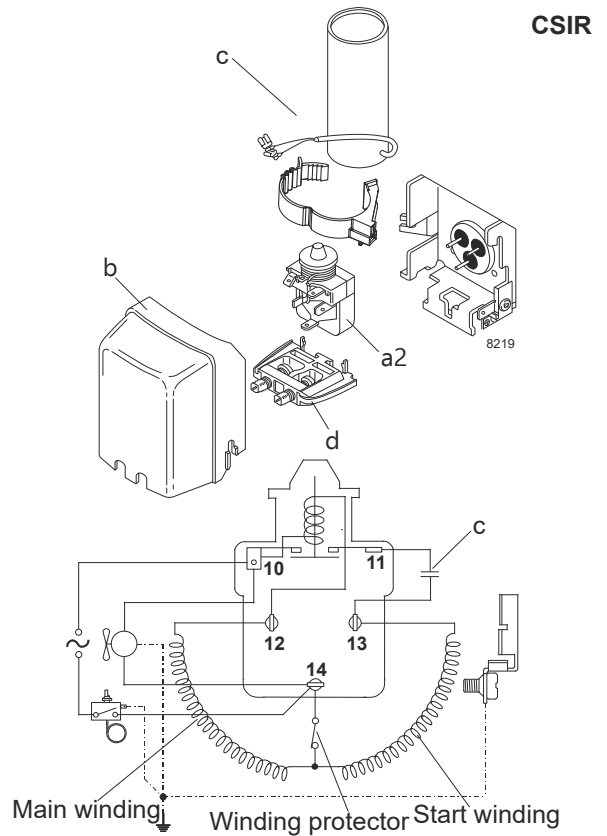
### Model

Designation	<b>NL8.4MF</b>	<b>220-240V/50Hz</b>	<b>Conf. 4</b>	Sales code:	<b>105G7802</b>
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### Configuration

Motorconfiguration	CSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R513A
Application	MBP+HBP
Voltage range	187-254V
Starting torque	HST
Approvals	VDE CCC UL

### Electrical accessories / wiring diagram

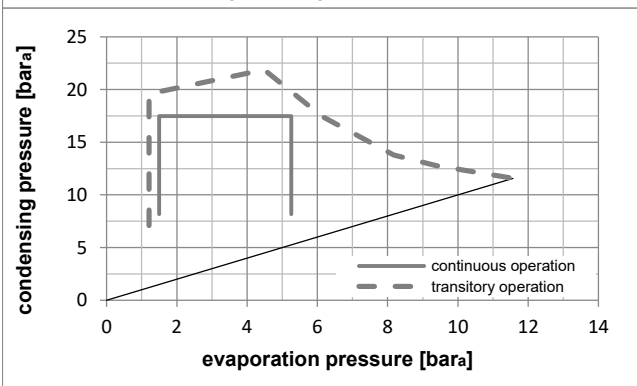
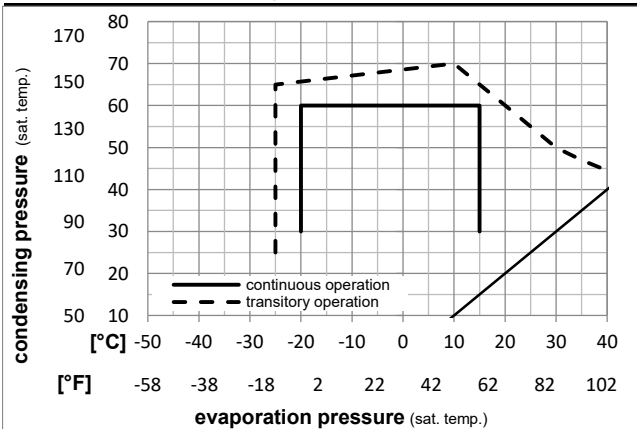


### Ambient temperatures / system cooling

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	n/a	fan 1,5m/s	fan 1,5m/s
38°C / 100°F	n/a	fan 3m/s	fan 3m/s
43°C / 110°F	n/a	fan 3m/s	fan 3m/s

### Operation pressure range



### Components

a2	relay	117U6016
c	start capacitor (80µF)	117U5015
b	plastic cover	103N2011
d	cord relief	103N1010

**Model**

Designation	<b>NL8.4MF</b>	<b>220-240V/50Hz</b>	<b>Conf. 4</b>	Sales code:	<b>105G7802</b>
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**Optimization + standard conditions**

R513A, 220V/50Hz, CSIR, fan 1,5m/s, VDE, CCC, UL

Evaporating pressure (saturation temperature)		Condensing pressure (saturation temperature)				Power consumption									ASHRAE HBP	
		Return gas temp.				Current consumption										Ref. mass flow m
		Liquid temp.				Cooling capacity	COP	EER	P1	I			m			
pe	pc	RGT	Tliq	[W]	[Btu/h]					[kcal/h]	[W/W]	[Btu/Wh]		[kcal/Wh]		
[°C]	7,22	54,4	35	46,1	846,4	2891	728,4	2,24	7,64	1,93	378,2	2,30	21,03	ASHRAE HBP		
[°F]	45	130	95	115												
[°C]	5	55	32	55	688,2	2350	592,3	1,88	6,44	1,62	365,2	2,27	19,34	cecomaf HBP		
[°F]	41	131	89,6	131												
[°C]	5	50	20	50	713,2	2436	613,8	2,03	6,92	1,74	352,0	2,23	20,45	EN12900 HBP		
[°F]	41	122	68	122												
[°C]	-6,66	54,4	35	46,1	480,5	1641	413,6	1,63	5,58	1,41	294,3	2,07	11,77	ASHRAE MBP		
[°F]	20	130	95	115												
[°C]	-10	55	32	55	367,5	1255	316,3	1,33	4,53	1,14	276,8	2,02	10,16	cecomaf MBP		
[°F]	14	131	89,6	131												
[°C]	-10	45	20	45	418,6	1430	360,2	1,60	5,45	1,37	262,1	1,98	11,09	EN12900 MBP		
[°F]	14	113	68	113												

**Performance tables**

R513A, 220V/50Hz, CSIR, fan 1,5m/s, VDE, CCC, UL

[°C / °F]	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]	-20	-4	271,2	926	233,4	1,25	4,28	1,08	216,5	1,85	6,63
cond. pressure	-15	5	347,1	1185	298,7	1,45	4,96	1,25	239,0	1,91	8,51
pc= 45/113	-10	14	437,7	1495	376,7	1,67	5,70	1,44	262,1	1,98	10,76
return gas temp.	-5	23	544,8	1860	468,8	1,90	6,50	1,64	286,2	2,05	13,45
RGT= 32/90	0	32	670,0	2288	576,6	2,15	7,34	1,85	311,7	2,12	16,62
liquid temp	5	41	815,2	2784	701,6	2,41	8,22	2,07	338,8	2,19	20,33
Tliq= 45/113	15	59	1172,4	4004	1009,0	2,93	10,02	2,52	399,8	2,36	29,66
[°C / °F]	-20	-4	227,2	776	195,6	1,01	3,46	0,87	224,2	1,87	6,24
cond. pressure	-15	5	291,2	994	250,6	1,16	3,98	1,00	250,1	1,94	8,02
pc= 55/131	-10	14	367,5	1255	316,3	1,33	4,53	1,14	276,8	2,02	10,16
return gas temp	-5	23	457,9	1564	394,1	1,50	5,13	1,29	304,6	2,10	12,72
RGT= 32/90	0	32	564,3	1927	485,6	1,69	5,77	1,45	334,0	2,18	15,76
liquid temp	5	41	688,2	2350	592,3	1,88	6,44	1,62	365,2	2,27	19,34
Tliq= 55/131	15	59	996,0	3402	857,2	2,29	7,82	1,97	434,7	2,46	28,45

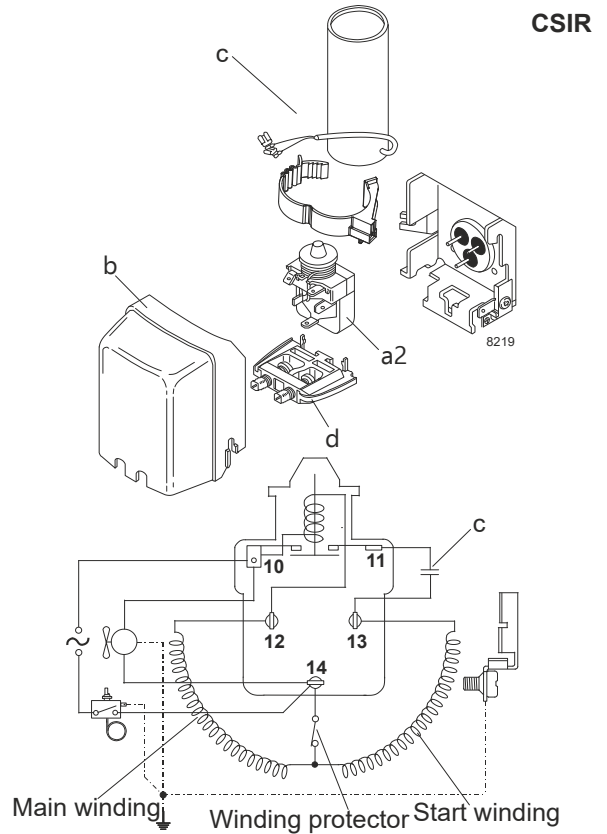
### Model

Designation	<b>NL8.4MF</b>	<b>208-230V/60Hz</b>	<b>Conf. 5</b>	Sales code:	<b>105G7802</b>
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### Configuration

Motorconfiguration	CSIR
Power supply (nominal)	208-230V/60Hz 1~
Refrigerant	R513A
Application	LBP+MBP
Voltage range	187-253V
Starting torque	HST
Approvals	CCC
	UL

### Electrical accessories / wiring diagram

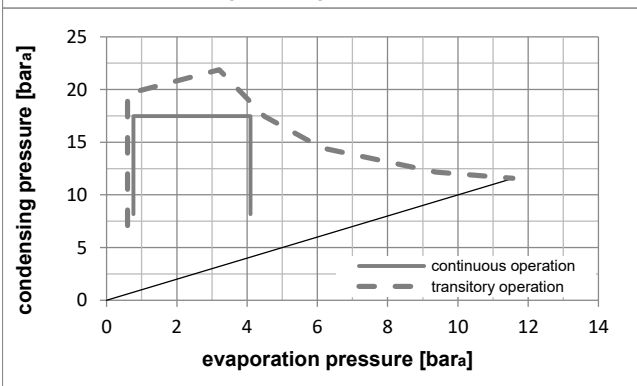
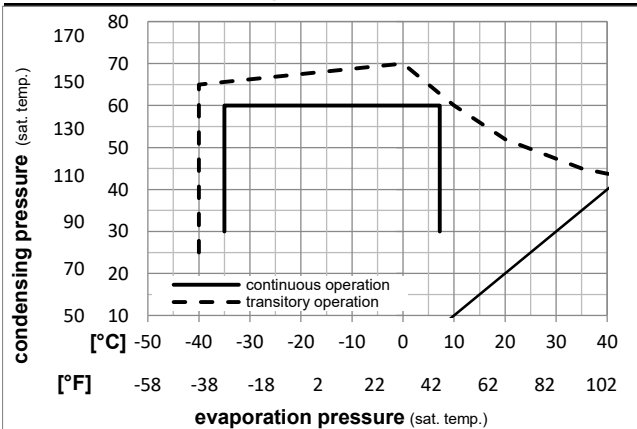


### Ambient temperatures / system cooling

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	relay	117U6016
c	start capacitor (80µF)	117U5015
b	plastic cover	103N2011
d	cord relief	103N1010

**Model**

Designation **NL8.4MF 208-230V/60Hz** Conf. 5 Sales code: **105G7802**

**Optimization + standard conditions**

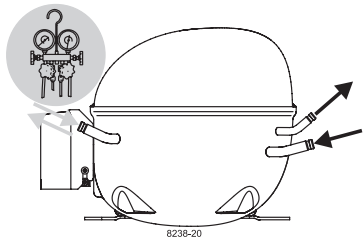
R513A, 220V/60Hz, CSIR, fan 1,5m/s, CCC, UL

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)					Power consumption				
					Return gas temp.					Current consumption				
					Liquid temp.					Ref. mass flow				
					Cooling capacity					COP EER				
pe	pc	RGT	Tliq		[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	m	
[°C]	[°C]		[°C]	[°C]							[W]	[A]	[kg/h]	
7,22	54,4	35	46,1		1020,3	3484	878,1	2,14	7,29	1,84	477,8	2,54	25,35	ASHRAE HBP
45	130	95	115											
5	55	32	55		828,1	2828	712,7	1,79	6,12	1,54	462,1	2,48	23,27	cecomaf HBP
41	131	89,6	131											
5	50	20	50		864,3	2952	743,9	1,97	6,73	1,69	438,9	2,39	24,78	EN12900 HBP
41	122	68	122											
-6,66	54,4	35	46,1		574,5	1962	494,4	1,59	5,43	1,37	361,0	2,09	14,07	ASHRAE MBP
20	130	95	115											
-10	55	32	55		436,0	1489	375,2	1,31	4,46	1,12	334,0	1,99	12,06	cecomaf MBP
14	131	89,6	131											
-10	45	20	45		506,1	1729	435,6	1,61	5,50	1,39	314,0	1,92	13,42	EN12900 MBP
14	113	68	113											

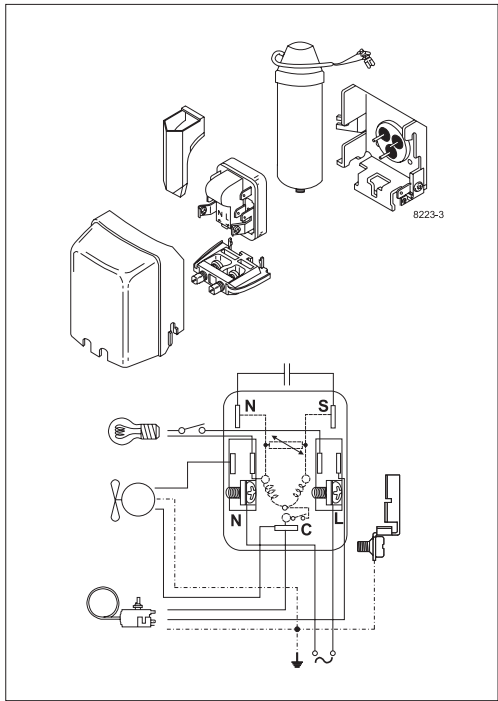
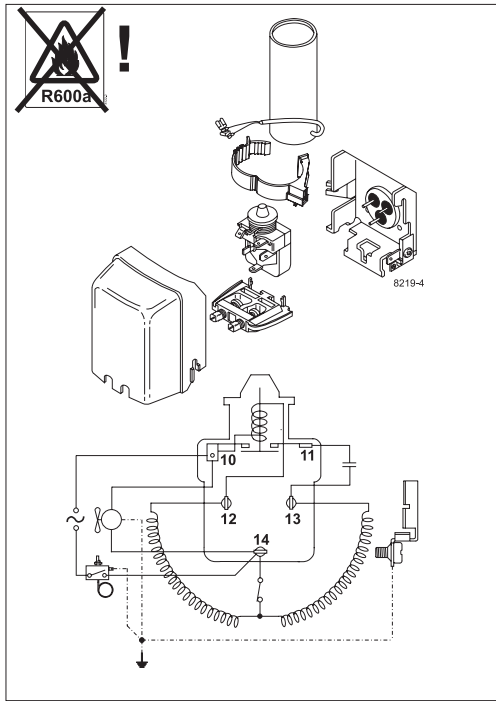
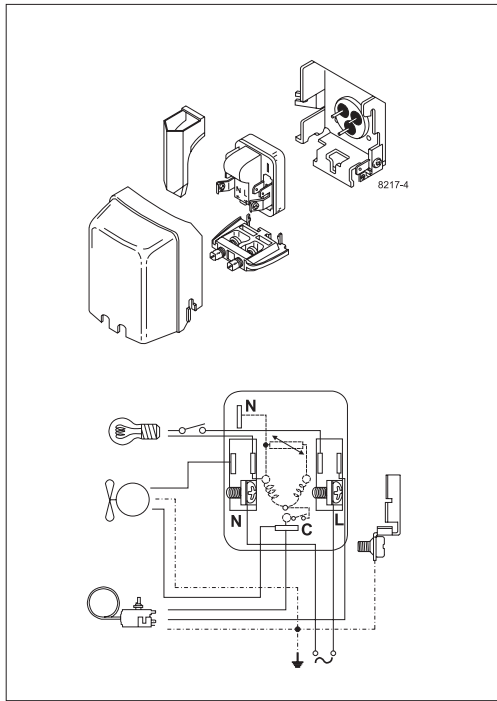
**Performance tables**

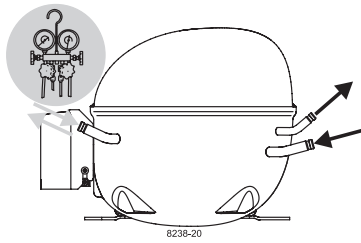
R513A, 220V/60Hz, CSIR, fan 1,5m/s, CCC, UL

	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	131,3	448	113,0	0,93	3,17	0,80	141,5	1,26	3,19		
cond. pressure	-25	-13	248,3	848	213,6	1,19	4,06	1,02	209,0	1,52	6,05		
pc= 45/113	-15	5	418,8	1430	360,5	1,50	5,13	1,29	278,8	1,78	10,26		
return gas temp.	-10	14	529,3	1808	455,5	1,69	5,76	1,45	314,0	1,92	13,01		
RGT= 32/90	-5	23	659,1	2251	567,3	1,89	6,45	1,62	349,2	2,05	16,27		
liquid temp	0	32	810,4	2768	697,4	2,11	7,21	1,82	384,1	2,18	20,10		
Tliq= 45/113	7,2	45	1069,9	3654	920,8	2,47	8,43	2,12	433,6	2,37	26,76		
[°C / °F]	-35	-31	89,1	304	76,7	0,71	2,41	0,61	126,0	1,20	2,43		
cond. pressure	-25	-13	193,9	662	166,8	0,94	3,20	0,81	207,2	1,51	5,31		
pc= 55/131	-15	5	341,3	1165	293,7	1,17	4,00	1,01	291,3	1,83	9,40		
return gas temp	-10	14	436,0	1489	375,2	1,31	4,46	1,12	334,0	1,99	12,06		
RGT= 32/90	-5	23	547,3	1869	471,1	1,45	4,96	1,25	376,8	2,15	15,20		
liquid temp	0	32	677,4	2313	583,0	1,61	5,51	1,39	419,6	2,32	18,92		
Tliq= 55/131	7,2	45	901,5	3079	775,9	1,88	6,41	1,61	480,6	2,55	25,41		

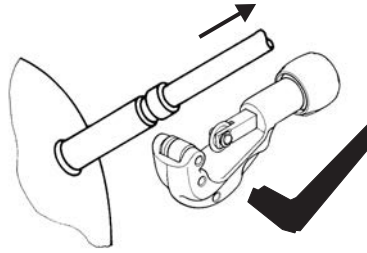
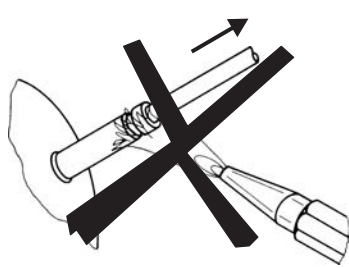


# NL Compressors





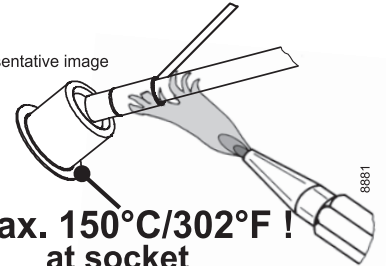
## Service/Repair – R600a, R290



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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