

Model
NLE10MF.2

Sales code:
105G6187

Compressor Data

Refrigerant(s)	R134a / R513A
Refr. charge - tech. limit	600g / 21.16oz
Weight	10.90 kg / 24.03lbs
Displacement	10.09 cm³ / 0.62cu.in
Compressors on pallet	80



General – Configurations With NLE10MF.2

–	Conf. 1	Conf. 2	Conf. 3	Conf. 4
Motor configuration	CSIR	eRSIR	eRSCR	CSIR
Power supply (nominal)	220-240 V/50 Hz	220-240 V/50 Hz	220-240 V/50 Hz	220-240 V/50 Hz
Number of phases	1	1	1	1
Voltage range	198-254 V	198-254 V	198-254 V	198-254 V
Approvals	VDE	VDE	VDE	VDE
Starting torque	HST	LST	LST	HST
Refrigerant	R134a	R134a	R134a	R513A
Application	LBP+MBP	LBP+MBP	LBP+MBP	LBP+MBP
Hot gas defrost	OK	OK	OK	OK
Long interval pull down	OK	OK	OK	OK

Application Notes

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

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Compressor Design

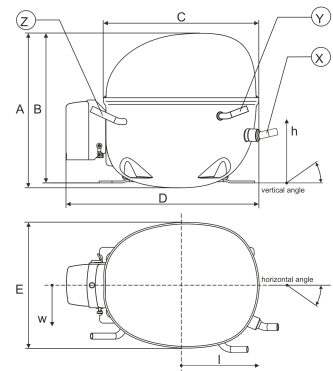
Oil type	POE	Winding resistance main	9.28 Ohm
Oil viscosity	19,2cSt	Winding resistance aux	11.64 Ohm
Oil quantity	300 / 10.14fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	2,360 cm³ / 79.80fl.oz	Max. discharge temp.	110°C / 230°F
Motor protection	internal		

Compressor Dimensions

Housing

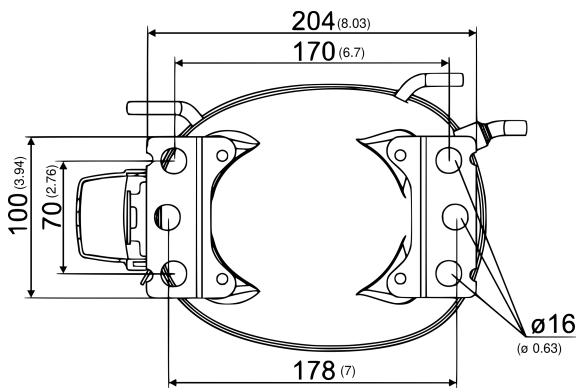
A Height	203mm / 7.99in
B Height	197mm / 7.76in
C Length shell	205mm / 8.07in
D Length w. cover	254mm / 10.00in
E Width	166mm / 6.54in

[Find 3D Model here](#)

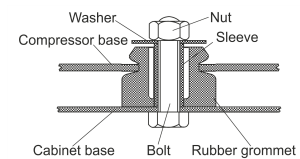


Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	15°	21°	155°
Position l/h/w [mm]	132/68.5/56.7 / 5.20/2.70/2.23in	94/101.7/81 / 3.70/4.00/3.19in	-109.3/94.3/72 / -4.30/3.71/2.83in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

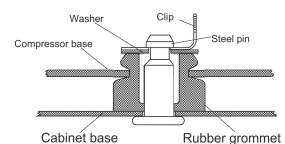
Mounting Accessories



Bolt joint



Snap-on



Dimensions in mm [in]

	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

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Configuration 1

Sales code:

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Configuration

Motor configuration	CSIR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R134a
Application	LBP+MBP
Voltage range	198-254 V
Starting torque	HST
Approvals	VDE
Starting device type	relay
Run capacitor	-/-
Start capacitor	80 µF
LRA (locked rotor amps / 4s/ U(N))	10.7 A
RLA (rated load amps / 1s/ U(N))	2.15 A
Cut in current (U(N))	15.9 A

Ambient/ machine room temperatures minimum /maximum

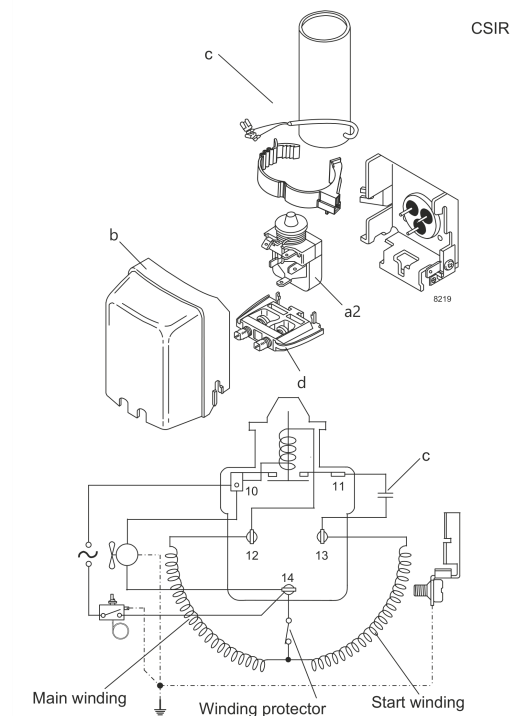
Ambient temperature range: 10 - 43°C / 50 - 109°F

Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



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Components

a2 assy. relay 117U6002

c start capacitor (80µF) 117U5015

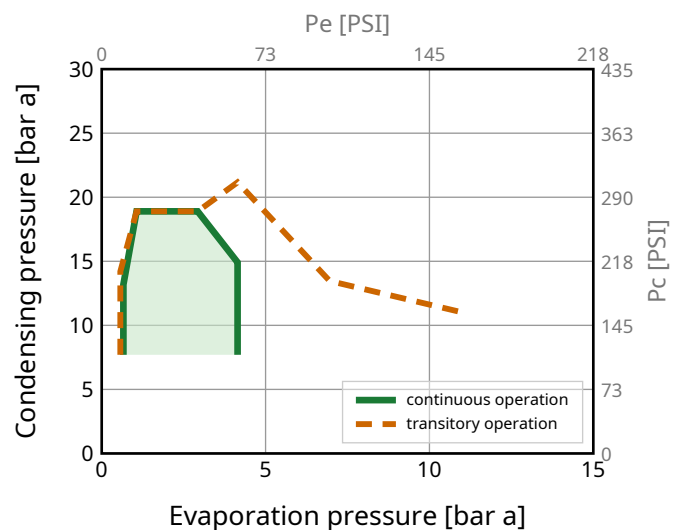
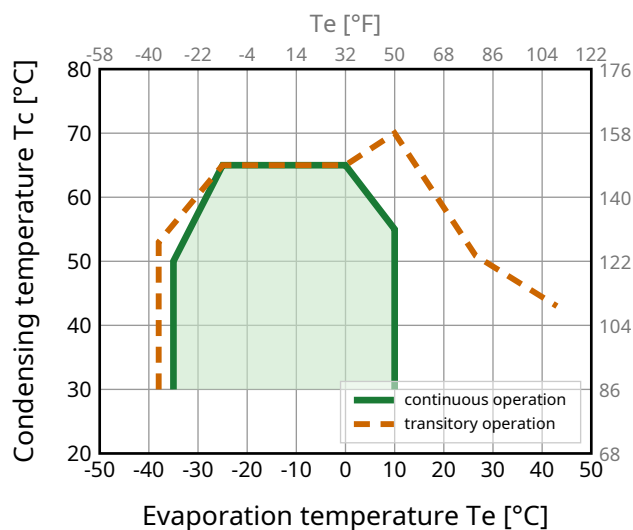
b plastic cover 103N2010

d cord relief 103N1010

Alternative components

b plastic cover 103N2011

Operation Pressure Range



Model

NLE10MF.2

Configuration 1

Sales code:

105G6187

Standard Conditions

R134a, 220 V/50 Hz, CSIR, fan 3m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	m	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-23.3 -10	54.4 129.9	32.2 90	32.2 90	289	986	249	1.45	4.94	200	1.54	5.61	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	210	718	181	1.12	3.82	188	1.51	5.02	CECOMAF LBP
-35 -31	40 104	20 68	40 104	152	517	130	1.06	3.63	142	1.43	3.32	EN12900 LBP
-6.7 20	54.4 129.9	35 95	46.1 115	608	2073	523	1.94	6.62	313	1.89	13.23	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	471	1607	405	1.62	5.53	290	1.81	11.36	CECOMAF MBP
-10 14	45 113	20 68	45 113	537	1832	462	1.99	6.79	270	1.75	12.52	EN12900 MBP

Performance Tables

R134a, 220 V/50 Hz, CSIR, fan 3m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	m
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-35	-31	134	458	115	0.94	3.20	143	1.43	2.89
-30	-22	194	661	166	1.17	3.98	166	1.47	4.18
-20	-4	344	1173	296	1.60	5.45	215	1.58	7.46
-10	14	556	1897	478	2.06	7.04	270	1.75	12.14
0	32	854	2913	734	2.59	8.83	330	1.96	18.84
10	50	1261	4304	1085	3.17	10.82	398	2.20	28.23

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

-35	-31	94	319	80	0.75	2.56	125	1.40	2.22
-30	-22	148	506	128	0.95	3.25	156	1.45	3.53
-20	-4	283	966	243	1.28	4.37	221	1.59	6.77
-10	14	471	1607	405	1.62	5.53	290	1.81	11.36
0	32	737	2513	633	2.02	6.88	365	2.08	17.96
10	50	1103	3764	949	2.47	8.43	447	2.40	27.33

Model

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Configuration 2

Sales code:

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Configuration

Motor configuration	eRSIR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R134a
Application	LBP+MBP
Voltage range	198-254 V
Starting torque	LST
Approvals	VDE
Starting device type	e-PTC
Run capacitor	-/-
Start capacitor	-/-
LRA (locked rotor amps / 4s/ U(N))	10.7 A
RLA (rated load amps / 1s/ U(N))	2.15 A
Cut in current (U(N))	15.9 A

Ambient/ machine room temperatures minimum /maximum

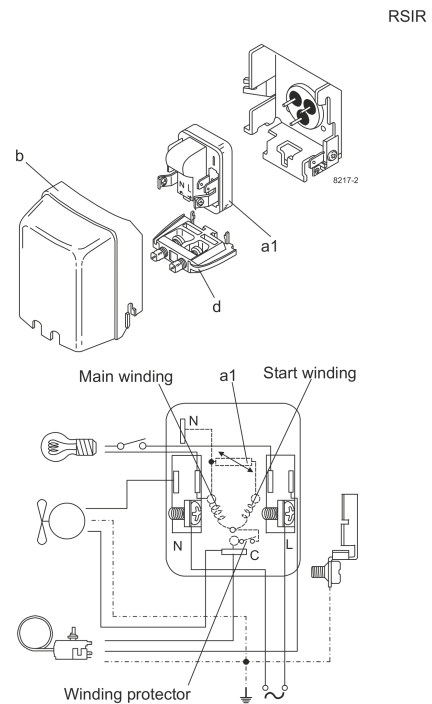
Ambient temperature range: 10 - 43°C / 50 - 109°F

Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



Components

a1 e-PTC starter (220V, 250hm, 4.8mm) 103N0050

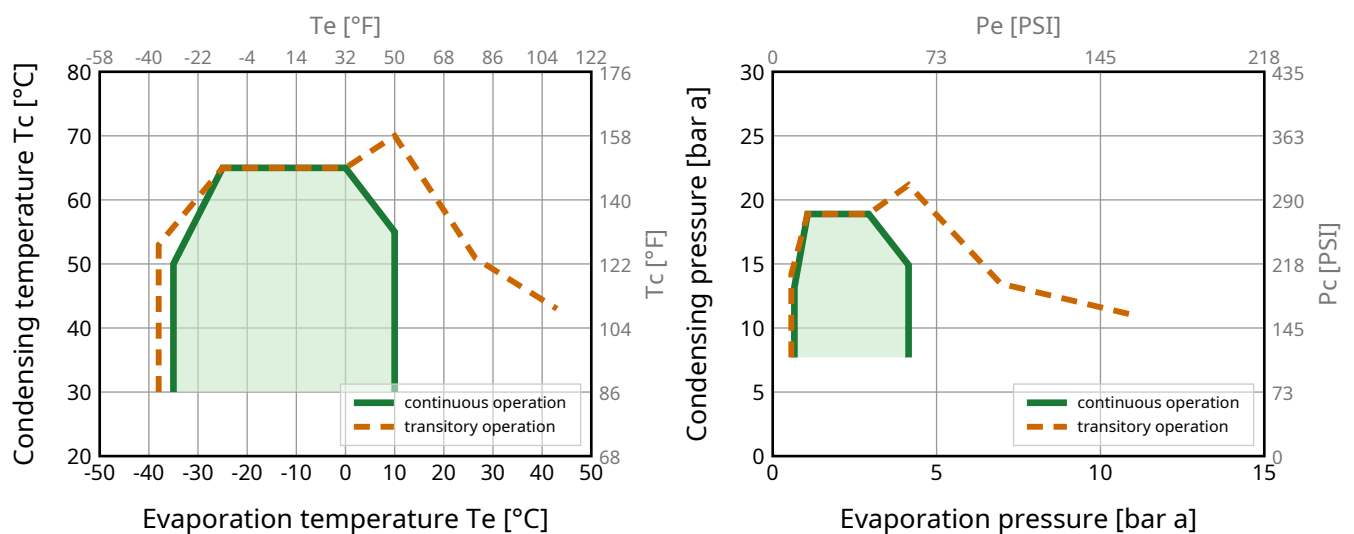
b plastic cover 103N2010

d cord relief 103N1010

Alternative components

b plastic cover 103N2011

Operation Pressure Range



Model
NLE10MF.2

Configuration 2

Sales code:
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Standard Conditions

R134a, 220 V/50 Hz, eRSIR, fan 3m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	m	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-23.3 -10	54.4 129.9	32.2 90	32.2 90	289	986	249	1.45	4.94	200	1.54	5.61	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	210	718	181	1.12	3.82	188	1.51	5.02	CECOMAF LBP
-35 -31	40 104	20 68	40 104	152	517	130	1.06	3.63	142	1.43	3.32	EN12900 LBP
-6.7 20	54.4 129.9	35 95	46.1 115	608	2073	523	1.94	6.62	313	1.89	13.23	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	471	1607	405	1.62	5.53	290	1.81	11.36	CECOMAF MBP
-10 14	45 113	20 68	45 113	537	1832	462	1.99	6.79	270	1.75	12.52	EN12900 MBP

Performance Tables

R134a, 220 V/50 Hz, eRSIR, fan 3m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	m
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-35	-31	134	458	115	0.94	3.20	143	1.43	2.89
-30	-22	194	661	166	1.17	3.98	166	1.47	4.18
-20	-4	344	1173	296	1.60	5.45	215	1.58	7.46
-10	14	556	1897	478	2.06	7.04	270	1.75	12.14
0	32	854	2913	734	2.59	8.83	330	1.96	18.84
10	50	1261	4304	1085	3.17	10.82	398	2.20	28.23

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

-35	-31	94	319	80	0.75	2.56	125	1.40	2.22
-30	-22	148	506	128	0.95	3.25	156	1.45	3.53
-20	-4	283	966	243	1.28	4.37	221	1.59	6.77
-10	14	471	1607	405	1.62	5.53	290	1.81	11.36
0	32	737	2513	633	2.02	6.88	365	2.08	17.96
10	50	1103	3764	949	2.47	8.43	447	2.40	27.33

Model

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Configuration 3

Sales code:

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Configuration

Motor configuration	eRSCR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R134a
Application	LBP+MBP
Voltage range	198-254 V
Starting torque	LST
Approvals	VDE
Starting device type	e-PTC
Run capacitor	4 μF
Start capacitor	-/-
LRA (locked rotor amps / 4s/ U(N))	10.7 A
RLA (rated load amps / 1s/ U(N))	2.15 A
Cut in current (U(N))	15.9 A

Ambient/ machine room temperatures minimum /maximum

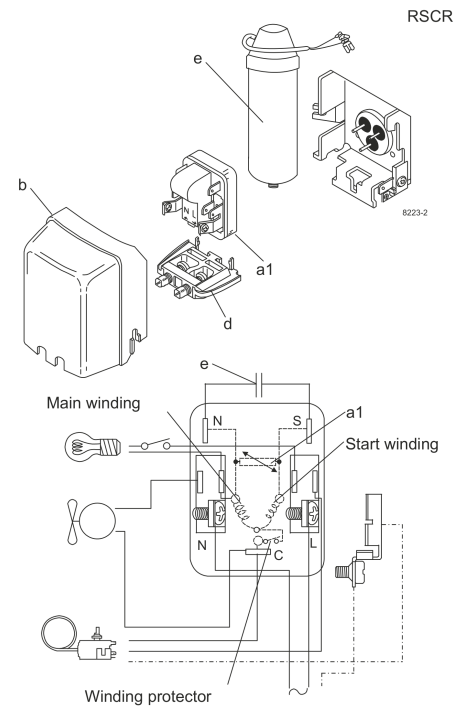
Ambient temperature range: 10 - 43°C / 50 - 109°F

Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



Components

a1 e-PTC starter (220V, 250hm, 4.8mm) 103N0050

e run capacitor (4 μ F, 4.8mm) 117-7119

b plastic cover 103N2010

d cord relief 103N1010

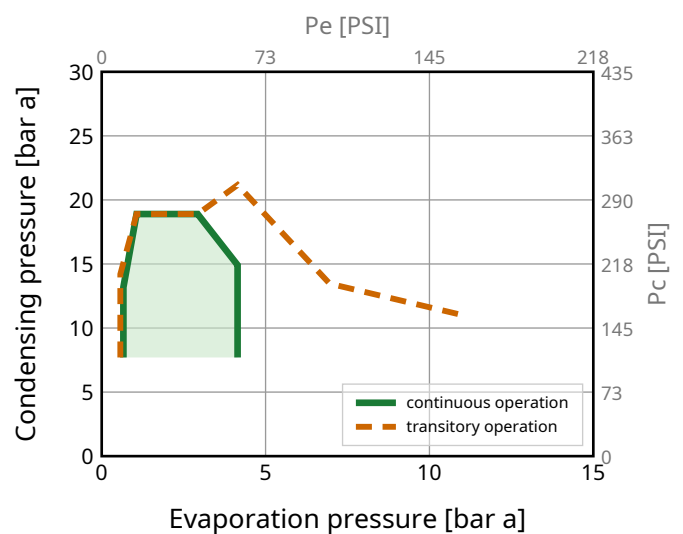
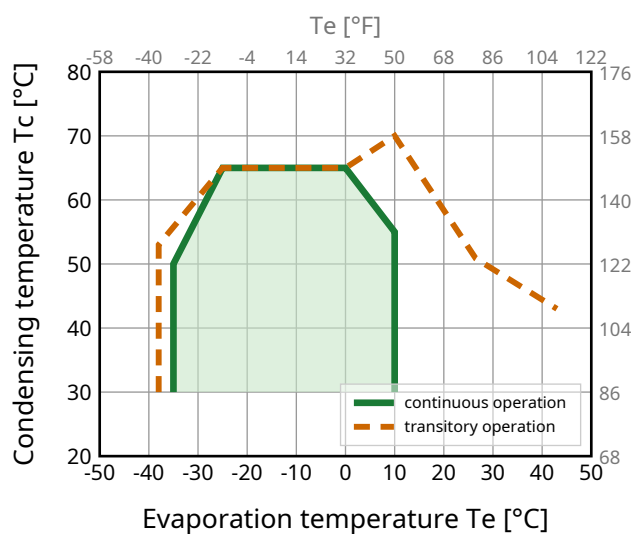
bracket for run capacitor 117-0300

screw M4x8mm 117-0301

Alternative components

b plastic cover 103N2011

Operation Pressure Range



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Configuration 3

Sales code:
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Standard Conditions

R134a, 220 V/50 Hz, eRSCR, fan 3m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	m	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-23.3 -10	54.4 129.9	32.2 90	32.2 90	289	985	248	1.52	5.20	190	1.46	5.60	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	210	717	181	1.18	4.02	178	1.43	5.01	CECOMAF LBP
-35 -31	40 104	20 68	40 104	152	517	130	1.12	3.82	135	1.36	3.31	EN12900 LBP
-6.7 20	54.4 129.9	35 95	46.1 115	607	2071	522	2.04	6.97	297	1.79	13.22	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	471	1606	405	1.71	5.83	276	1.71	11.35	CECOMAF MBP
-10 14	45 113	20 68	45 113	536	1830	461	2.10	7.15	256	1.66	12.50	EN12900 MBP

Performance Tables

R134a, 220 V/50 Hz, eRSCR, fan 3m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	m
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-35	-31	134	458	115	0.99	3.37	136	1.36	2.89
-30	-22	193	660	166	1.23	4.19	158	1.39	4.17
-20	-4	344	1172	295	1.68	5.74	204	1.50	7.45
-10	14	555	1895	478	2.17	7.41	256	1.66	12.13
0	32	853	2910	733	2.72	9.29	313	1.86	18.82
10	50	1260	4299	1084	3.34	11.39	377	2.09	28.20

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

-35	-31	93	319	80	0.79	2.70	118	1.33	2.22
-30	-22	148	505	127	1.00	3.42	148	1.37	3.52
-20	-4	283	965	243	1.35	4.60	210	1.51	6.76
-10	14	471	1606	405	1.71	5.83	276	1.71	11.35
0	32	736	2511	633	2.12	7.24	347	1.97	17.94
10	50	1102	3760	948	2.60	8.87	424	2.28	27.30

Model

NLE10MF.2

Configuration 4

Sales code:

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Configuration

Motor configuration	CSIR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R513A
Application	LBP+MBP
Voltage range	198-254 V
Starting torque	HST
Approvals	VDE
Starting device type	relay
Run capacitor	-/-
Start capacitor	80 µF
LRA (locked rotor amps / 4s/ U(N))	10.7 A
RLA (rated load amps / 1s/ U(N))	2.15 A
Cut in current (U(N))	15.9 A

Ambient/ machine room temperatures minimum /maximum

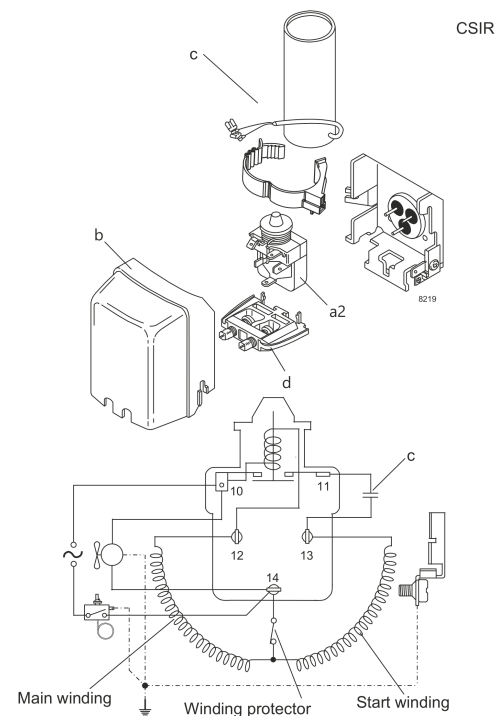
Ambient temperature range: 10 - 43°C / 50 - 109°F

Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



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Components

a2 assy. relay 117U6002

c start capacitor (80µF) 117U5015

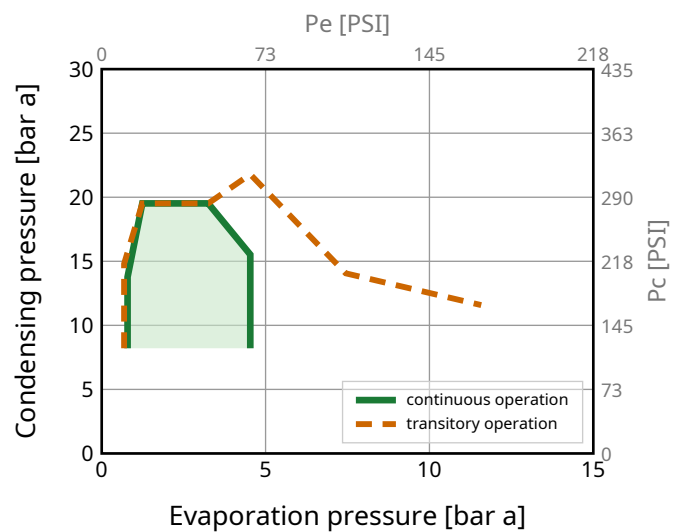
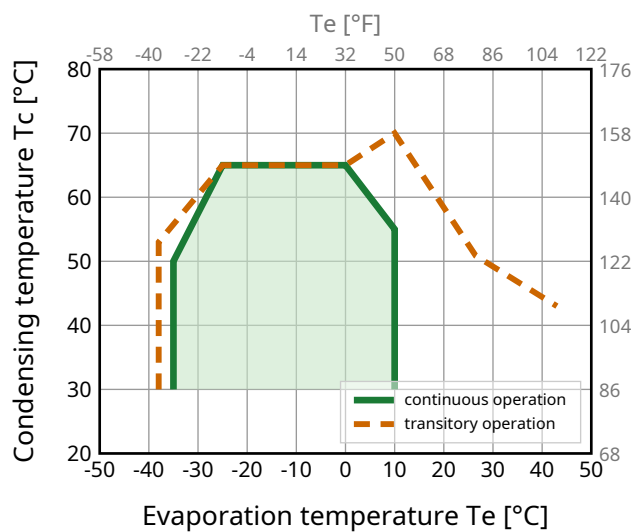
b plastic cover 103N2010

d cord relief 103N1010

Alternative components

b plastic cover 103N2011

Operation Pressure Range



Model
NLE10MF.2

Configuration 4

Sales code:
105G6187

Standard Conditions

R513A, 220 V/50 Hz, CSIR, fan 3m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	m	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-23.3 -10	54.4 129.9	32.2 90	32.2 90	321	1095	276	1.48	5.05	217	1.63	7.03	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	228	779	196	1.12	3.81	205	1.60	6.32	CECOMAF LBP
-35 -31	40 104	20 68	40 104	170	582	147	1.09	3.72	156	1.46	4.29	EN12900 LBP
-6.7 20	54.4 129.9	35 95	46.1 115	638	2178	549	1.92	6.55	332	1.97	15.91	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	490	1672	421	1.58	5.40	310	1.90	13.75	CECOMAF MBP
-10 14	45 113	20 68	45 113	559	1908	481	1.95	6.65	287	1.83	15.14	EN12900 MBP

Performance Tables

R513A, 220 V/50 Hz, CSIR, fan 3m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	m
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-35	-31	153	522	132	0.97	3.32	158	1.46	3.77
-30	-22	216	736	185	1.19	4.06	181	1.53	5.32
-20	-4	371	1266	319	1.60	5.47	232	1.68	9.21
-10	14	587	2001	504	2.05	6.98	287	1.83	14.68
0	32	886	3022	762	2.55	8.70	347	2.01	22.43
10	50	1292	4407	1111	3.11	10.62	415	2.21	33.27

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

-35	-31	107	366	92	0.77	2.64	139	1.41	2.95
-30	-22	164	561	141	0.96	3.27	171	1.50	4.54
-20	-4	302	1030	260	1.26	4.32	239	1.70	8.39
-10	14	490	1672	421	1.58	5.40	310	1.90	13.75
0	32	752	2564	646	1.95	6.65	385	2.12	21.37
10	50	1110	3789	955	2.38	8.11	467	2.36	32.17