

Model

Designation	NL7CLX	220-240V/50Hz 1~	Sales code:	105F3712
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R404A, R507
Oil viscosity	32cST	Displacement	7,27cm ³ / 0,44cu.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	10,4kg / 22,9lbs		
Motor protection	1# internal		
Winding resistance main	8,2Ω (at 25°C)		
Winding resistance aux	14,7Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations with NL7CLX

	Conf. 1	Conf. 2
Motorconfiguration	CSIR	RSIR
Power supply (nominal)	220-240V/50Hz	220-240V/50Hz
Number of phases	1	1
Voltage range	198-254V	198-254V
Approvals	CCC, VDE, UL	CCC, VDE, UL
Starting torque	HST	LST
Note	- / -	

Applications with NL7CLX

	Conf. 1	Conf. 2
Refrigerant	R404A	R404A
Application	LBP+MBP	LBP+MBP
System cooling	fan 1,5m/s	fan 1,5m/s
Hot gas defrost	- / -	- / -
Long interval pull down	- / -	- / -

Electrical data - Configurations with NL7CLX

	Conf. 1	Conf. 2
Starting device type	relay	PTC
Run capacitor	- / -	- / -
Start capacitor	80μF	- / -
LRA (locked rotor amps / 4s)	11A	11A
RLA (rated load amps / 1s)	1,8A	1,8A
Cut in current	14,5A	14,5A

Model

Designation

NL7CLX

220-240V/50Hz 1~

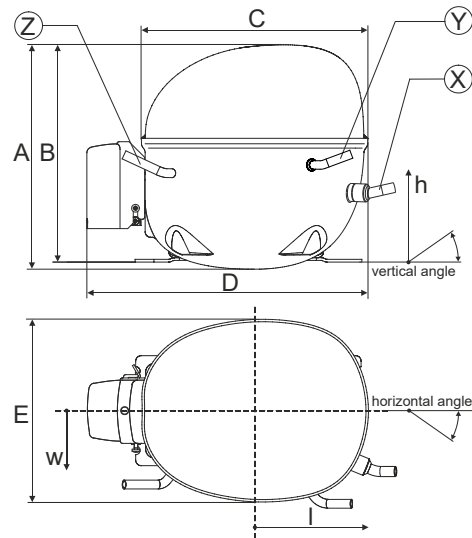
Sales code:

105F3712

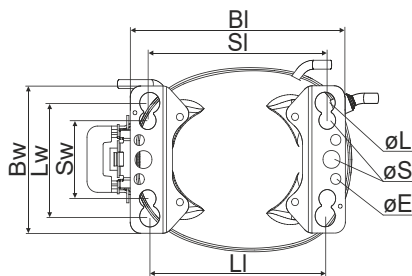
Compressor dimensions

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 X	Discharge Y	Process 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°	47°	27°	124°
Vertical angle ±2°	90°	90°	90°
Position l/h/w [mm]	98/97/80	109/120/55	-85/107/80
[in]	3,9/3,8/3,1	4,3/4,7/2,1	-3,3/4,2/3,1
Straight tube l. [mm]	12	12	12
[in]	0,5	0,5	0,5

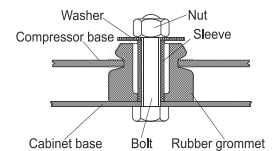


Compressor fixation

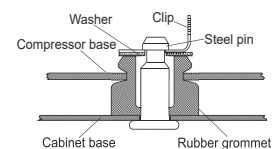


Baseplate	[mm]	[inch]
BI	204	8.03
BW	132	5.2
øE	ø 9.7	ø 0.38
Large holes	[mm]	[inch]
LI	165	6.5
Lw	101.6	4
øL	ø 19	ø 0.75
Small holes	[mm]	[inch]
SI	170	6.7
Sw	70	2.76
øS	ø 16	ø 0.63

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.

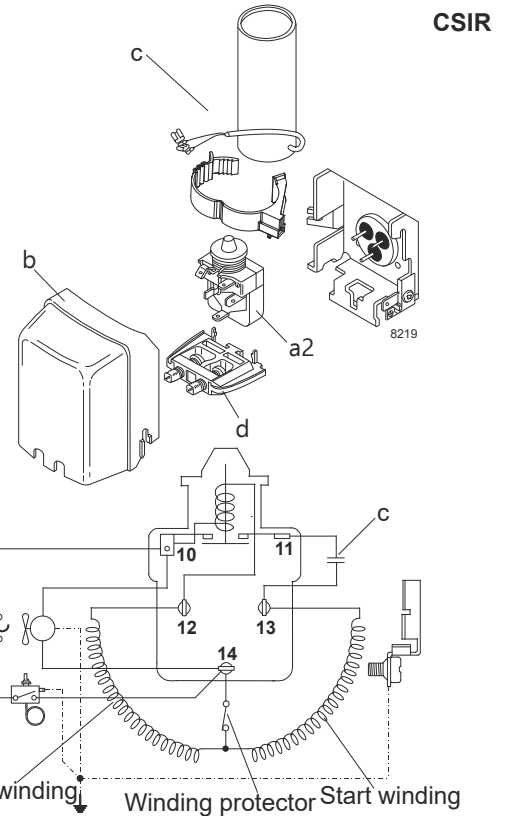
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Configuration

Motorconfiguration	CSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R404A
Application	LBP+MBP
Voltage range	198-254V
Starting torque	HST
Approvals	CCC VDE UL

Electrical accessories / wiring diagram

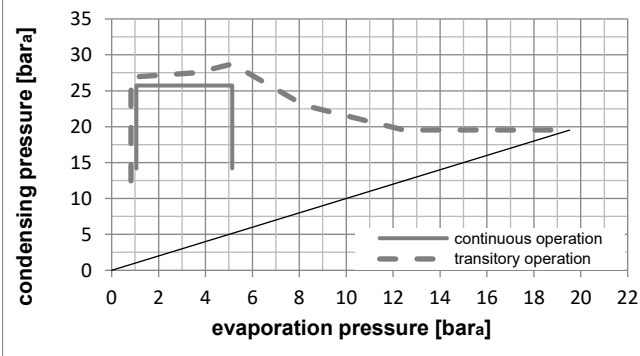
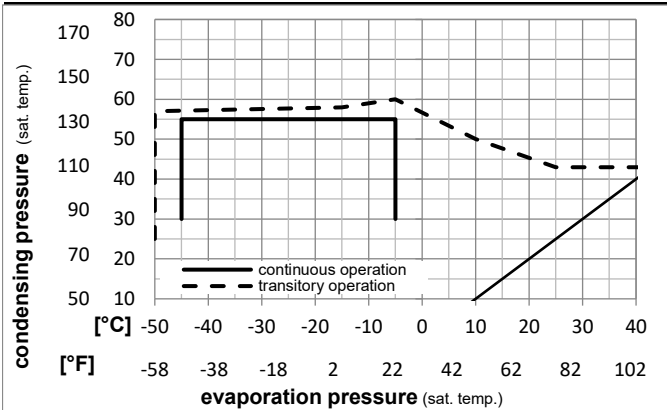


Ambient temperatures / system cooling

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 3m/s	fan 3m/s	n/a

Operation pressure range



Components

a2	assy. relay	117U6002
c	start capacitor (80μF)	117U5015
b	plastic cover	103N2010
d	cord relief	103N1010

Alternative components

b	plastic cover	103N2011
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Optimization + standard conditions

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

	Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)			Return gas temp.	Liquid temp.	Cooling capacity			COP	EER	Power consumption			ASHRAE LBP
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]			[W/W]	[Btu/Wh]	[kcal/Wh]			P1	I	Ref. mass flow	
[°C]	-23	54	32	32	387,3	1323	333,3	1,31	4,48	1,13	295,3	1,79	9,02					
[°F]	-10	130	90	90														
[°C]	-25	55	32	55	262,5	897	225,9	0,93	3,17	0,80	282,8	1,74	8,20				cecomaf LBP	
[°F]	-13	131	90	131														
[°C]	-35	40	20	40	210,3	718	181,0	1,01	3,43	0,87	209,1	1,44	5,71				EN12900 LBP	
[°F]	-31	104	68	104														
[°C]	-23	49	4,4	49	292,1	997	251,3	1,00	3,43	0,86	290,6	1,75	10,34				ARI540 LBP	
[°F]	-10	120	40	120														
[°C]	-23	41	32	32	440,3	1504	378,9	1,61	5,49	1,38	274,1	1,68	10,26				AHAM LBP	
[°F]	-10	105	90	90														
[°C]	-35	45	32	45	198,9	679	171,2	0,93	3,17	0,80	214,5	1,46	5,32				opt	
[°F]	-31	113	90	113														

Performance tables

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

	pe		Cooling capacity			COP	EER		P1	I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]		[W/W]	[Btu/Wh]			
[°C / °F]	-45	-49	102,0	349	87,8	0,65	2,21	0,56	157,8	1,31	2,71
cond. pressure	-35	-31	198,9	679	171,2	0,93	3,17	0,80	214,5	1,46	5,32
pc= 45/113	-30	-22	263,3	899	226,6	1,08	3,70	0,93	243,3	1,56	7,07
return gas temp.	-25	-13	340,1	1161	292,7	1,24	4,25	1,07	273,5	1,68	9,17
RGT= 32/90	-20	-4	430,4	1470	370,4	1,41	4,80	1,21	306,1	1,81	11,68
liquid temp	-15	5	535,6	1829	460,9	1,57	5,35	1,35	341,8	1,96	14,63
Tliq= 45/113	-5	23	795,7	2717	684,8	1,87	6,38	1,61	426,0	2,32	22,12
[°C / °F]	-45	-49	69,8	238	60,1	0,49	1,66	0,42	143,8	1,28	2,14
cond. pressure	-35	-31	147,7	504	127,1	0,70	2,38	0,60	211,9	1,48	4,57
pc= 55/131	-30	-22	199,9	683	172,0	0,81	2,77	0,70	246,5	1,60	6,21
return gas temp	-25	-13	262,5	897	225,9	0,93	3,17	0,80	282,8	1,74	8,20
RGT= 32/90	-20	-4	337,0	1151	290,0	1,05	3,58	0,90	321,4	1,90	10,60
liquid temp	-15	5	424,4	1450	365,3	1,17	3,99	1,01	363,3	2,07	13,46
Tliq= 55/131	-5	23	643,6	2198	553,9	1,40	4,78	1,20	460,2	2,47	20,83

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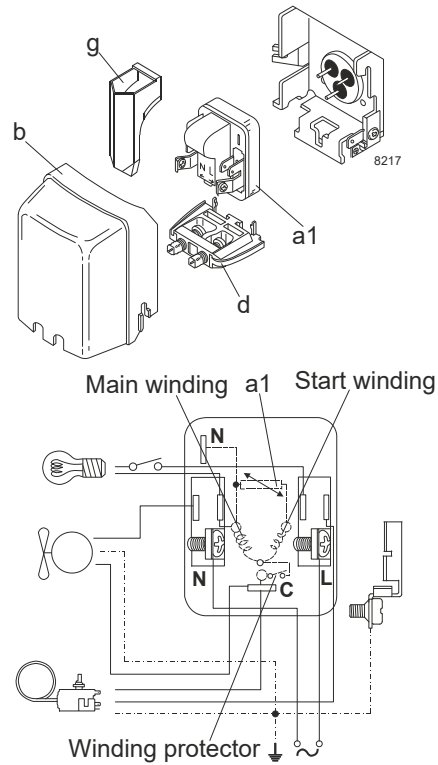
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Configuration

Motorconfiguration	RSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R404A
Application	LBP+MBP
Voltage range	198-254V
Starting torque	LST
Approvals	CCC VDE UL

Electrical accessories / wiring diagram

RSIR

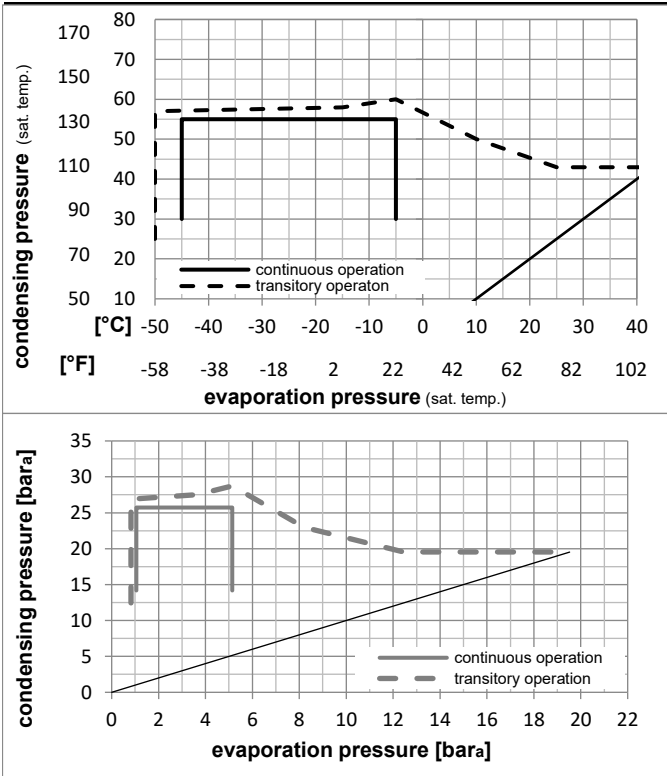


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43°C / 110°F	fan 3m/s	fan 3m/s	n/a

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	103N2010
d	cord relief	103N1010
g	protection screen for PTC	103N0476

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Optimization + standard conditions

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

	Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)						Power consumption			ASHRAE LBP
	pe	pc	RGT	Tliq	Cooling capacity	COP	EER	P1	I	Ref. mass flow				
	[°C]	[°F]	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
	-23	54	32	32	387,3	1323	333,3	1,31	4,48	1,13	295,3	1,79	9,02	ASHRAE LBP
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