

Model

Designation	NL6.1MLX	220V/50Hz 1~208-230V/60Hz 1~	Sales code:	105F3610
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R404A, R507
Oil viscosity	32cSt	Displacement	6,13cm ³ / 0,37cu.in
Oil quantity	298cm ³ / 10,1fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	400g / 14,1oz		
Free gas volume comp.	2310cm ³ / 78,1fl.oz		
Weight	10,5kg / 23,1lbs		
Motor protection	1# internal		
Winding resistance main	6,1Ω (at 25°C)		
Winding resistance aux	18,35Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations with NL6.1MLX

	Conf. 1	Conf. 2
Motor configuration	CSIR	CSIR
Power supply (nominal)	220-240V/50Hz	208-230V/60Hz
Number of phases	1	1
Voltage range	187-254V	187-254V
Approvals	VDE, CCC, EAC, UL	VDE, CCC, EAC, UL
Starting torque	HST	HST
Note	- / -	

Applications with NL6.1MLX

	Conf. 1	Conf. 2
Refrigerant	R404A	R404A
Application	MBP	MBP
System cooling	fan 3m/s	fan 3m/s
Hot gas defrost	-/-	-/-
Long interval pull down	OK	OK

Electrical data - Configurations with NL6.1MLX

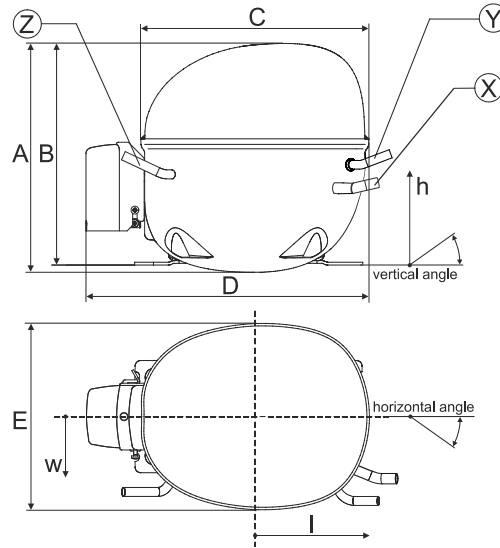
	Conf. 1	Conf. 2
Starting device type	relay	relay
Run capacitor	-/-	-/-
Start capacitor	80μF	80μF
LRA (locked rotor amps / 4s/ U(N))	16,6A	16,1A
RLA (rated load amps / 1s/ U(N))	2,8A	2,4A
Cut in current (U(N))	17A	15,5A

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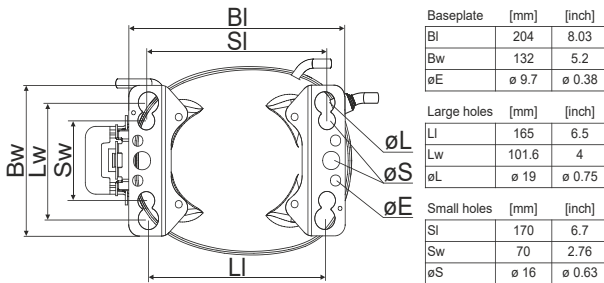
Compressor dimensions

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

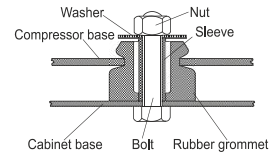


Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 9,61-9,79	øi 6,41-6,59	øi 6,41-6,59
(i:inside, o:outside)	[in]	øi 0,38-0,39	øi 0,25-0,26	øi 0,25-0,26
Material		copper	copper	copper
Horizontal angle	±2°	0°	0°	0°
Vertical angle	±2°	15°	35°	155°
Position l/h/w	[mm]	126/76/78	133/103/54	-107/94/72
	[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

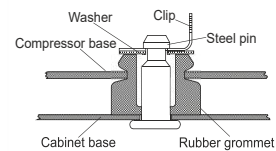
Compressor fixation



Bolt joint



Snap-on



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

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

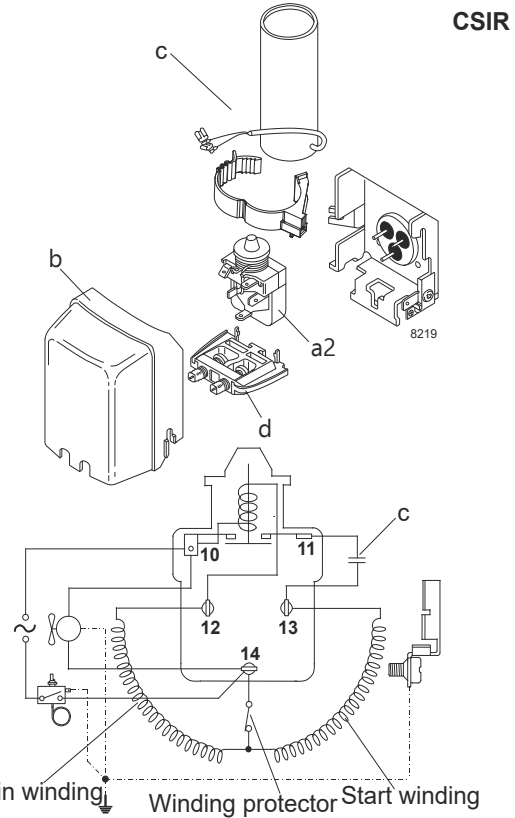
Model

Designation **NL6.1MLX** **220-240V/50Hz** Conf. 1 Sales code: **105F3610**

Configuration

Motor configuration CSIR
 Power supply (nominal) 220-240V/50Hz 1~
 Refrigerant R404A
 Application MBP
 Voltage range 187-254V
 Starting torque HST
 Approvals VDE
 CCC
 EAC
 UL

Electrical accessories / wiring diagram



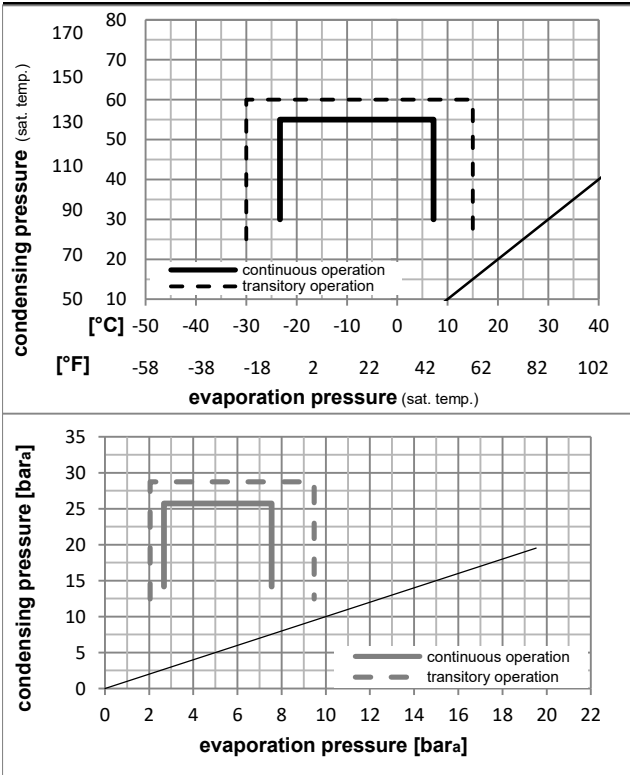
Ambient/ machine room temperatures minimum /maximum

Ambient temperature range: 10 - 43°C / 50 - 110°F

Machine room temperature range: 10 - 48°C / 50 - 119°F

Compressor cooling: fan 3m/s

Operation pressure range



Components

- | | | |
|----|------------------------|----------|
| a2 | relay | 117U6022 |
| c | start capacitor (80µF) | 117U5015 |
| b | plastic cover | 103N2011 |
| d | cord relief | 103N1010 |

Model

Designation **NL6.1MLX** **220-240V/50Hz** Conf. 1 Sales code: **105F3610**

Optimization + standard conditions

R404A, 220V/50Hz, CSIR, fan 3m/s, VDE, CCC, EAC, UL

		Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)					Power consumption				
		Return gas temp.		Liquid temp.		Cooling capacity			COP	EER		Current consumption		Ref. mass flow	
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	m	
[°C]	[°F]	[°C]	[°F]	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
[°C]	-7	54	35	46	569,4	1945	490,1	1,61	5,51	1,39	352,8	2,43	15,67	ASHRAE MBP	
[°F]	20	130	95	115											
[°C]	-10	55	32	55	422,4	1442	363,5	1,26	4,30	1,08	335,8	2,38	13,52	cecomaf MBP	
[°F]	14	131	90	131											
[°C]	-10	45	20	45	499,3	1705	429,7	1,60	5,47	1,38	311,9	2,29	15,04	EN12900 MBP	
[°F]	14	113	68	113											
[°C]	-7	49	18	49	520,3	1777	447,8	1,54	5,27	1,33	337,3	2,37	17,00	ARI540 MBP	
[°F]	20	120	65	120											
[°C]	-10	45	32	45	529,9	1810	456,0	1,70	5,80	1,46	311,9	2,29	14,59	opt	
[°F]	14	113	90	113											
[°C]	-25	45	32	45	256,1	875	220,4	1,09	3,73	0,94	234,1	2,10	6,91	opt	
[°F]	-13	113	90	113											

Performance tables

R404A, 220V/50Hz, CSIR, fan 3m/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]	-23	-10	281,4	961	242,2	1,16	3,95	0,99	243,6	2,12	7,61
cond. pressure	-20	-4	334,4	1142	287,8	1,28	4,37	1,10	261,5	2,16	9,07
pc= 45/113	-15	5	425,1	1452	365,9	1,48	5,05	1,27	287,4	2,22	11,61
return gas temp.	-10	14	529,9	1810	456,0	1,70	5,80	1,46	311,9	2,29	14,59
RGT= 32/90	-5	23	650,5	2221	559,8	1,94	6,63	1,67	334,8	2,36	18,08
liquid temp	0	32	788,6	2693	678,7	2,22	7,56	1,91	356,0	2,43	22,17
Tliq= 45/113	7,2	45	1021,9	3490	879,4	2,67	9,11	2,29	383,2	2,54	29,30
[°C / °F]	-23	-10	214,5	733	184,6	0,84	2,87	0,72	255,4	2,18	6,72
cond. pressure	-20	-4	259,5	886	223,3	0,94	3,21	0,81	276,1	2,23	8,16
pc= 55/131	-15	5	335,4	1146	288,7	1,09	3,74	0,94	306,6	2,30	10,64
return gas temp	-10	14	422,4	1442	363,5	1,26	4,30	1,08	335,8	2,38	13,52
RGT= 32/90	-5	23	522,0	1783	449,3	1,44	4,90	1,24	363,6	2,47	16,90
liquid temp	0	32	636,2	2173	547,5	1,63	5,57	1,40	389,9	2,55	20,86
Tliq= 55/131	7,2	45	829,4	2833	713,8	1,95	6,67	1,68	424,8	2,69	27,84

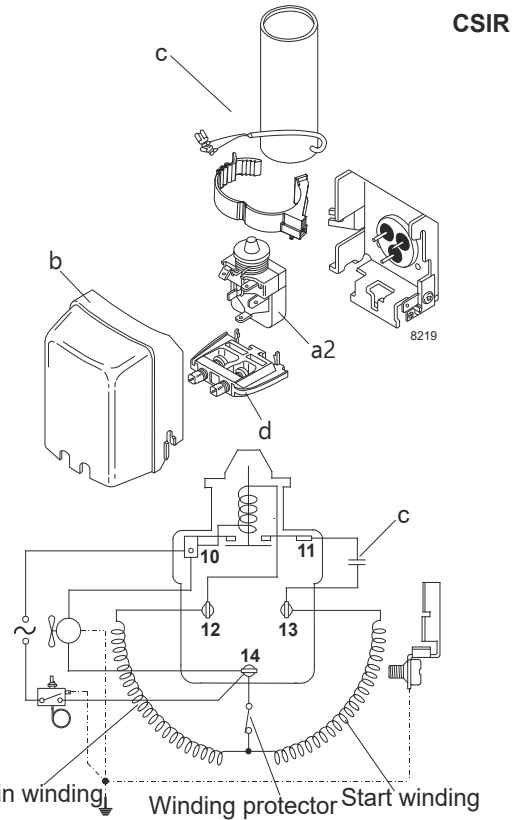
Model

Designation **NL6.1MLX** **208-230V/60Hz** Conf. 2 Sales code: **105F3610**

Configuration

Motor configuration CSIR
 Power supply (nominal) 208-230V/60Hz 1~
 Refrigerant R404A
 Application MBP
 Voltage range 187-254V
 Starting torque HST
 Approvals VDE
 CCC
 EAC
 UL

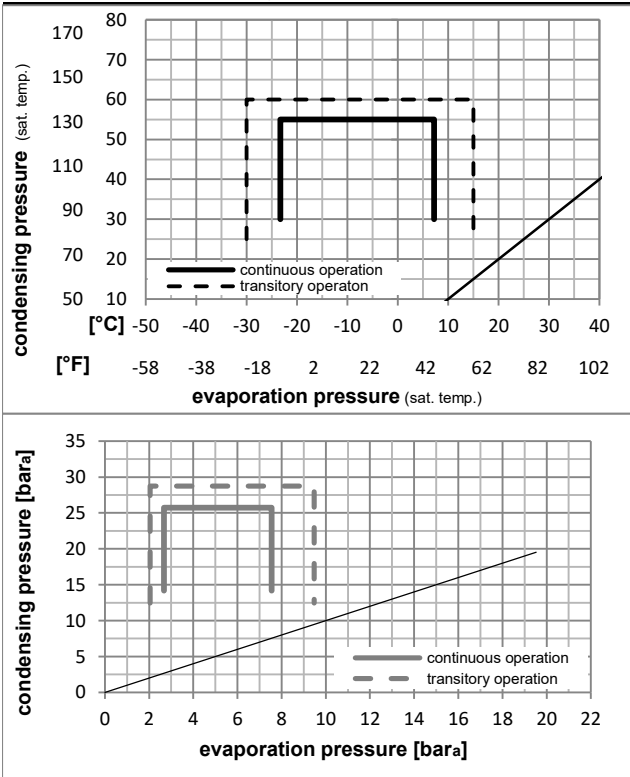
Electrical accessories / wiring diagram



Ambient/ machine room temperatures minimum /maximum

Ambient temperature range: 10 - 43°C / 50 - 110°F
 Machine room temperature range: 10 - 48°C / 50 - 119°F
 Compressor cooling: fan 3m/s

Operation pressure range



Components

- | | | |
|----|------------------------|----------|
| a2 | relay | 117U6022 |
| c | start capacitor (80µF) | 117U5015 |
| b | plastic cover | 103N2011 |
| d | cord relief | 103N1010 |

Model

Designation **NL6.1MLX** **208-230V/60Hz** Conf. 2 Sales code: **105F3610**

Optimization + standard conditions

R404A, 230V/60Hz, CSIR, fan 3m/s, VDE, 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]	[W]	[A]	[kg/h]	ASHRAE MBP																	
[°C]	[°F]																															
-7	20	54	130	35	95	46	115	676,9	2312	582,6	1,62	5,52	1,39	419,0	2,39	18,63	ASHRAE MBP															
-10	14	55	131	32	90	55	131	502,8	1717	432,7	1,28	4,36	1,10	394,1	2,30	16,09	cecomaf MBP															
-10	14	45	113	20	68	45	113	593,2	2026	510,5	1,61	5,51	1,39	367,6	2,20	17,87	EN12900 MBP															
-7	20	49	120	18	65	49	120	617,8	2110	531,7	1,54	5,26	1,33	400,8	2,33	20,19	ARI540 MBP															
-10	14	45	113	32	90	45	113	629,6	2150	541,8	1,71	5,85	1,47	367,6	2,20	17,34	opt															
-25	-13	45	113	32	90	45	113	309,2	1056	266,1	1,17	4,00	1,01	264,2	1,84	8,34	opt															

Performance tables

R404A, 230V/60Hz, CSIR, fan 3m/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]	[W]	[A]	[kg/h]	[W]	[A]	[kg/h]			
[°C / °F]	-23	-10	338,9	1157	291,7	1,23	4,19	1,05	276,5	1,88	9,16									
cond. pressure	-20	-4	400,9	1369	345,0	1,34	4,57	1,15	299,9	1,96	10,88									
pc= 45/113	-15	5	507,0	1732	436,4	1,52	5,18	1,31	334,3	2,08	13,85									
return gas temp.	-10	14	629,6	2150	541,8	1,71	5,85	1,47	367,6	2,20	17,34									
RGT= 32/90	-5	23	770,7	2632	663,2	1,93	6,58	1,66	400,0	2,33	21,42									
liquid temp	0	32	932,3	3184	802,3	2,16	7,38	1,86	431,5	2,46	26,21									
Tliq= 45/113	7,2	45	1205,2	4116	1037,2	2,53	8,65	2,18	475,6	2,66	34,56									
[°C / °F]	-23	-10	257,8	881	221,9	0,91	3,12	0,79	282,3	1,89	8,08									
cond. pressure	-20	-4	310,8	1061	267,5	1,00	3,41	0,86	310,8	1,99	9,78									
pc= 55/131	-15	5	400,3	1367	344,5	1,13	3,87	0,98	353,1	2,14	12,69									
return gas temp	-10	14	502,8	1717	432,7	1,28	4,36	1,10	394,1	2,30	16,09									
RGT= 32/90	-5	23	620,3	2118	533,8	1,43	4,88	1,23	434,2	2,45	20,08									
liquid temp	0	32	754,8	2578	649,6	1,59	5,45	1,37	473,3	2,62	24,75									
Tliq= 55/131	7,2	45	982,7	3356	845,7	1,86	6,35	1,60	528,5	2,85	32,98									