Technical Data Compressor

SECOP

Model

Designation	**NLE11MN**	**115-127V/60Hz 1~**	Sales code:	**105H5980**

Compressor design

Oil type	Polyolester	Refrigerant(s)	**R290**
Oil viscosity	32cST	Displacement	11,15cm³ / 0,68cu.in
Oil quantity	300cm³ / 10,1fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	150g / 5,3oz		
Free gas volume comp.	2360cm³ / 79,8fl.oz		
Weight	12,14kg / 26,8lbs		
Motor protection	1# internal		
Winding resistance main	0,8Ω (at 25°C)		
Winding resistance aux	3,25Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		

General - Configurations with NLE11MN

	Conf. 1	**Conf. 2**	**Conf. 3**	**Conf. 4**
Motorconfiguration	CSIR	CSIR	RSCR	RSCR
Power supply (nominal)	115V/60Hz	115V/60Hz	115V/60Hz	115V/60Hz
Number of phases	1	1	1	1
Voltage range	95-127V	95-135V	95-127V	95-135V
Approvals	UL, CCC	UL, CCC	UL, CCC	UL, CCC
Starting torque	HST	HST	LST	LST
Note	- / -			

Applications with NLE11MN

	Conf. 1	**Conf. 2**	**Conf. 3**	**Conf. 4**
Refrigerant	R290	R290	R290	R290
Application	MBP	MBP	MBP	MBP
System cooling	fan 3m/s	fan 3m/s	fan 3m/s	fan 3m/s
Hot gas defrost	OK	OK	OK	OK
Long interval pull down	OK	OK	OK	OK

Electrical data - Configurations with NLE11MN

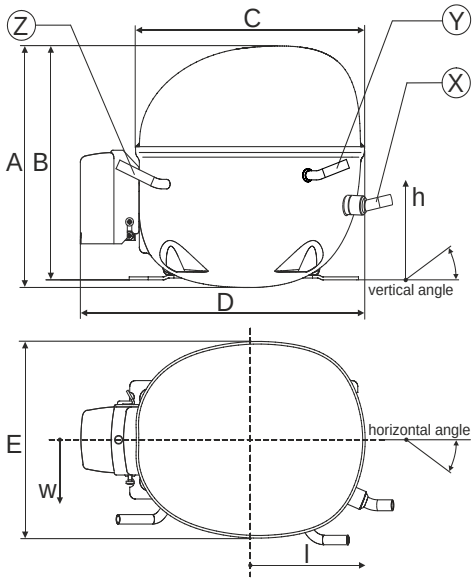
	Conf. 1	**Conf. 2**	**Conf. 3**	**Conf. 4**
Starting device type	relay	relay	PTC	PTC
Run capacitor	-/-	-/-	23,5µF	23,5µF
Start capacitor	240µF	240µF	-/-	-/-
LRA (locked rotor amps / 4s)	40,23A	40,23A	41,7A	41,7A
RLA (rated load amps / 1s)	8,37A	8,37A	8,37A	8,37A
Cut in current	40,23A	40,23A	51,83A	51,83A
IP class	21	21	21	21

Model

Designation **NLE11MN** **115-127V/60Hz 1~** Sales code: **105H5980**

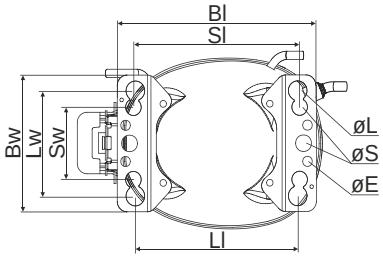
Compressor dimensions

Housing	A Height	203mm / 7,99in
	B Height	197mm / 7,76in
	C Length shell	205mm / 8,07in
	D Length w. cover	254mm / 10in
	E Width	166mm / 6,54in



Connectors		**Suction**	**Discharge**	**Process**
		X	**Y**	**Z**
Diameter	[mm]	øi 8,11-8,29	øi 6,41-6,59	øi 6,41-6,59
(i:inside, o:outside)	[in]	øi 0,32-0,33	øi 0,25-0,26	øi 0,25-0,26
Material		copper	copper	copper
Horizontal angle	±2°	22°	0°	0°
Vertical angle	±2°	45°	15°	155°
Position l/h/w	[mm]	128/79/61	88/95/85	-112/97/68
	[in]	5/3,1/2,4	3,5/3,7/3,3	-4,4/3,8/2,7
Straight tube l.	[mm]	12	12	12
	[in]	0,5	0,5	0,5

Compressor fixation

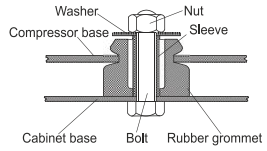


Baseplate	[mm]	[inch]
Bl	204	8.03
Bw	132	5.2
øE	ø 9.7	ø 0.38

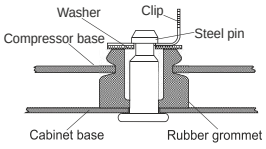
Large holes	[mm]	[inch]
Ll	165	6.5
Lw	101.6	4
øL	ø 19	ø 0.75

Small holes	[mm]	[inch]
Sl	170	6.7
Sw	70	2.76
øS	ø 16	ø 0.63

Bolt joint



Snap-on



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

Application notes

LRA value on compressor label and datasheet may differ due to different test conditions for UL approval.

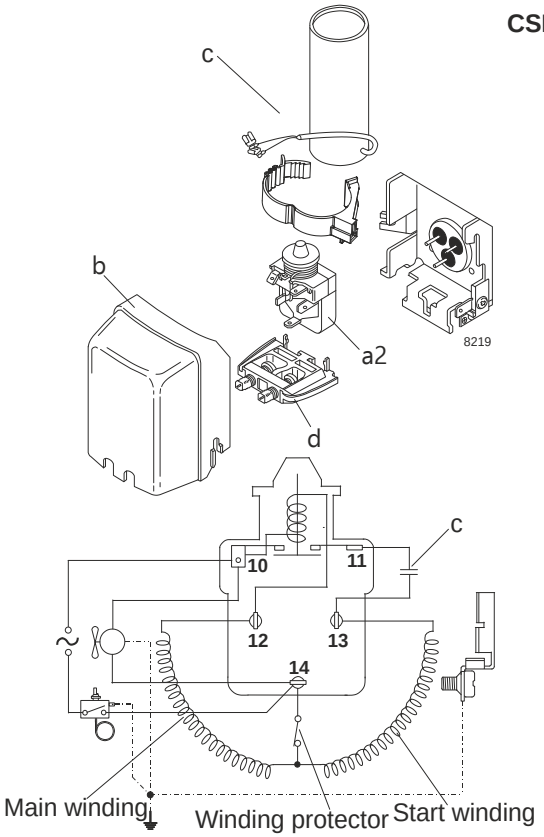
Model

Designation			Sales code:	
	NLE11MN	**115V/60Hz**	**Conf. 1**	**105H5980**

Configuration

Motorconfiguration	CSIR	
Power supply (nominal)	115V/60Hz 1~	
Refrigerant	R290	
Application	MBP	
Voltage range	95-127V	
Starting torque	HST	
Approvals	UL	SA3693
	CCC	

Electrical accessories / wiring diagram

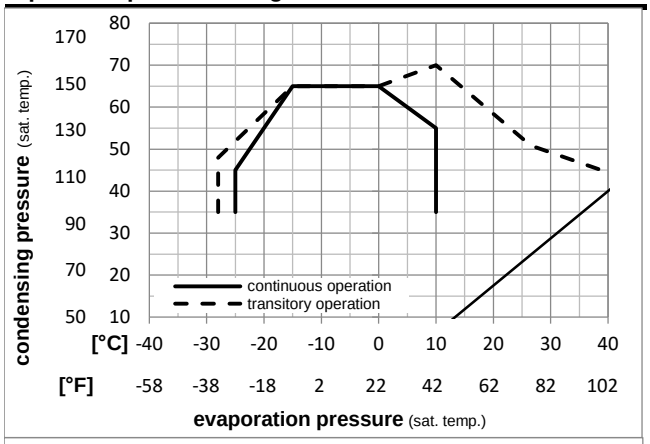


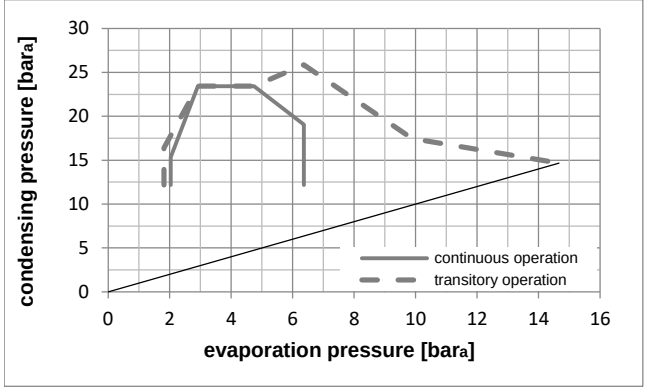
Ambient temperatures / system cooling

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

Operation pressure range





Components

a2	relay	117U7020
c	start capacitor (240µF, 6,3mm)	117U5073
b	plastic cover	103N2011
d	cord relief	103N1010

Alternative components

a2	relay	117U7020
c	start capacitor (240µF, 15kOhm)	117U5034
b	plastic cover	103N2011
d	cord relief	103N1010

Model

Designation **NLE11MN 115V/60Hz** **Conf. 1** Sales code: **105H5980**

Optimization + standard conditions 115V/60Hz, CSIR, fan 3m/s, UL, CCC

	Evaporating pressure (saturation temperature)	Condensing pressure (saturation temperature)	Return gas temp.	Liquid temp.	Cooling capacity			COP	EER		Power consumption P1	Current consumption I	Ref. mass flow ṁ	
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
[°C]	-6,66	54,4	35	46,1	1202,7	4107	1035,1	2,04	6,97	1,76	589,1	7,15	13,72	**ASHRAE MBP**
[°F]	20	130	95	115										
[°C]	-10	55	32	55	959,7	3278	825,9	1,71	5,83	1,47	561,8	6,96	12,14	**cecomaf MBP**
[°F]	14	131	89,6	131										
[°C]	-10	45	20	45	1058,4	3615	910,9	2,04	6,96	1,75	519,1	6,77	12,99	**EN12900 MBP**
[°F]	14	113	68	113										
[°C]	-6,66	48,9	18,3	48,9	1124,6	3841	967,8	2,00	6,83	1,72	562,1	7,01	14,60	**ARI540 MBP**
[°F]	20	120	65	120										
[°C]	-10	45	32	45	1101,8	3763	948,2	2,12	7,25	1,83	519,1	6,77	12,61	**opt**
[°F]	14	113	89,6	113										
[°C]	-25	45	32	45	594,0	2029	511,2	1,45	4,94	1,24	410,8	6,09	6,70	**opt**
[°F]	-13	113	89,6	113										

Performance tables 115V/60Hz, CSIR, fan 3m/s, UL, CCC

	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]	-25	-13	594,0	2029	511,2	1,45	4,94	1,24	410,8	6,09	6,70
cond. pressure	-23,3	-10	642,1	2193	552,6	1,52	5,18	1,31	422,9	6,17	7,25
pc= 45/113	-15	5	912,1	3115	784,9	1,89	6,44	1,62	483,7	6,54	10,38
return gas temp.	-9,4	15	1124,4	3840	967,7	2,15	7,34	1,85	523,0	6,79	12,87
RGT= 32/90	0	32	1558,6	5323	1341,3	2,67	9,11	2,29	584,5	7,21	18,08
liquid temp	4,4	40	1799,8	6147	1548,9	2,95	10,08	2,54	609,9	7,38	21,03
Tliq= 45/113	10	50	2139,1	7305	1840,9	3,36	11,46	2,89	637,3	7,58	25,28
[°C / °F]	-25	-13	498,1	1701	428,7	1,18	4,03	1,01	422,5	6,09	6,20
cond. pressure	-23,3	-10	542,7	1853	467,1	1,24	4,23	1,07	438,1	6,18	6,77
pc= 55/131	-15	5	789,0	2695	679,0	1,53	5,22	1,32	515,9	6,66	9,92
return gas temp	-9,4	15	979,9	3347	843,3	1,73	5,90	1,49	566,8	7,00	12,40
RGT= 32/90	0	32	1367,3	4670	1176,7	2,11	7,20	1,82	648,2	7,57	17,56
liquid temp	4,4	40	1582,1	5403	1361,5	2,32	7,91	1,99	683,0	7,83	20,49
Tliq= 55/131	10	50	1884,1	6435	1621,5	2,61	8,91	2,24	722,4	8,13	24,70

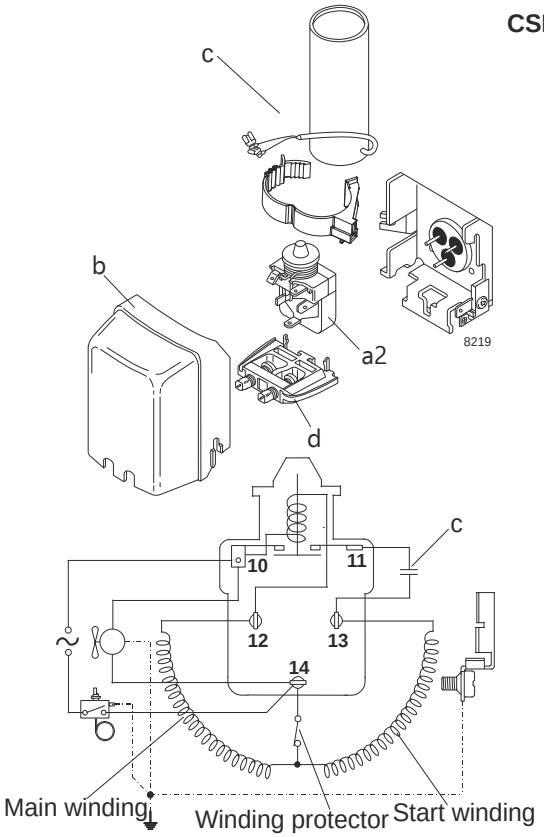
Model

Designation			Sales code:	
	NLE11MN	**115V/60Hz**	**Conf. 2**	**105H5980**

Configuration

Motorconfiguration	CSIR	
Power supply (nominal)	115V/60Hz 1~	
Refrigerant	R290	
Application	MBP	
Voltage range	95-135V	
Starting torque	HST	
Approvals	UL	SA3693
	CCC	

Electrical accessories / wiring diagram

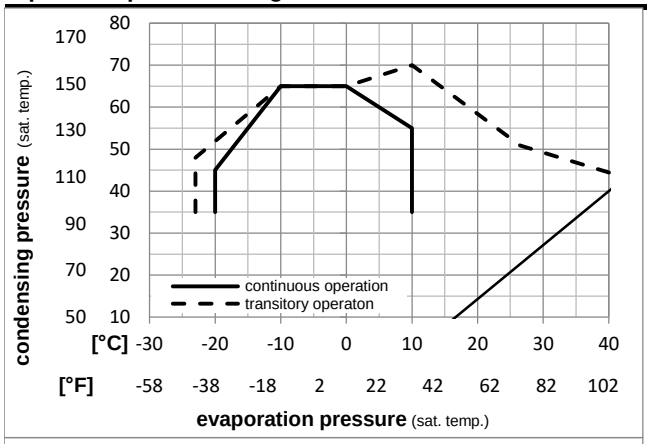


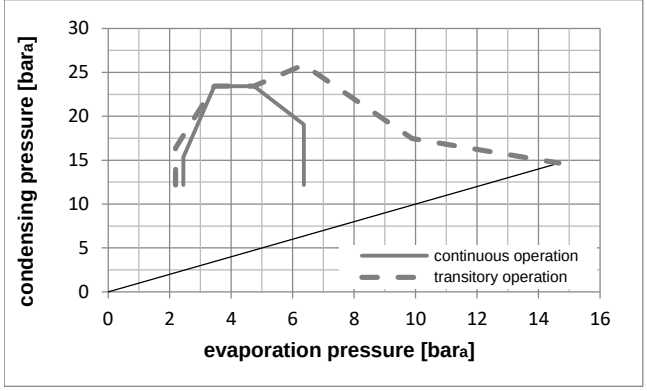
Ambient temperatures / system cooling

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

Operation pressure range





Components

a2	relay	117U7020
c	start capacitor (240µF, 6,3mm)	117U5073
b	plastic cover	103N2011
d	cord relief	103N1010

Alternative components

a2	relay	117U7020
c	start capacitor (240µF, 15kOhm)	117U5034
b	plastic cover	103N2011
d	cord relief	103N1010

Model

Designation **NLE11MN 115V/60Hz** **Conf. 2** Sales code: **105H5980**

Optimization + standard conditions 115V/60Hz, CSIR, fan 3m/s, UL, CCC

	Evaporating pressure (saturation temperature)	Condensing pressure (saturation temperature)	Return gas temp.	Liquid temp.	Cooling capacity			COP	EER		Power consumption P1	Current consumption I	Ref. mass flow ṁ	
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
[°C]	-6,66	54,4	35	46,1	1202,7	4107	1035,1	2,04	6,97	1,76	589,1	7,15	13,72	**ASHRAE MBP**
[°F]	20	130	95	115										
[°C]	-10	55	32	55	959,7	3278	825,9	1,71	5,83	1,47	561,8	6,96	12,14	**cecomaf MBP**
[°F]	14	131	89,6	131										
[°C]	-10	45	20	45	1058,4	3615	910,9	2,04	6,96	1,75	519,1	6,77	12,99	**EN12900 MBP**
[°F]	14	113	68	113										
[°C]	-6,66	48,9	18,3	48,9	1124,6	3841	967,8	2,00	6,83	1,72	562,1	7,01	14,60	**ARI540 MBP**
[°F]	20	120	65	120										
[°C]	-10	45	32	45	1101,8	3763	948,2	2,12	7,25	1,83	519,1	6,77	12,61	**opt**
[°F]	14	113	89,6	113										
[°C]	-25	45	32	45	594,0	2029	511,2	1,45	4,94	1,24	410,8	6,09	6,70	**opt**
[°F]	-13	113	89,6	113										

Performance tables 115V/60Hz, CSIR, fan 3m/s, UL, CCC

	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	743,8	2540	640,1	1,66	5,68	1,43	447,3	6,31	8,42
cond. pressure	-15	5	912,1	3115	784,9	1,89	6,44	1,62	483,7	6,54	10,38
pc= 45/113	-9,4	15	1124,4	3840	967,7	2,15	7,34	1,85	523,0	6,79	12,87
return gas temp.	-6,7	20	1241,9	4241	1068,8	2,29	7,83	1,97	541,9	6,92	14,27
RGT= 32/90	0	32	1558,6	5323	1341,3	2,67	9,11	2,29	584,5	7,21	18,08
liquid temp	4,4	40	1799,8	6147	1548,9	2,95	10,08	2,54	609,9	7,38	21,03
Tliq= 45/113	10	50	2139,1	7305	1840,9	3,36	11,46	2,89	637,3	7,58	25,28
[°C / °F]	-20	-4	636,2	2173	547,5	1,36	4,63	1,17	469,2	6,37	7,96
cond. pressure	-15	5	789,0	2695	679,0	1,53	5,22	1,32	515,9	6,66	9,92
pc= 55/131	-9,4	15	979,9	3347	843,3	1,73	5,90	1,49	566,8	7,00	12,40
return gas temp	-6,7	20	1085,0	3705	933,8	1,83	6,26	1,58	591,6	7,17	13,79
RGT= 32/90	0	32	1367,3	4670	1176,7	2,11	7,20	1,82	648,2	7,57	17,56
liquid temp	4,4	40	1582,1	5403	1361,5	2,32	7,91	1,99	683,0	7,83	20,49
Tliq= 55/131	10	50	1884,1	6435	1621,5	2,61	8,91	2,24	722,4	8,13	24,70

Model

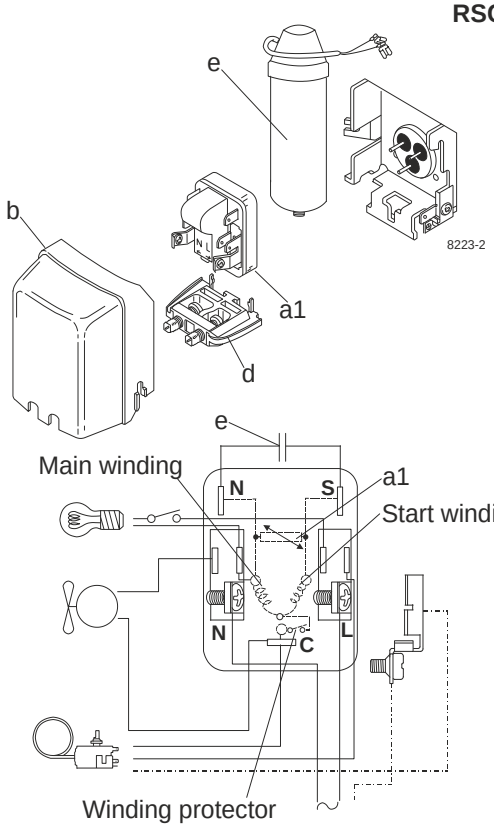
Designation					
	NLE11MN	**115V/60Hz**	**Conf. 3**	Sales code:	**105H5980**

Configuration

Motorconfiguration	RSCR	
Power supply (nominal)	115V/60Hz 1~	
Refrigerant	R290	
Application	MBP	
Voltage range	95-127V	
Starting torque	LST	
Approvals	UL	SA3693
	CCC	

Electrical accessories / wiring diagram

RSCR

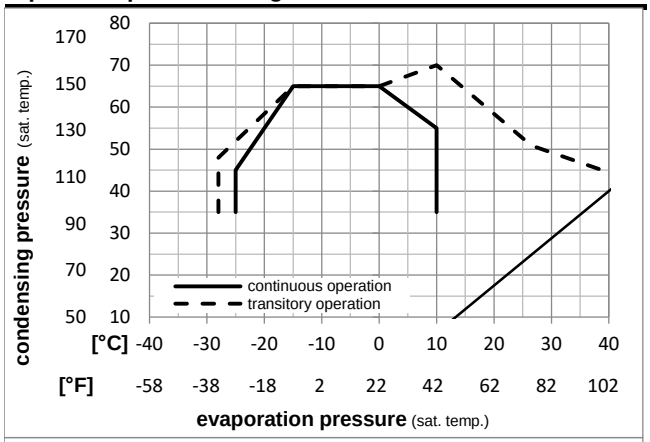


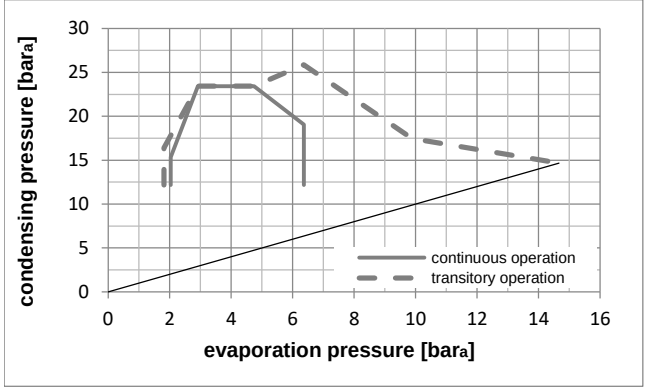
Ambient temperatures / system cooling

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

Operation pressure range





Components

a1	e-PTC starter	103N0058
e	run capacitor (23,5µF, 6.3mm)	117-7114
b	plastic cover	103N2011
d	cord relief	103N1010
	bracket for run capacitor	117-0300
	screw M4x8mm	117-0301

Model

Designation **NLE11MN 115V/60Hz** **Conf. 3** Sales code: **105H5980**

Optimization + standard conditions 115V/60Hz, RSCR, fan 3m/s, UL, CCC

	Evaporating pressure (saturation temperature)	Condensing pressure (saturation temperature)	Return gas temp.	Liquid temp.	Cooling capacity			COP	EER		Power consumption P1	Current consumption I	Ref. mass flow ṁ	
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
[°C]	-6,66	54,4	35	46,1	1221,4	4171	1051,2	2,20	7,51	1,89	555,5	6,74	13,93	**ASHRAE MBP**
[°F]	20	130	95	115										
[°C]	-10	55	32	55	975,1	3330	839,2	1,84	6,29	1,58	529,7	6,56	12,33	**cecomaf MBP**
[°F]	14	131	89,6	131										
[°C]	-10	45	20	45	1067,3	3645	918,5	2,18	7,45	1,88	489,5	6,38	13,10	**EN12900 MBP**
[°F]	14	113	68	113										
[°C]	-6,66	48,9	18,3	48,9	1138,5	3888	979,8	2,15	7,34	1,85	530,0	6,61	14,78	**ARI540 MBP**
[°F]	20	120	65	120										
[°C]	-10	45	32	45	1111,1	3795	956,3	2,27	7,75	1,95	489,5	6,38	12,71	**opt**
[°F]	14	113	89,6	113										
[°C]	-25	45	32	45	598,4	2044	515,0	1,54	5,28	1,33	387,4	5,75	6,75	**opt**
[°F]	-13	113	89,6	113										

Performance tables 115V/60Hz, RSCR, fan 3m/s, UL, CCC

	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]	-25	-13	598,4	2044	515,0	1,54	5,28	1,33	387,4	5,75	6,75
cond. pressure	-23,3	-10	647,1	2210	556,9	1,62	5,54	1,40	398,8	5,81	7,31
pc= 45/113	-15	5	919,7	3141	791,5	2,02	6,89	1,74	456,0	6,17	10,46
return gas temp.	-9,4	15	1133,9	3872	975,8	2,30	7,85	1,98	493,1	6,40	12,98
RGT= 32/90	0	32	1572,1	5369	1353,0	2,85	9,74	2,45	551,1	6,79	18,23
liquid temp	4,4	40	1815,8	6201	1562,7	3,16	10,78	2,72	575,1	6,96	21,22
Tliq= 45/113	10	50	2158,8	7373	1857,9	3,59	12,27	3,09	601,0	7,14	25,51
[°C / °F]	-25	-13	508,1	1735	437,3	1,28	4,36	1,10	398,4	5,75	6,33
cond. pressure	-23,3	-10	553,3	1889	476,1	1,34	4,57	1,15	413,0	5,83	6,90
pc= 55/131	-15	5	802,5	2741	690,7	1,65	5,63	1,42	486,5	6,28	10,09
return gas temp	-9,4	15	995,5	3400	856,8	1,86	6,36	1,60	534,5	6,60	12,60
RGT= 32/90	0	32	1387,3	4738	1193,9	2,27	7,75	1,95	611,2	7,13	17,82
liquid temp	4,4	40	1604,7	5480	1381,0	2,49	8,51	2,14	644,0	7,38	20,78
Tliq= 55/131	10	50	1910,7	6525	1644,3	2,81	9,58	2,41	681,1	7,67	25,05

Model

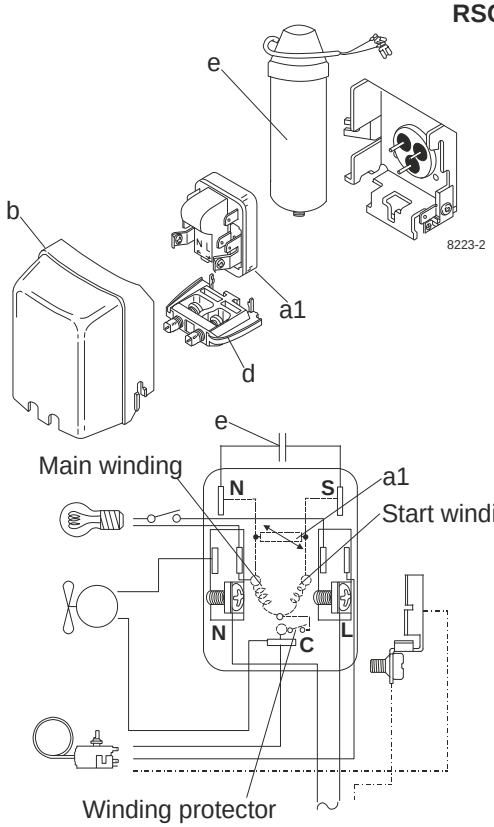
Designation			Sales code:	
	NLE11MN	**115V/60Hz**	**Conf. 4**	**105H5980**

Configuration

Motorconfiguration	RSCR	
Power supply (nominal)	115V/60Hz 1~	
Refrigerant	R290	
Application	MBP	
Voltage range	95-135V	
Starting torque	LST	
Approvals	UL	SA3693
	CCC	

Electrical accessories / wiring diagram

RSCR

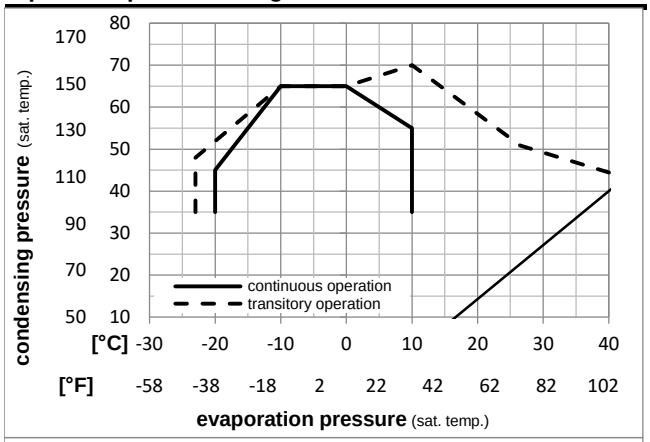


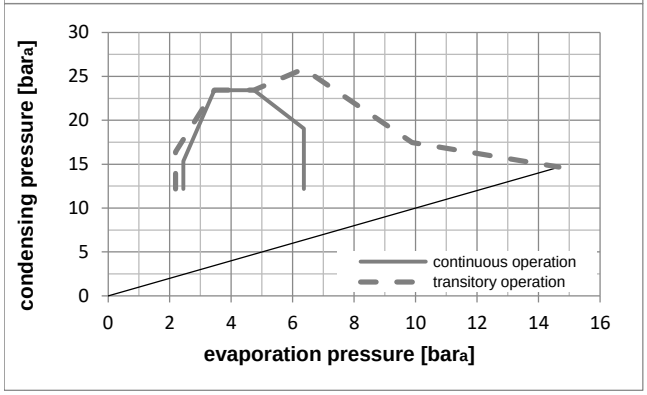
Ambient temperatures / system cooling

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

Operation pressure range





Components

a1	e-PTC starter	103N0058
e	run capacitor (23,5µF, 6.3mm)	117-7114
b	plastic cover	103N2011
d	cord relief	103N1010
	bracket for run capacitor	117-0300
	screw M4x8mm	117-0301

Model

Designation **NLE11MN 115V/60Hz** **Conf. 4** Sales code: **105H5980**

Optimization + standard conditions 115V/60Hz, RSCR, fan 3m/s, UL, CCC

	Evaporating pressure (saturation temperature)	Condensing pressure (saturation temperature)	Return gas temp.	Liquid temp.	Cooling capacity			COP	EER		Power consumption P1	Current consumption I	Ref. mass flow ṁ	
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
[°C]	-6,66	54,4	35	46,1	1221,4	4171	1051,2	2,20	7,51	1,89	555,5	6,74	13,93	**ASHRAE MBP**
[°F]	20	130	95	115										
[°C]	-10	55	32	55	975,1	3330	839,2	1,84	6,29	1,58	529,7	6,56	12,33	**cecomaf MBP**
[°F]	14	131	89,6	131										
[°C]	-10	45	20	45	1067,3	3645	918,5	2,18	7,45	1,88	489,5	6,38	13,10	**EN12900 MBP**
[°F]	14	113	68	113										
[°C]	-6,66	48,9	18,3	48,9	1138,5	3888	979,8	2,15	7,34	1,85	530,0	6,61	14,78	**ARI540 MBP**
[°F]	20	120	65	120										
[°C]	-10	45	32	45	1111,1	3795	956,3	2,27	7,75	1,95	489,5	6,38	12,71	**opt**
[°F]	14	113	89,6	113										
[°C]	-25	45	32	45	598,4	2044	515,0	1,54	5,28	1,33	387,4	5,75	6,75	**opt**
[°F]	-13	113	89,6	113										

Performance tables 115V/60Hz, RSCR, fan 3m/s, UL, CCC

	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	749,9	2561	645,3	1,78	6,07	1,53	421,8	5,95	8,49
cond. pressure	-15	5	919,7	3141	791,5	2,02	6,89	1,74	456,0	6,17	10,46
pc= 45/113	-9,4	15	1133,9	3872	975,8	2,30	7,85	1,98	493,1	6,40	12,98
return gas temp.	-6,7	20	1252,4	4277	1077,8	2,45	8,37	2,11	511,0	6,52	14,39
RGT= 32/90	0	32	1572,1	5369	1353,0	2,85	9,74	2,45	551,1	6,79	18,23
liquid temp	4,4	40	1815,8	6201	1562,7	3,16	10,78	2,72	575,1	6,96	21,22
Tliq= 45/113	10	50	2158,8	7373	1857,9	3,59	12,27	3,09	601,0	7,14	25,51
[°C / °F]	-20	-4	647,9	2213	557,6	1,46	5,00	1,26	442,5	6,01	8,10
cond. pressure	-15	5	802,5	2741	690,7	1,65	5,63	1,42	486,5	6,28	10,09
pc= 55/131	-9,4	15	995,5	3400	856,8	1,86	6,36	1,60	534,5	6,60	12,60
return gas temp	-6,7	20	1101,8	3763	948,2	1,98	6,75	1,70	557,8	6,76	14,00
RGT= 32/90	0	32	1387,3	4738	1193,9	2,27	7,75	1,95	611,2	7,13	17,82
liquid temp	4,4	40	1604,7	5480	1381,0	2,49	8,51	2,14	644,0	7,38	20,78
Tliq= 55/131	10	50	1910,7	6525	1644,3	2,81	9,58	2,41	681,1	7,67	25,05