Single
Packs

Single Pack NLE11MF.2 220-240V 50Hz CSIR

Single pack code number: **195B4170**

Position	Title	Code	Amount
1	Compressor NLE11MF.2	105G6197	1
2	Starting relay	117U6003	1
3	Starting capacitor (80µF 220V, 6.3mm)	117U5015	1
4	Cord relief	103N1010	1
5	Cover	103N2010	1
6	Bolt joint for one compressor | M6 | ø16mm	118-1917	1

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Model
NLE11MF.2

Sales code:
105G6197

Compressor Data

Refrigerant(s)	**R134a / R513A**
Refr. charge - tech. limit	**600g / 21.16oz**
Weight	**10.90 kg / 24.03lbs**
Displacement	**11.15 cm3 / 0.68cu.in**
Compressors on pallet	**80**

General – Configurations With NLE11MF.2

–	Conf. 1	Conf. 2	Conf. 3	Conf. 4	Conf. 5	Conf. 6	Conf. 7	Conf. 8	Conf. 9	Conf. 10
Motor configuration	CSIR	eRSIR	CSIR	eRSIR	eRSCR	CSIR	eRSIR	CSIR	eRSIR	eRSCR
Power supply (nominal)	220-230 V/50 Hz	220-230 V/50 Hz	220-240 V/50 Hz	220-240 V/50 Hz	220-240 V/50 Hz	220-230 V/50 Hz	220-230 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	1	1	1	1	1	1
Voltage range	198-242 V	198-242 V	198-254 V	198-254 V	198-254 V	198-242 V	198-242 V	198-254 V	198-254 V	198-254 V
Approvals	VDE, CCC	VDE, CCC	VDE, CCC	VDE, CCC	VDE, CCC	VDE, CCC	VDE, CCC	VDE, CCC	VDE, CCC	VDE, CCC
Starting torque	HST	LST	HST	LST	LST	HST	LST	HST	LST	LST
Refrigerant	R134a	R134a	R134a	R134a	R134a	R513A	R513A	R513A	R513A	R513A
Application	MBP	MBP	MBP	MBP	MBP	MBP	MBP	MBP	MBP	MBP
Hot gas defrost	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
Long interval pull down	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK

Application Notes

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

Model
NLE11MF.2

Sales code:
105G6197

Compressor Design

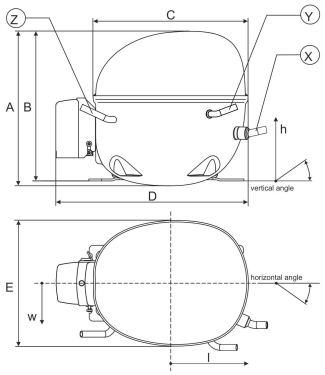
Oil type	**POE**	Winding resistance main	**8.84 Ohm**
Oil viscosity	**19,2cSt**	Winding resistance aux	**19.04 Ohm**
Oil quantity	**295 / 9.98fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**2,360 cm3 / 79.80fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**internal**		

Compressor Dimensions

Housing

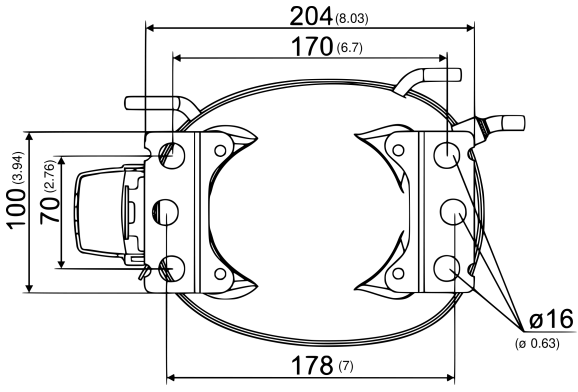
A Height	**203mm / 7.99in**
B Height	**197mm / 7.76in**
C Length shell	**205mm / 8.07in**
D Length w. cover	**254mm / 10.00in**
E Width	**166mm / 6.54in**

Find 3D Model here



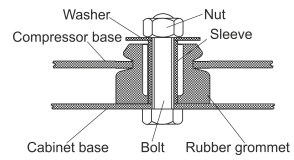
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	15°	21°	155°
Position l/h/w [mm]	132/68.5/56.7 / 5.20/2.70/2.23in	94/101.7/81 / 3.70/4.00/3.19in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

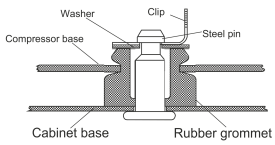


Dimensions in mm [in]

Bolt joint



Snap-on



	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
NLE11MF.2 Configuration 1

Sales code:
105G6197

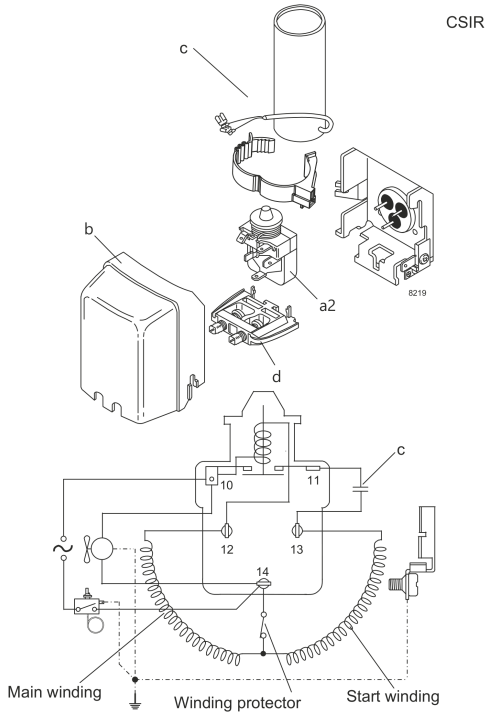
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**220-230 V/50 Hz 1~**
Refrigerant	**R134a**
Application	**MBP**
Voltage range	**198-242 V**
Starting torque	**HST**
Approvals	**VDE, CCC**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**13.12 A**
RLA (rated load amps / 1s/ U(N))	**2.29 A**
Cut in current (U(N))	**13.12 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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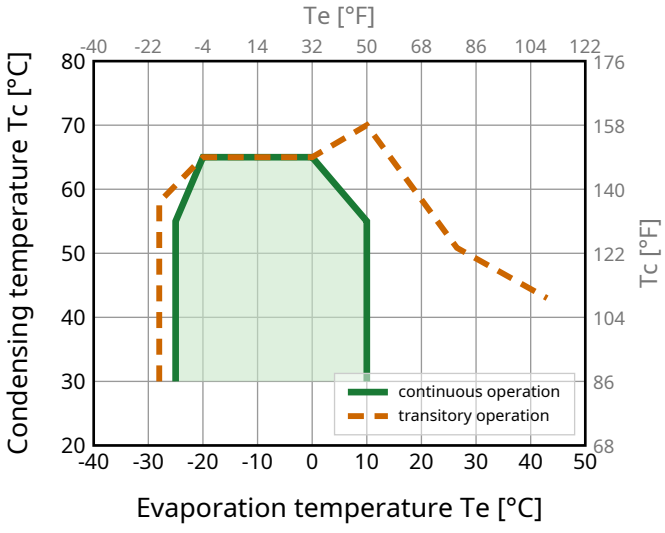
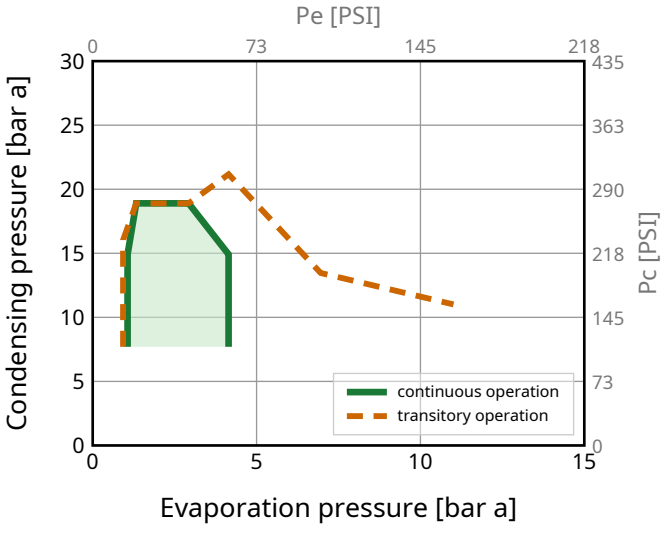
Components
a2 assy. relay 117U6003
c start capacitor (80µF) 117U5015
b plastic cover 103N2010
d cord relief 103N1010

Alternative components
b plastic cover 103N2011

Operation Pressure Range





Model
NLE11MF.2 Configuration 1

Sales code:
105G6197

Standard Conditions

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

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-6.7 20	54.4 129.9	35 95	46.1 115	**680**	2319	584	**1.88**	6.40	362	2.19	14.80	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**527**	1799	453	**1.57**	5.37	335	2.11	12.71	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**602**	2053	517	**1.91**	6.50	316	2.06	14.03	**EN12900 MBP**
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	**652**	2226	561	**1.87**	6.38	349	2.15	16.03	**ARI540 MBP**
-10 14	45 113	32 89.6	45 113	**623**	2126	536	**1.97**	6.74	316	2.06	13.61	**opt MBP 1**
-25 -13	45 113	32 89.6	45 113	**297**	1012	255	**1.34**	4.58	221	1.78	6.42	**opt MBP 2**

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	ṁ
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-25	-13	**297**	1012	255	**1.34**	4.58	221	1.78	6.42
-20	-4	**386**	1319	332	**1.55**	5.27	250	1.89	8.38
-15	5	**495**	1688	425	**1.75**	5.99	282	1.97	10.76
-10	14	**623**	2126	536	**1.97**	6.74	316	2.06	13.61
-5	23	**774**	2641	666	**2.21**	7.54	350	2.14	16.98
0	32	**949**	3238	816	**2.46**	8.41	385	2.23	20.94
5	41	**1150**	3924	989	**2.75**	9.38	418	2.35	25.54
10	50	**1380**	4707	1186	**3.07**	10.46	450	2.49	30.88

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

-25	-13	**242**	826	208	**1.08**	3.69	224	1.78	5.78
-20	-4	**319**	1089	275	**1.24**	4.24	257	1.89	7.64
-15	5	**414**	1411	356	**1.41**	4.80	294	2.00	9.93
-10	14	**527**	1799	453	**1.57**	5.37	335	2.11	12.71
-5	23	**662**	2259	569	**1.75**	5.97	378	2.24	16.04
0	32	**820**	2797	705	**1.94**	6.61	423	2.39	19.99
5	41	**1003**	3422	863	**2.14**	7.30	469	2.58	24.64
10	50	**1213**	4139	1043	**2.36**	8.05	514	2.80	30.06

Model
NLE11MF.2 Configuration 2

Sales code:
105G6197

Configuration

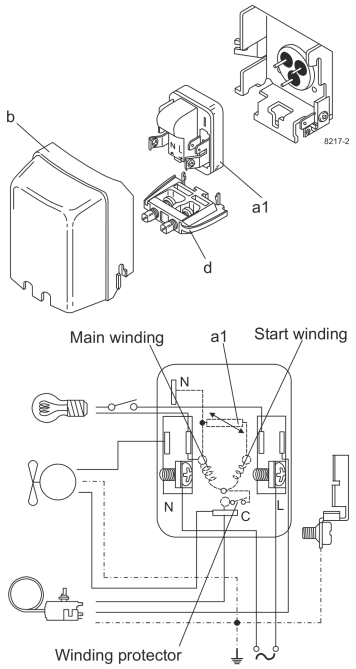
Motor configuration	**eRSIR**
Power supply (nominal)	**220-230 V/50 Hz 1~**
Refrigerant	**R134a**
Application	**MBP**
Voltage range	**198-242 V**
Starting torque	**LST**
Approvals	**VDE, CCC**
Starting device type	**e-PTC**
Run capacitor	**-/-**
Start capacitor	**-/-**
LRA (locked rotor amps / 4s/ U(N))	**13.12 A**
RLA (rated load amps / 1s/ U(N))	**2.29 A**
Cut in current (U(N))	**13.12 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

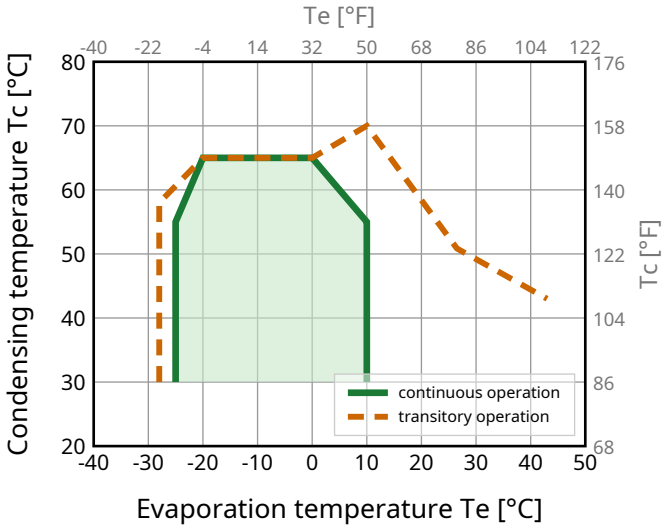
RSIR

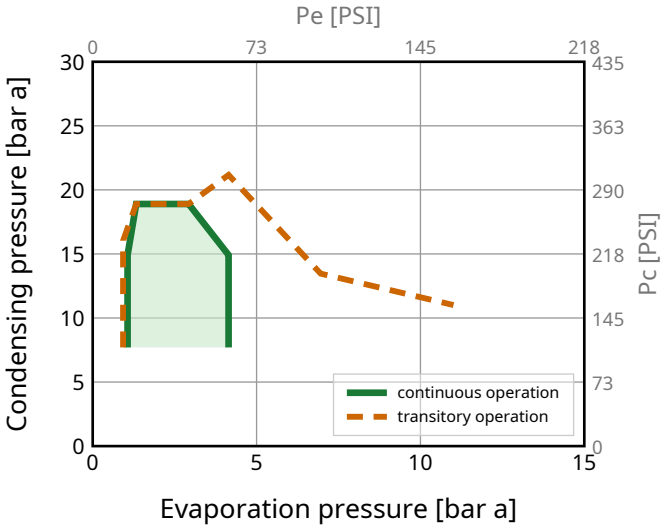


Components
a1 e-PTC starter (220V, 25Ohm, 4.8mm) 103N0050
b plastic cover 103N2010
d cord relief 103N1010

Alternative components
b plastic cover 103N2011

Operation Pressure Range





Model
NLE11MF.2 Configuration 2

Sales code:
105G6197

Standard Conditions

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

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-6.7 20	54.4 129.9	35 95	46.1 115	**680**	2319	584	**1.88**	6.40	362	2.19	14.80	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**527**	1799	453	**1.57**	5.37	335	2.11	12.71	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**602**	2053	517	**1.91**	6.50	316	2.06	14.03	**EN12900 MBP**
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	**652**	2226	561	**1.87**	6.38	349	2.15	16.03	**ARI540 MBP**
-10 14	45 113	32 89.6	45 113	**623**	2126	536	**1.97**	6.74	316	2.06	13.61	**opt MBP 1**
-25 -13	45 113	32 89.6	45 113	**297**	1012	255	**1.34**	4.58	221	1.78	6.42	**opt MBP 2**

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	ṁ
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-25	-13	**297**	1012	255	**1.34**	4.58	221	1.78	6.42
-20	-4	**386**	1319	332	**1.55**	5.27	250	1.89	8.38
-15	5	**495**	1688	425	**1.75**	5.99	282	1.97	10.76
-10	14	**623**	2126	536	**1.97**	6.74	316	2.06	13.61
-5	23	**774**	2641	666	**2.21**	7.54	350	2.14	16.98
0	32	**949**	3238	816	**2.46**	8.41	385	2.23	20.94
5	41	**1150**	3924	989	**2.75**	9.38	418	2.35	25.54
10	50	**1380**	4707	1186	**3.07**	10.46	450	2.49	30.88

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

-25	-13	**242**	826	208	**1.08**	3.69	224	1.78	5.78
-20	-4	**319**	1089	275	**1.24**	4.24	257	1.89	7.64
-15	5	**414**	1411	356	**1.41**	4.80	294	2.00	9.93
-10	14	**527**	1799	453	**1.57**	5.37	335	2.11	12.71
-5	23	**662**	2259	569	**1.75**	5.97	378	2.24	16.04
0	32	**820**	2797	705	**1.94**	6.61	423	2.39	19.99
5	41	**1003**	3422	863	**2.14**	7.30	469	2.58	24.64
10	50	**1213**	4139	1043	**2.36**	8.05	514	2.80	30.06

Model
NLE11MF.2 Configuration 3

Sales code:
105G6197

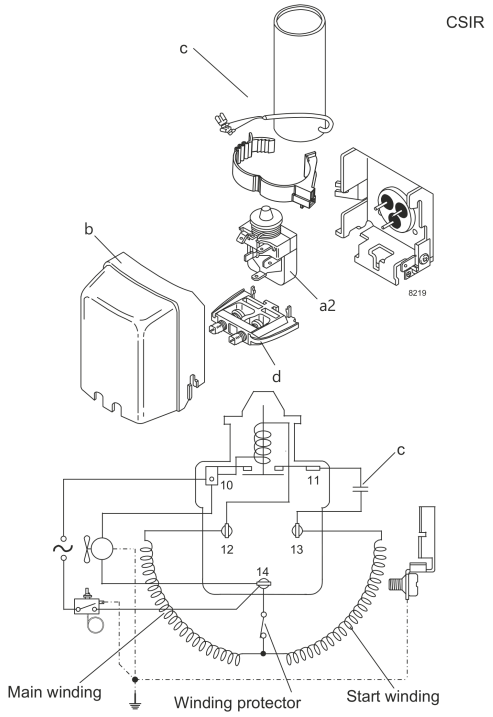
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R134a**
Application	**MBP**
Voltage range	**198-254 V**
Starting torque	**HST**
Approvals	**VDE, CCC**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**13.12 A**
RLA (rated load amps / 1s/ U(N))	**2.29 A**
Cut in current (U(N))	**13.12 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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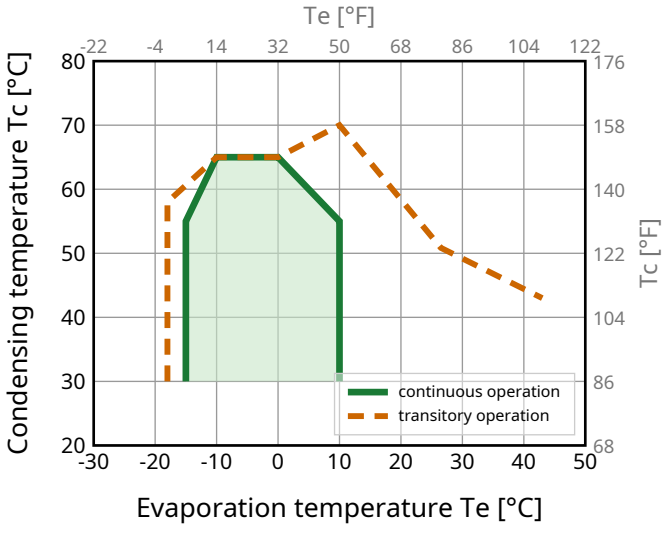
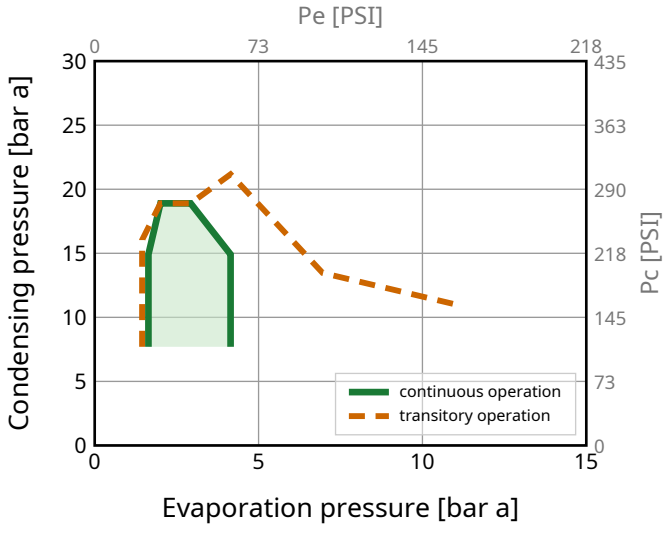
Components
a2 assy. relay 117U6003
c start capacitor (80µF) 117U5015
b plastic cover 103N2010
d cord relief 103N1010

Alternative components
b plastic cover 103N2011

Operation Pressure Range





Model

NLE11MF.2 Configuration 3

Sales code:

105G6197

Standard Conditions

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

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-6.7 20	54.4 129.9	35 95	46.1 115	**680**	2319	584	**1.88**	6.40	362	2.19	14.80	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**527**	1799	453	**1.57**	5.37	335	2.11	12.71	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**602**	2053	517	**1.91**	6.50	316	2.06	14.03	**EN12900 MBP**
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	**652**	2226	561	**1.87**	6.38	349	2.15	16.03	**ARI540 MBP**
-10 14	45 113	32 89.6	45 113	**623**	2126	536	**1.97**	6.74	316	2.06	13.61	**opt MBP 1**
-25 -13	45 113	32 89.6	45 113	**297**	1012	255	**1.34**	4.58	221	1.78	6.42	**opt MBP 2**

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	ṁ
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-15	5	**495**	1688	425	**1.75**	5.99	282	1.97	10.76
-10	14	**623**	2126	536	**1.97**	6.74	316	2.06	13.61
-5	23	**774**	2641	666	**2.21**	7.54	350	2.14	16.98
0	32	**949**	3238	816	**2.46**	8.41	385	2.23	20.94
5	41	**1150**	3924	989	**2.75**	9.38	418	2.35	25.54
10	50	**1380**	4707	1186	**3.07**	10.46	450	2.49	30.88

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

-15	5	**414**	1411	356	**1.41**	4.80	294	2.00	9.93
-10	14	**527**	1799	453	**1.57**	5.37	335	2.11	12.71
-5	23	**662**	2259	569	**1.75**	5.97	378	2.24	16.04
0	32	**820**	2797	705	**1.94**	6.61	423	2.39	19.99
5	41	**1003**	3422	863	**2.14**	7.30	469	2.58	24.64
10	50	**1213**	4139	1043	**2.36**	8.05	514	2.80	30.06

Model
NLE11MF.2 Configuration 4

Sales code:
105G6197

Configuration

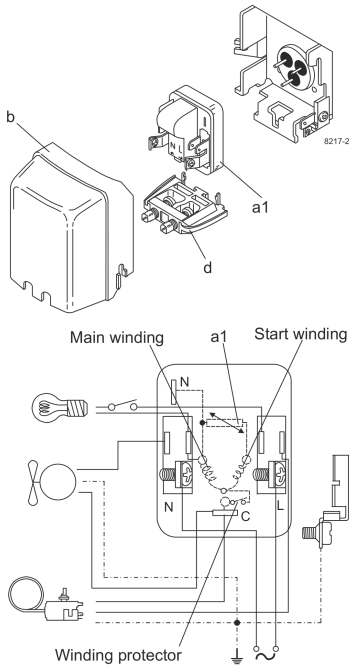
Motor configuration	**eRSIR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R134a**
Application	**MBP**
Voltage range	**198-254 V**
Starting torque	**LST**
Approvals	**VDE, CCC**
Starting device type	**e-PTC**
Run capacitor	**-/-**
Start capacitor	**-/-**
LRA (locked rotor amps / 4s/ U(N))	**13.12 A**
RLA (rated load amps / 1s/ U(N))	**2.29 A**
Cut in current (U(N))	**13.12 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

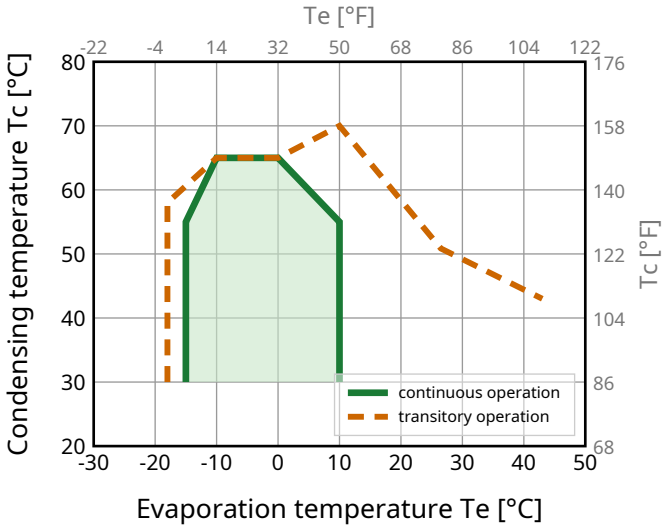
RSIR

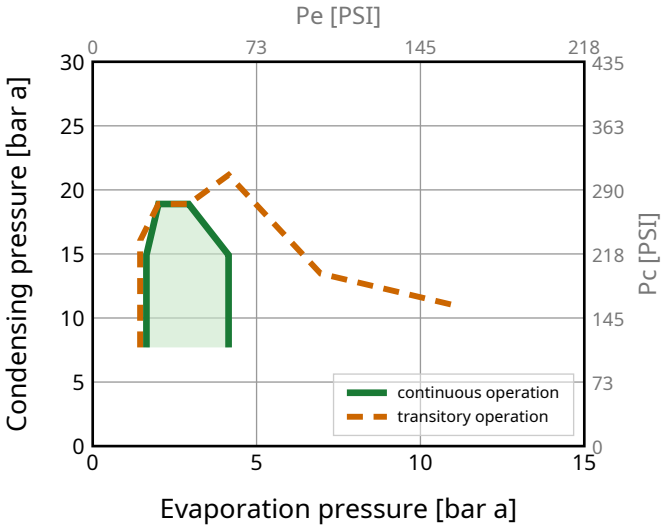


Components
a1 e-PTC starter (220V, 25Ohm, 4.8mm) 103N0050
b plastic cover 103N2010
d cord relief 103N1010

Alternative components
b plastic cover 103N2011

Operation Pressure Range





Model
NLE11MF.2 Configuration 4

Sales code:
105G6197

Standard Conditions

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

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-6.7 20	54.4 129.9	35 95	46.1 115	**680**	2319	584	**1.88**	6.40	362	2.19	14.80	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**527**	1799	453	**1.57**	5.37	335	2.11	12.71	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**602**	2053	517	**1.91**	6.50	316	2.06	14.03	**EN12900 MBP**
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	**652**	2226	561	**1.87**	6.38	349	2.15	16.03	**ARI540 MBP**
-10 14	45 113	32 89.6	45 113	**623**	2126	536	**1.97**	6.74	316	2.06	13.61	**opt MBP 1**
-25 -13	45 113	32 89.6	45 113	**297**	1012	255	**1.34**	4.58	221	1.78	6.42	**opt MBP 2**

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	ṁ
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-15	5	**495**	1688	425	**1.75**	5.99	282	1.97	10.76
-10	14	**623**	2126	536	**1.97**	6.74	316	2.06	13.61
-5	23	**774**	2641	666	**2.21**	7.54	350	2.14	16.98
0	32	**949**	3238	816	**2.46**	8.41	385	2.23	20.94
5	41	**1150**	3924	989	**2.75**	9.38	418	2.35	25.54
10	50	**1380**	4707	1186	**3.07**	10.46	450	2.49	30.88

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

-15	5	**414**	1411	356	**1.41**	4.80	294	2.00	9.93
-10	14	**527**	1799	453	**1.57**	5.37	335	2.11	12.71
-5	23	**662**	2259	569	**1.75**	5.97	378	2.24	16.04
0	32	**820**	2797	705	**1.94**	6.61	423	2.39	19.99
5	41	**1003**	3422	863	**2.14**	7.30	469	2.58	24.64
10	50	**1213**	4139	1043	**2.36**	8.05	514	2.80	30.06

Model
NLE11MF.2 Configuration 5

Sales code:
105G6197

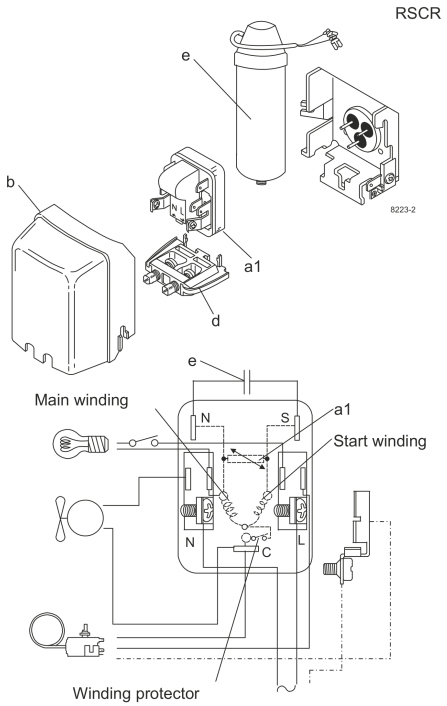
Configuration

Motor configuration	**eRSCR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R134a**
Application	**MBP**
Voltage range	**198-254 V**
Starting torque	**LST**
Approvals	**VDE, CCC**
Starting device type	**e-PTC**
Run capacitor	**4 µF**
Start capacitor	**-/-**
LRA (locked rotor amps / 4s/ U(N))	**13.12 A**
RLA (rated load amps / 1s/ U(N))	**2.29 A**
Cut in current (U(N))	**13.12 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

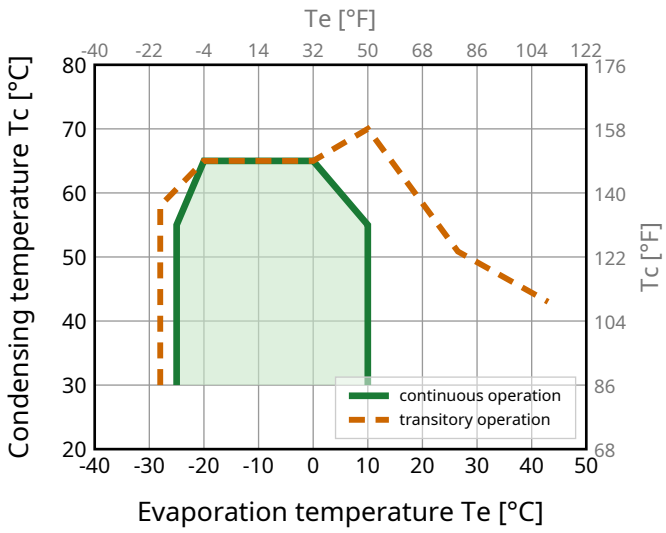
Electrical Accessories / Wiring Diagram

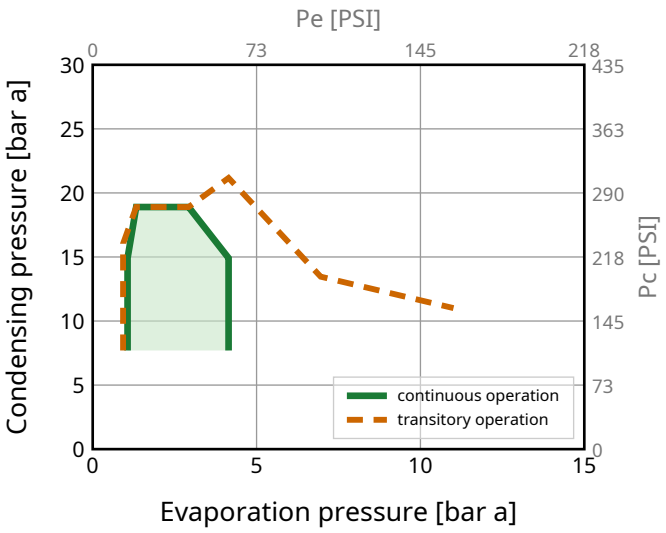


Components
a1 e-PTC starter (220V, 25Ohm, 4.8mm) 103N0050
e run capacitor (4µF, 4.8mm) 117-7119
b plastic cover 103N2010
d cord relief 103N1010
bracket for run capacitor 117-0300
screw M4x8mm 117-0301

Alternative components
b plastic cover 103N2011

Operation Pressure Range





Model

NLE11MF.2 Configuration 5

Sales code:

105G6197

Standard Conditions

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

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-6.7 20	54.4 129.9	35 95	46.1 115	**689**	2350	592	**2.02**	6.90	341	2.06	14.99	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**534**	1823	459	**1.70**	5.79	315	1.99	12.88	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**610**	2080	524	**2.05**	7.00	297	1.93	14.22	**EN12900 MBP**
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	**661**	2255	568	**2.02**	6.88	328	2.02	16.24	**ARI540 MBP**
-10 14	45 113	32 89.6	45 113	**631**	2154	543	**2.13**	7.26	297	1.93	13.79	**opt MBP 1**
-25 -13	45 113	32 89.6	45 113	**301**	1026	259	**1.45**	4.93	208	1.68	6.50	**opt MBP 2**

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	ṁ
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-25	-13	**301**	1026	259	**1.45**	4.93	208	1.68	6.50
-20	-4	**392**	1336	337	**1.67**	5.68	235	1.77	8.49
-15	5	**501**	1710	431	**1.89**	6.45	265	1.86	10.90
-10	14	**631**	2154	543	**2.13**	7.26	297	1.93	13.79
-5	23	**784**	2675	674	**2.38**	8.12	330	2.01	17.21
0	32	**961**	3280	827	**2.65**	9.06	362	2.10	21.21
5	41	**1165**	3976	1002	**2.96**	10.10	394	2.21	25.88
10	50	**1398**	4769	1202	**3.30**	11.27	423	2.34	31.29

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

-25	-13	**245**	837	211	**1.17**	3.97	211	1.68	5.85
-20	-4	**324**	1104	278	**1.34**	4.57	241	1.78	7.74
-15	5	**419**	1430	360	**1.52**	5.17	276	1.88	10.06
-10	14	**534**	1823	459	**1.70**	5.79	315	1.99	12.88
-5	23	**671**	2288	577	**1.89**	6.43	356	2.11	16.25
0	32	**831**	2834	714	**2.09**	7.12	398	2.25	20.26
5	41	**1016**	3468	874	**2.30**	7.86	441	2.42	24.96
10	50	**1229**	4194	1057	**2.54**	8.68	483	2.63	30.46

Model
NLE11MF.2 Configuration 6

Sales code:
105G6197

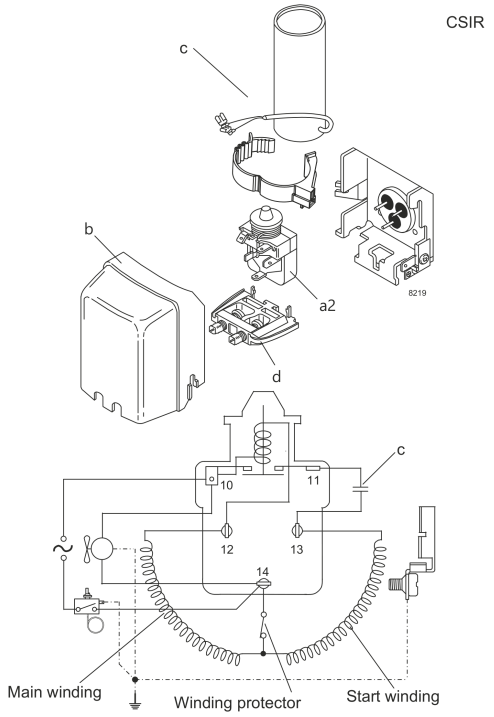
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**220-230 V/50 Hz 1~**
Refrigerant	**R513A**
Application	**MBP**
Voltage range	**198-242 V**
Starting torque	**HST**
Approvals	**VDE, CCC**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**13.12 A**
RLA (rated load amps / 1s/ U(N))	**2.29 A**
Cut in current (U(N))	**13.12 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

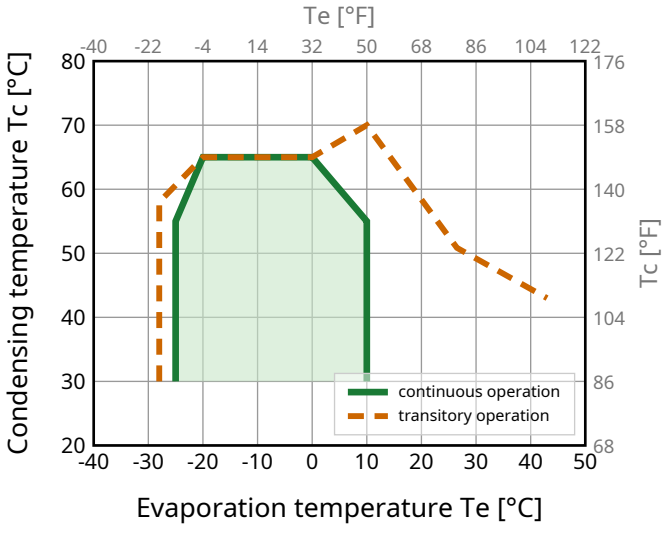


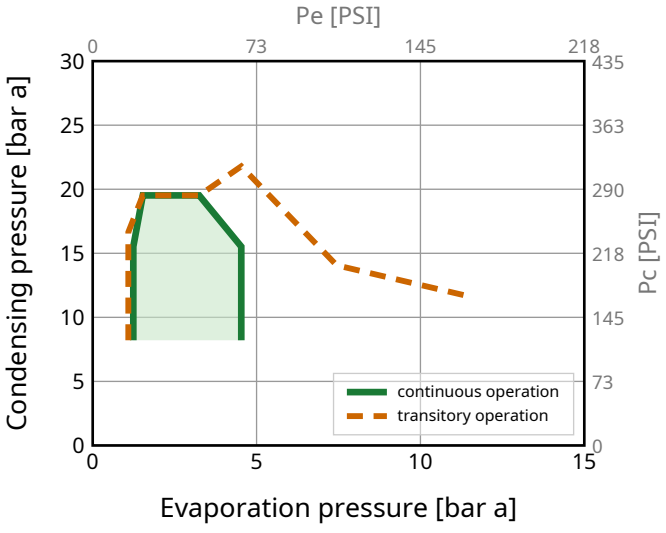
View full size

Components
a2 assy. relay 117U6003
c start capacitor (80µF) 117U5015
b plastic cover 103N2010
d cord relief 103N1010

Alternative components
b plastic cover 103N2011

Operation Pressure Range





Model Sales code:

NLE11MF.2 Configuration 6 **105G6197**

Standard Conditions

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

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-6.7 20	54.4 129.9	35 95	46.1 115	**712**	2429	612	**1.85**	6.32	384	2.29	17.75	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**546**	1864	470	**1.53**	5.22	357	2.19	15.32	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**625**	2133	538	**1.86**	6.36	336	2.12	16.93	**EN12900 MBP**
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	**668**	2280	575	**1.81**	6.17	370	2.23	19.24	**ARI540 MBP**
-10 14	45 113	32 89.6	45 113	**656**	2238	564	**1.96**	6.67	336	2.12	16.42	**opt MBP 1**
-25 -13	45 113	32 89.6	45 113	**322**	1100	277	**1.35**	4.61	238	1.86	7.98	**opt MBP 2**

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	ṁ
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-25	-13	**322**	1100	277	**1.35**	4.61	238	1.86	7.98
-20	-4	**415**	1416	357	**1.55**	5.28	268	1.93	10.30
-15	5	**526**	1793	452	**1.75**	5.96	301	2.02	13.10
-10	14	**656**	2238	564	**1.96**	6.67	336	2.12	16.42
-5	23	**808**	2757	695	**2.18**	7.43	371	2.23	20.33
0	32	**983**	3355	846	**2.42**	8.27	406	2.36	24.91
5	41	**1184**	4039	1018	**2.69**	9.20	439	2.48	30.22
10	50	**1411**	4815	1214	**3.00**	10.24	470	2.60	36.35

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

-25	-13	**260**	889	224	**1.07**	3.66	243	1.87	7.21
-20	-4	**338**	1155	291	**1.22**	4.17	277	1.95	9.40
-15	5	**433**	1477	372	**1.38**	4.69	315	2.06	12.09
-10	14	**546**	1864	470	**1.53**	5.22	357	2.19	15.32
-5	23	**680**	2319	584	**1.69**	5.78	401	2.35	19.18
0	32	**835**	2850	718	**1.87**	6.37	447	2.51	23.75
5	41	**1015**	3462	873	**2.06**	7.02	493	2.69	29.10
10	50	**1220**	4162	1049	**2.27**	7.73	539	2.87	35.34

Model
NLE11MF.2 Configuration 7

Sales code:
105G6197

Configuration

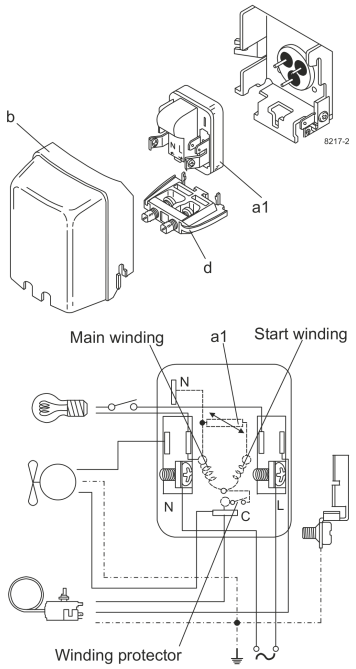
Motor configuration	**eRSIR**
Power supply (nominal)	**220-230 V/50 Hz 1~**
Refrigerant	**R513A**
Application	**MBP**
Voltage range	**198-242 V**
Starting torque	**LST**
Approvals	**VDE, CCC**
Starting device type	**e-PTC**
Run capacitor	**-/-**
Start capacitor	**-/-**
LRA (locked rotor amps / 4s/ U(N))	**13.12 A**
RLA (rated load amps / 1s/ U(N))	**2.29 A**
Cut in current (U(N))	**13.12 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

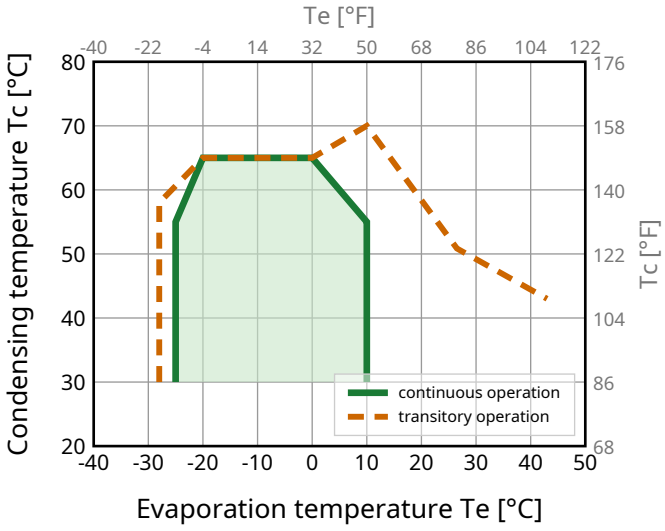
RSIR

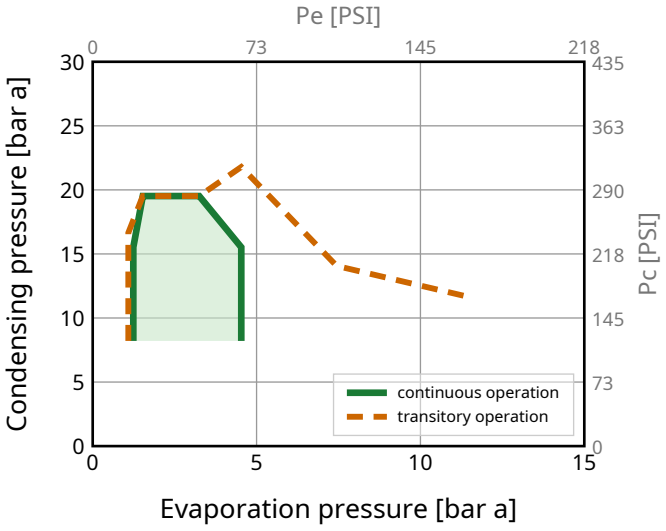


Components
a1 e-PTC starter (220V, 25Ohm, 4.8mm) 103N0050
b plastic cover 103N2010
d cord relief 103N1010

Alternative components
b plastic cover 103N2011

Operation Pressure Range





Model
NLE11MF.2 Configuration 7

Sales code:
105G6197

Standard Conditions

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

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-6.7 20	54.4 129.9	35 95	46.1 115	**712**	2429	612	**1.85**	6.32	384	2.29	17.75	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**546**	1864	470	**1.53**	5.22	357	2.19	15.32	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**625**	2133	538	**1.86**	6.36	336	2.12	16.93	**EN12900 MBP**
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	**668**	2280	575	**1.81**	6.17	370	2.23	19.24	**ARI540 MBP**
-10 14	45 113	32 89.6	45 113	**656**	2238	564	**1.96**	6.67	336	2.12	16.42	**opt MBP 1**
-25 -13	45 113	32 89.6	45 113	**322**	1100	277	**1.35**	4.61	238	1.86	7.98	**opt MBP 2**

Performance Tables

R513A, 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	ṁ
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-25	-13	**322**	1100	277	**1.35**	4.61	238	1.86	7.98
-20	-4	**415**	1416	357	**1.55**	5.28	268	1.93	10.30
-15	5	**526**	1793	452	**1.75**	5.96	301	2.02	13.10
-10	14	**656**	2238	564	**1.96**	6.67	336	2.12	16.42
-5	23	**808**	2757	695	**2.18**	7.43	371	2.23	20.33
0	32	**983**	3355	846	**2.42**	8.27	406	2.36	24.91
5	41	**1184**	4039	1018	**2.69**	9.20	439	2.48	30.22
10	50	**1411**	4815	1214	**3.00**	10.24	470	2.60	36.35

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

-25	-13	**260**	889	224	**1.07**	3.66	243	1.87	7.21
-20	-4	**338**	1155	291	**1.22**	4.17	277	1.95	9.40
-15	5	**433**	1477	372	**1.38**	4.69	315	2.06	12.09
-10	14	**546**	1864	470	**1.53**	5.22	357	2.19	15.32
-5	23	**680**	2319	584	**1.69**	5.78	401	2.35	19.18
0	32	**835**	2850	718	**1.87**	6.37	447	2.51	23.75
5	41	**1015**	3462	873	**2.06**	7.02	493	2.69	29.10
10	50	**1220**	4162	1049	**2.27**	7.73	539	2.87	35.34

Model
NLE11MF.2 Configuration 8

Sales code:
105G6197

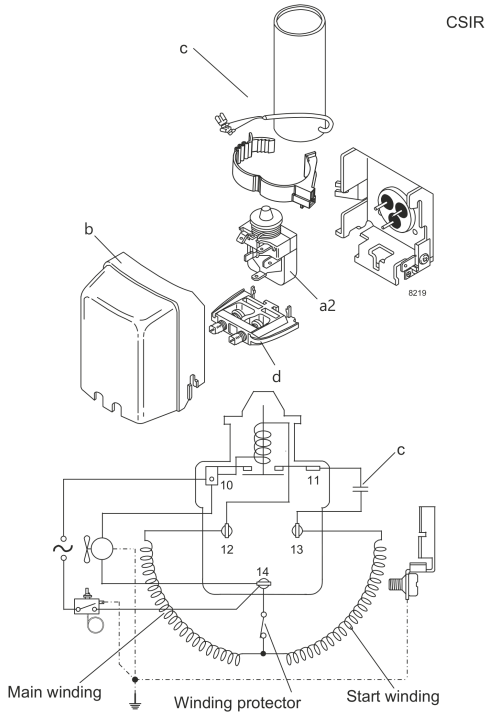
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R513A**
Application	**MBP**
Voltage range	**198-254 V**
Starting torque	**HST**
Approvals	**VDE, CCC**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**13.12 A**
RLA (rated load amps / 1s/ U(N))	**2.29 A**
Cut in current (U(N))	**13.12 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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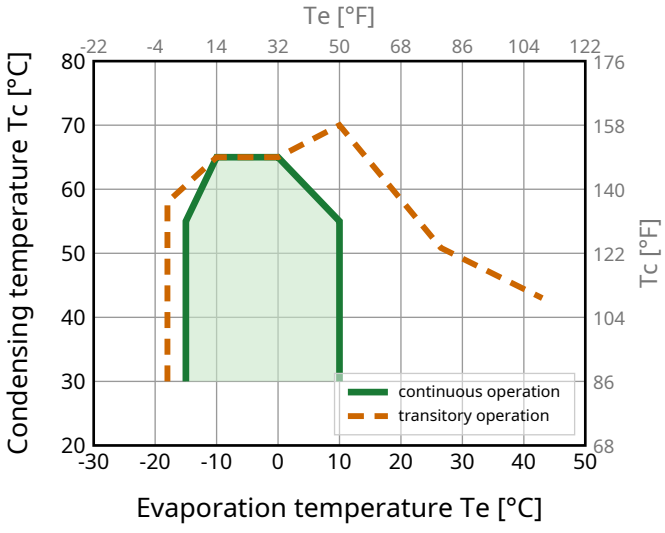
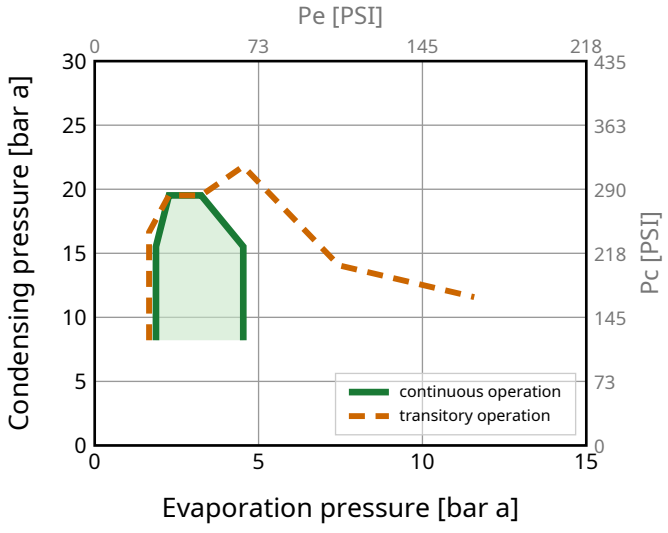
Components
a2 assy. relay 117U6003
c start capacitor (80µF) 117U5015
b plastic cover 103N2010
d cord relief 103N1010

Alternative components
b plastic cover 103N2011

Operation Pressure Range





Model
NLE11MF.2 Configuration 8

Sales code:
105G6197

Standard Conditions

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

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-6.7 20	54.4 129.9	35 95	46.1 115	**712**	2429	612	**1.85**	6.32	384	2.29	17.75	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**546**	1864	470	**1.53**	5.22	357	2.19	15.32	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**625**	2133	538	**1.86**	6.36	336	2.12	16.93	**EN12900 MBP**
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	**668**	2280	575	**1.81**	6.17	370	2.23	19.24	**ARI540 MBP**
-10 14	45 113	32 89.6	45 113	**656**	2238	564	**1.96**	6.67	336	2.12	16.42	**opt MBP 1**
-25 -13	45 113	32 89.6	45 113	**322**	1100	277	**1.35**	4.61	238	1.86	7.98	**opt MBP 2**

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	ṁ
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-15	5	**526**	1793	452	**1.75**	5.96	301	2.02	13.10
-10	14	**656**	2238	564	**1.96**	6.67	336	2.12	16.42
-5	23	**808**	2757	695	**2.18**	7.43	371	2.23	20.33
0	32	**983**	3355	846	**2.42**	8.27	406	2.36	24.91
5	41	**1184**	4039	1018	**2.69**	9.20	439	2.48	30.22
10	50	**1411**	4815	1214	**3.00**	10.24	470	2.60	36.35

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

-15	5	**433**	1477	372	**1.38**	4.69	315	2.06	12.09
-10	14	**546**	1864	470	**1.53**	5.22	357	2.19	15.32
-5	23	**680**	2319	584	**1.69**	5.78	401	2.35	19.18
0	32	**835**	2850	718	**1.87**	6.37	447	2.51	23.75
5	41	**1015**	3462	873	**2.06**	7.02	493	2.69	29.10
10	50	**1220**	4162	1049	**2.27**	7.73	539	2.87	35.34

Model
NLE11MF.2 Configuration 9

Sales code:
105G6197

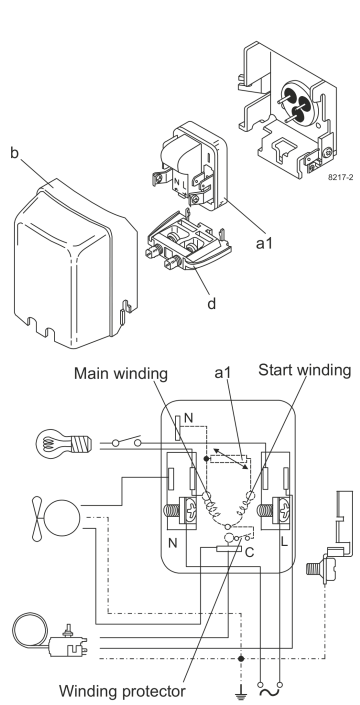
Configuration

Motor configuration	**eRSIR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R513A**
Application	**MBP**
Voltage range	**198-254 V**
Starting torque	**LST**
Approvals	**VDE, CCC**
Starting device type	**e-PTC**
Run capacitor	**-/-**
Start capacitor	**-/-**
LRA (locked rotor amps / 4s/ U(N))	**13.12 A**
RLA (rated load amps / 1s/ U(N))	**2.29 A**
Cut in current (U(N))	**13.12 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

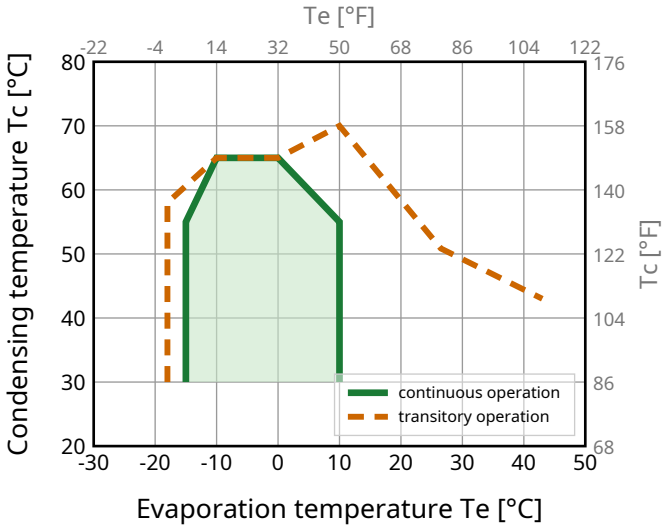
Electrical Accessories / Wiring Diagram

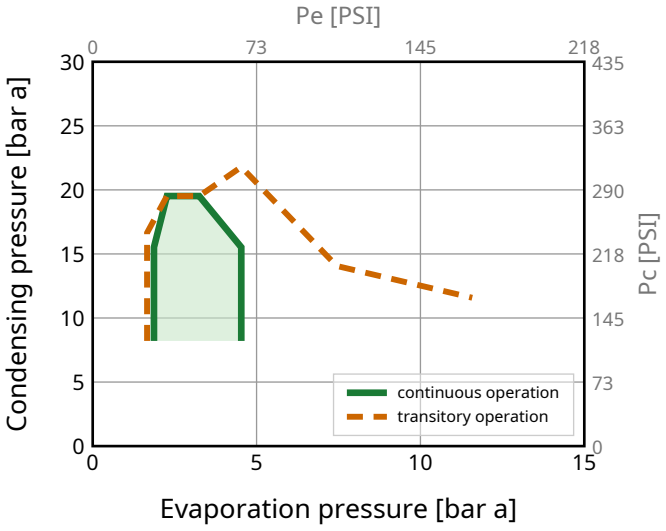


Components
a1 e-PTC starter (220V, 25Ohm, 4.8mm) 103N0050
b plastic cover 103N2010
d cord relief 103N1010

Alternative components
b plastic cover 103N2011

Operation Pressure Range





Model

NLE11MF.2 Configuration 9

Sales code:

105G6197

Standard Conditions

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

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-6.7 20	54.4 129.9	35 95	46.1 115	**712**	2429	612	**1.85**	6.32	384	2.29	17.75	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**546**	1864	470	**1.53**	5.22	357	2.19	15.32	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**625**	2133	538	**1.86**	6.36	336	2.12	16.93	**EN12900 MBP**
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	**668**	2280	575	**1.81**	6.17	370	2.23	19.24	**ARI540 MBP**
-10 14	45 113	32 89.6	45 113	**656**	2238	564	**1.96**	6.67	336	2.12	16.42	**opt MBP 1**
-25 -13	45 113	32 89.6	45 113	**322**	1100	277	**1.35**	4.61	238	1.86	7.98	**opt MBP 2**

Performance Tables

R513A, 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	ṁ
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-15	5	**526**	1793	452	**1.75**	5.96	301	2.02	13.10
-10	14	**656**	2238	564	**1.96**	6.67	336	2.12	16.42
-5	23	**808**	2757	695	**2.18**	7.43	371	2.23	20.33
0	32	**983**	3355	846	**2.42**	8.27	406	2.36	24.91
5	41	**1184**	4039	1018	**2.69**	9.20	439	2.48	30.22
10	50	**1411**	4815	1214	**3.00**	10.24	470	2.60	36.35

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

-15	5	**433**	1477	372	**1.38**	4.69	315	2.06	12.09
-10	14	**546**	1864	470	**1.53**	5.22	357	2.19	15.32
-5	23	**680**	2319	584	**1.69**	5.78	401	2.35	19.18
0	32	**835**	2850	718	**1.87**	6.37	447	2.51	23.75
5	41	**1015**	3462	873	**2.06**	7.02	493	2.69	29.10
10	50	**1220**	4162	1049	**2.27**	7.73	539	2.87	35.34

Model
NLE11MF.2 Configuration 10

Sales code:
105G6197

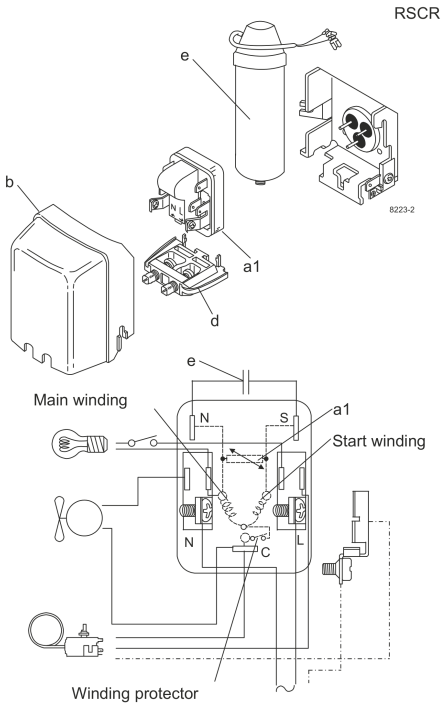
Configuration

Motor configuration	**eRSCR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R513A**
Application	**MBP**
Voltage range	**198-254 V**
Starting torque	**LST**
Approvals	**VDE, CCC**
Starting device type	**e-PTC**
Run capacitor	**4 µF**
Start capacitor	**-/-**
LRA (locked rotor amps / 4s/ U(N))	**13.12 A**
RLA (rated load amps / 1s/ U(N))	**2.29 A**
Cut in current (U(N))	**13.12 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

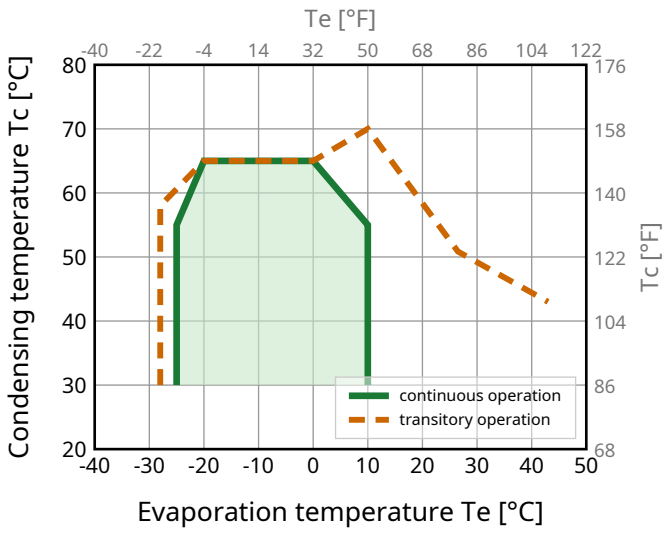
Electrical Accessories / Wiring Diagram

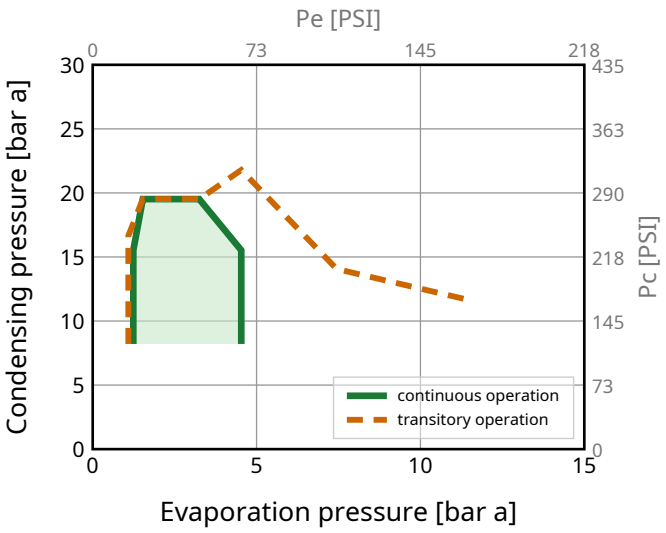


Components
a1 e-PTC starter (220V, 25Ohm, 4.8mm) 103N0050
e run capacitor (4µF, 4.8mm) 117-7119
b plastic cover 103N2010
d cord relief 103N1010
bracket for run capacitor 117-0300
screw M4x8mm 117-0301

Alternative components
b plastic cover 103N2011

Operation Pressure Range





Model

NLE11MF.2 Configuration 10

Sales code:

105G6197

Standard Conditions

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

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-6.7 20	54.4 129.9	35 95	46.1 115	**721**	2461	620	**2.00**	6.82	361	1.96	17.99	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**554**	1889	476	**1.65**	5.64	335	1.86	15.53	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**634**	2162	545	**2.01**	6.86	315	1.79	17.16	**EN12900 MBP**
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	**677**	2311	582	**1.95**	6.66	347	1.91	19.50	**ARI540 MBP**
-10 14	45 113	32 89.6	45 113	**665**	2268	572	**2.11**	7.20	315	1.79	16.64	**opt MBP 1**
-25 -13	45 113	32 89.6	45 113	**327**	1115	281	**1.46**	4.97	224	1.51	8.08	**opt MBP 2**

Performance Tables

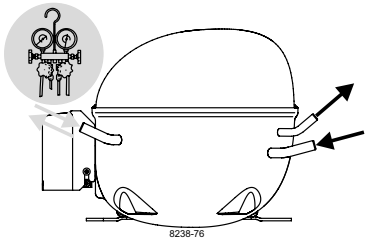
R513A, 220 V/50 Hz, eRSCR, fan 3m/s

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

pe		Cooling capacity			COP	EER	P	I	ṁ
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-25	-13	**327**	1115	281	**1.46**	4.97	224	1.51	8.08
-20	-4	**421**	1435	362	**1.67**	5.69	252	1.59	10.44
-15	5	**533**	1817	458	**1.88**	6.43	283	1.68	13.27
-10	14	**665**	2268	572	**2.11**	7.20	315	1.79	16.64
-5	23	**819**	2794	704	**2.35**	8.03	348	1.91	20.61
0	32	**996**	3400	857	**2.62**	8.93	381	2.03	25.24
5	41	**1200**	4094	1032	**2.91**	9.92	412	2.16	30.62
10	50	**1430**	4881	1230	**3.24**	11.05	442	2.28	36.84

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

-25	-13	**264**	901	227	**1.16**	3.95	228	1.52	7.31
-20	-4	**343**	1170	295	**1.32**	4.50	260	1.61	9.53
-15	5	**439**	1498	377	**1.48**	5.06	296	1.73	12.25
-10	14	**554**	1889	476	**1.65**	5.64	335	1.86	15.53
-5	23	**689**	2350	592	**1.83**	6.24	377	2.02	19.45
0	32	**846**	2888	728	**2.02**	6.88	420	2.19	24.07
5	41	**1028**	3509	885	**2.22**	7.57	463	2.36	29.50
10	50	**1236**	4219	1063	**2.44**	8.34	506	2.54	35.82



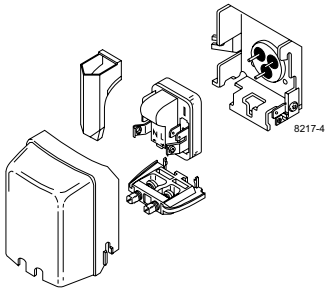
NL Compressors

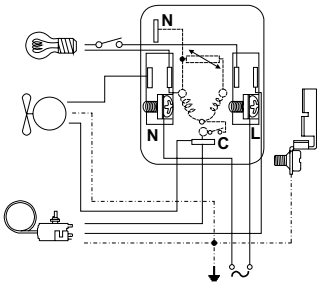
SECOP

Keep electrical equipment clear from oil, chemicals, and water

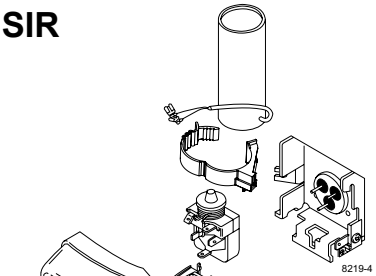
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

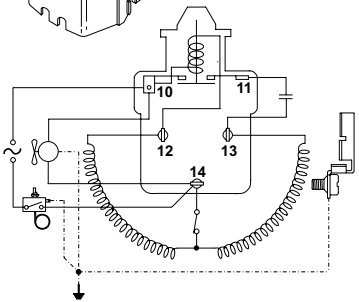
RSIR



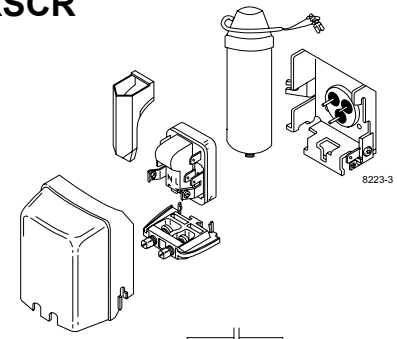


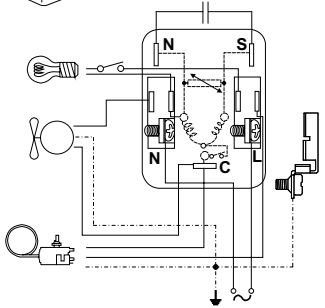
CSIR

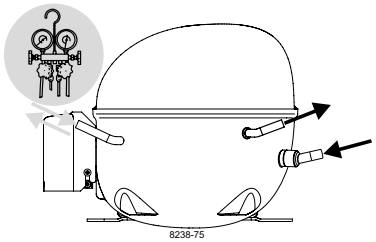




RSCR







NL Compressors

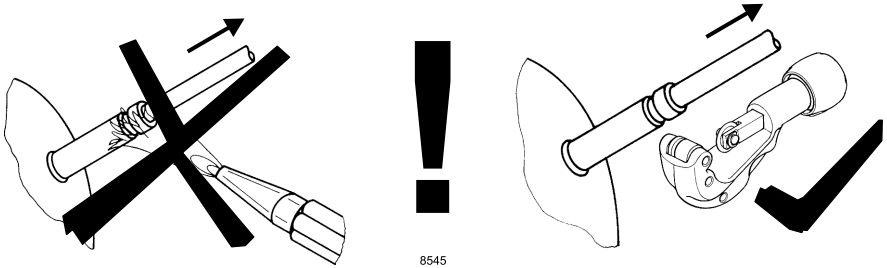
SECOP

Keep electrical equipment clear from oil, chemicals, and water

When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

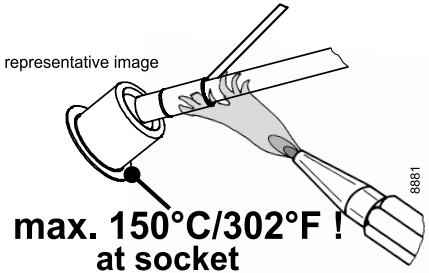
Service/Repair – R290, R600a, R170, R1270, R1234yf

(applies to all flammable refrigerants)



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)

Dismantling, recycling, disposal: At the end of a compressor's lifecycle, proceed by separating and storing components according to their environmental impact. Parts that may cause pollution must be clearly identified and handled separately, ensuring appropriate disposal. Refrigerant gas must not be released into the environment and should be recovered by qualified operators. Compressor oil must also be collected separately. The compressor should be disposed of at specialized disposal centers in accordance with the applicable regulations. **Subject to modifications/alterations. www.secop.com**