Single
Packs

Single Pack NL6F 220-240V 50Hz CSIR

Single pack code number: **195B4204**

Position	Title	Code	Amount
1	Compressor NL6F	105G6606	1
2	Starting relay	117U6004	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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Technical Data Compressor

SECOP

Model

Designation	**NL6F**	**220-240V/50Hz 1~**	Sales code:	**105G6606**

Compressor design

Oil type	Polyolester	Refrigerant(s)	**R134a**
Oil viscosity	19,2cST	Displacement	6,13cm³ / 0,37cu.in
Oil quantity	265cm³ / 9fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	400g / 14,1oz		
Free gas volume comp.	2130cm³ / 72fl.oz		
Weight	9,3kg / 20,5lbs		
Motor protection	1# internal		
Winding resistance main	16Ω (at 25°C)		
Winding resistance aux	13,6Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		

General - Configurations with NL6F

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

Applications with NL6F

	Conf. 1	**Conf. 2**
Refrigerant	R134a	R134a
Application	LBP	LBP
System cooling	static	static
Hot gas defrost	-/-	-/-
Long interval pull down	-/-	-/-

Electrical data - Configurations with NL6F

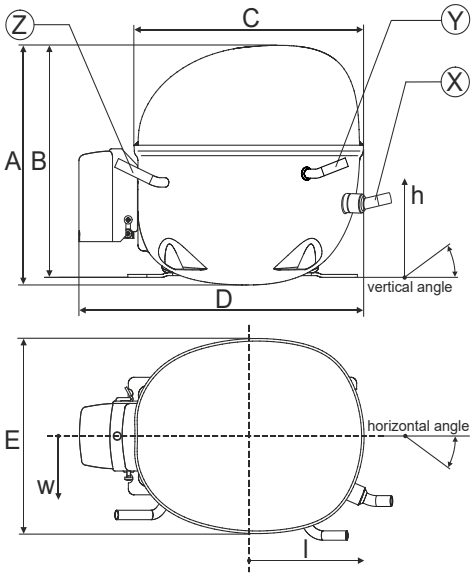
	Conf. 1	**Conf. 2**
Starting device type	PTC	relay
Run capacitor	-/-	-/-
Start capacitor	-/-	80µF
LRA (locked rotor amps / 4s)	5A	5A
RLA (rated load amps / 1s)	1A	1A
Cut in current	9,6A	9,6A

Model

Designation **NL6F** **220-240V/50Hz 1~** Sales code: **105G6606**

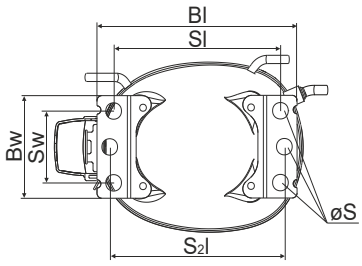
Compressor dimensions

Housing	
A Height	187,5mm / 7,38in
B Height	181,5mm / 7,15in
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 6,11-6,29	øi 5,12-5,22	øi 6,11-6,29
(i:inside, o:outside)	[in]	øi 0,24-0,25	øi 0,2-0,21	øi 0,24-0,25
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

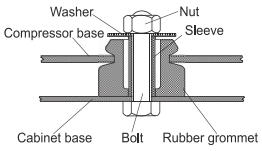
Compressor fixation



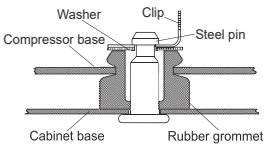
Baseplate	[mm]	[inch]
Bl	204	8.03
Bw	100	3.94

Small holes	[mm]	[inch]
Sl	170	6.7
Sw	70	2.76
S2l	178	7
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

Model

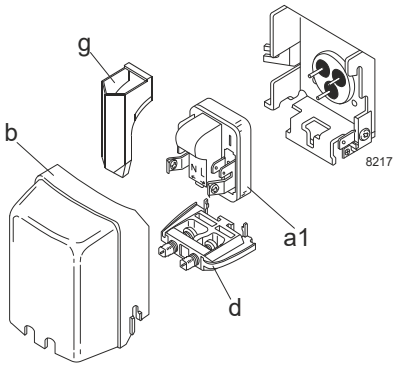
Designation	NL6F	220-240V/50Hz	Conf. 1	Sales code:	105G6606

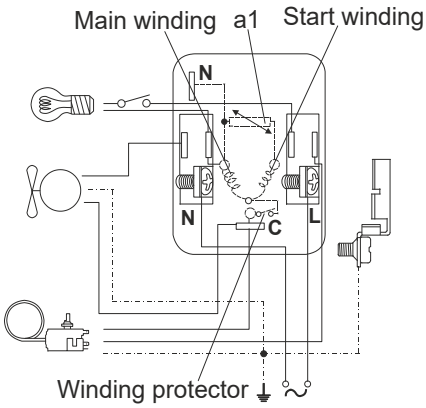
Configuration

Motorconfiguration	RSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R134a
Application	LBP
Voltage range	198-254V
Starting torque	LST
Approvals	VDE
	EAC

Electrical accessories / wiring diagram

RSIR



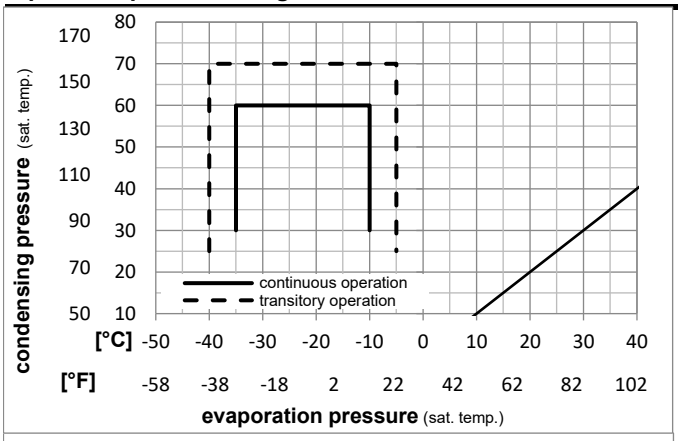


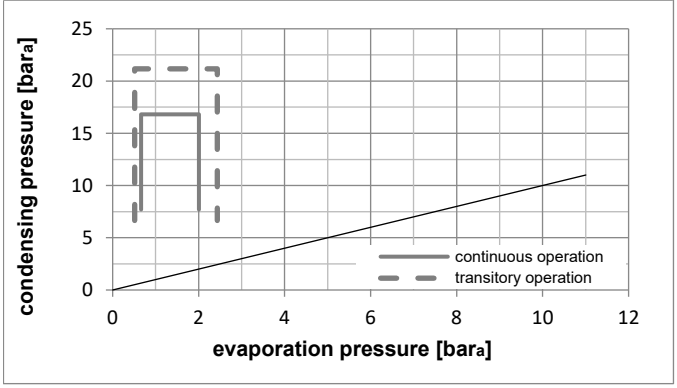
Ambient temperatures / system cooling

Ambient temperature min.:	10°C / 50°F
Ambient temperature max.:	38°C / 101°F

System cooling (n/a: outside limits)			
T ambient	LBP	MBP	HBP
32°C / 90°F	static	n/a	n/a
38°C / 100°F	static	n/a	n/a
43°C / 110°F	n/a	n/a	n/a

Operation pressure range





Components

a1	PTC starter (220V, 25Ohm, 4.8mm)	103N0018
b	plastic cover	103N2010
d	cord relief	103N1010
g	protection screen for PTC	103N0476

Alternative components

a1	PTC starter (220V, 25Ohm, 6.3mm)	103N0011
b	plastic cover	103N2011
d	cord relief	103N1010
g	protection screen for PTC	103N0476

Model

Designation **NL6F** **220-240V/50Hz** **Conf. 1** Sales code: **105G6606**

Optimization + standard conditions R134a, 220V/50Hz, RSIR, static, VDE, EAC

	Evaporating pressure (saturation temperature) pe	Condensing pressure (saturation temperature) pc	Return gas temp. RGT	Liquid temp. Tliq	Cooling capacity [W]	[Btu/h]	[kcal/h]	COP [W/W]	EER [Btu/Wh]	[kcal/Wh]	Power consumption P1 [W]	Current consumption I [A]	Ref. mass flow ṁ [kg/h]	
[°C]	-23	54	32	32	151,6	518	130,5	1,21	4,15	1,05	124,8	0,88	2,94	**ASHRAE LBP**
[°F]	-10	130	90	90										
[°C]	-25	55	32	55	110,0	376	94,7	0,93	3,19	0,80	117,9	0,86	2,63	**cecomaf LBP**
[°F]	-13	131	90	131										
[°C]	-35	40	20	40	67,9	232	58,4	0,78	2,66	0,67	87,2	0,80	1,49	**EN12900 LBP**
[°F]	-31	104	68	104										
[°C]	-23	49	4,4	49	125,0	427	107,6	1,00	3,41	0,86	125,1	0,87	3,30	**ARI540 LBP**
[°F]	-10	120	40	120										
[°C]	-23	41	32	32	173,3	592	149,1	1,41	4,83	1,22	122,5	0,87	3,36	**AHAM LBP**
[°F]	-10	105	90	90										
[°C]	-35	45	32	45	62,1	212	53,4	0,72	2,47	0,62	85,9	0,79	1,34	**opt**
[°F]	-31	113	90	113										

Performance tables R134a, 220V/50Hz, RSIR, static, VDE, EAC

	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]	-35	-31	62,1	212	53,4	0,72	2,47	0,62	85,9	0,79	1,34
cond. pressure	-30	-22	93,7	320	80,6	0,92	3,15	0,79	101,4	0,81	2,02
pc= 45/113	-25	-13	133,0	454	114,4	1,13	3,84	0,97	118,2	0,85	2,88
return gas temp.	-23	-10	148,1	506	127,5	1,19	4,07	1,03	124,2	0,87	3,21
RGT= 32/90	-20	-4	180,2	616	155,1	1,32	4,51	1,14	136,3	0,90	3,92
liquid temp	-15	5	235,9	805	203,0	1,51	5,16	1,30	156,2	0,97	5,14
Tliq= 45/113	-10	14	300,1	1025	258,3	1,69	5,76	1,45	177,8	1,04	6,57
[°C / °F]	-35	-31	52,0	177	44,7	0,65	2,22	0,56	80,1	0,78	1,24
cond. pressure	-30	-22	77,2	264	66,4	0,78	2,68	0,67	98,4	0,81	1,84
pc= 55/131	-25	-13	110,0	376	94,7	0,93	3,19	0,80	117,9	0,86	2,63
return gas temp	-23	-10	123,0	420	105,9	0,99	3,37	0,85	124,8	0,88	2,94
RGT= 32/90	-20	-4	150,9	515	129,9	1,09	3,72	0,94	138,7	0,92	3,62
liquid temp	-15	5	200,1	683	172,2	1,24	4,24	1,07	161,0	0,99	4,82
Tliq= 55/131	-10	14	257,9	881	222,0	1,39	4,76	1,20	185,1	1,08	6,24

Model

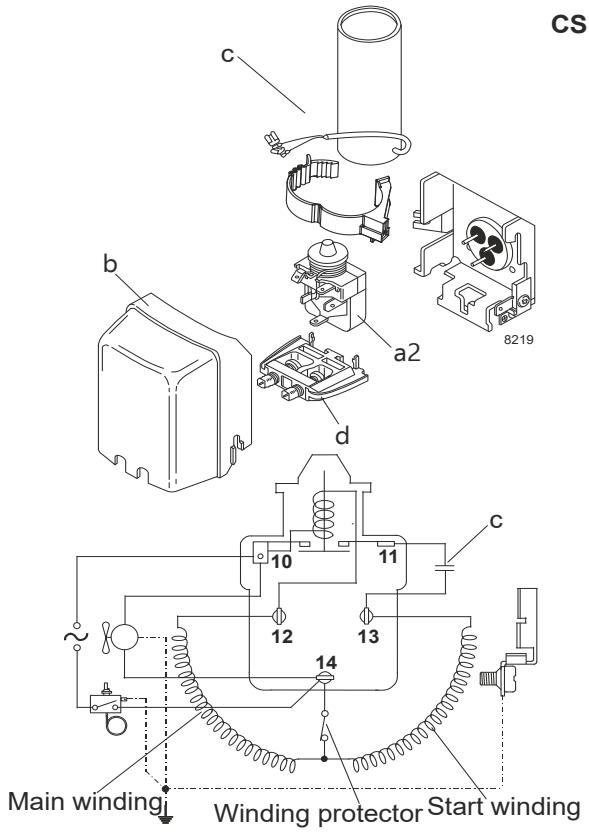
Designation				
	NL6F	**220-240V/50Hz**	**Conf. 2**	Sales code: **105G6606**

Configuration

Motorconfiguration	CSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R134a
Application	LBP
Voltage range	198-254V
Starting torque	HST
Approvals	VDE
	EAC

Electrical accessories / wiring diagram

CSIR

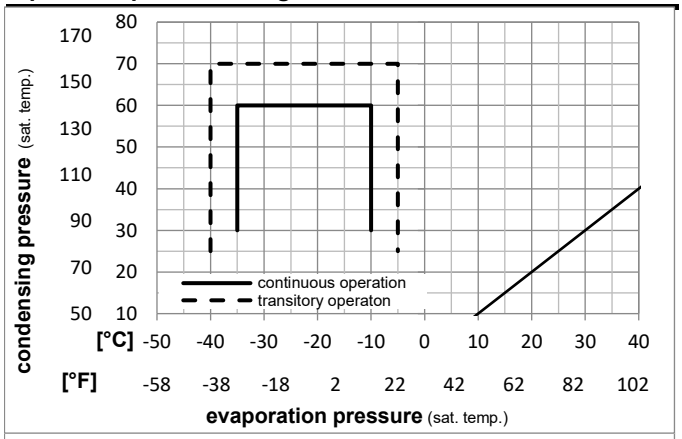


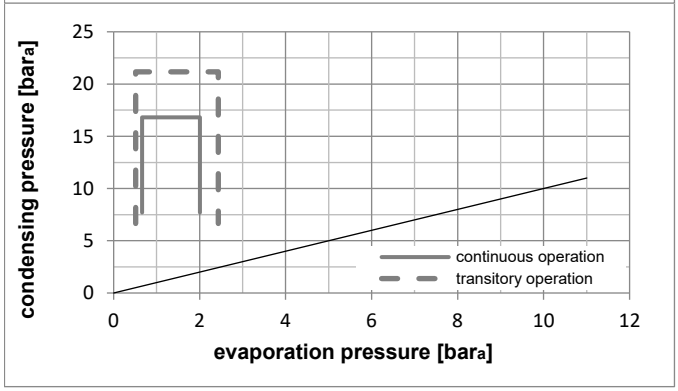
Ambient temperatures / system cooling

Ambient temperature min.:	10°C / 50°F
Ambient temperature max.:	38°C / 101°F

System cooling (n/a: outside limits)			
T ambient	LBP	MBP	HBP
32°C / 90°F	static	n/a	n/a
38°C / 100°F	static	n/a	n/a
43°C / 110°F	n/a	n/a	n/a

Operation pressure range





Components

a2	current relay	117U6004
c	start capacitor (60µF)	117U5014
d	cord relief	103N1010
d	cord relief	103N1010

Alternative components

b	plastic cover	103N2011

Model

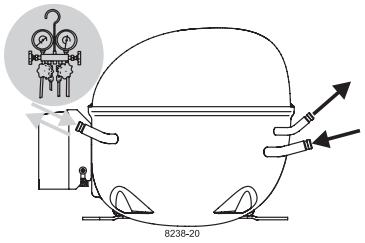
Designation	NL6F	220-240V/50Hz	Conf. 2	Sales code:	105G6606

Optimization + standard conditions R134a, 220V/50Hz, CSIR, static, VDE, EAC

	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]	P1 [W]	I [A]	ṁ [kg/h]	
[°C]	-23	54	32	32	151,6	518	130,5	1,21	4,15	1,05	124,8	0,88	2,94	ASHRAE LBP
[°F]	-10	130	90	90										
[°C]	-25	55	32	55	110,0	376	94,7	0,93	3,19	0,80	117,9	0,86	2,63	cecomaf LBP
[°F]	-13	131	90	131										
[°C]	-35	40	20	40	67,9	232	58,4	0,78	2,66	0,67	87,2	0,80	1,49	EN12900 LBP
[°F]	-31	104	68	104										
[°C]	-23	49	4,4	49	125,0	427	107,6	1,00	3,41	0,86	125,1	0,87	3,30	ARI540 LBP
[°F]	-10	120	40	120										
[°C]	-23	41	32	32	173,3	592	149,1	1,41	4,83	1,22	122,5	0,87	3,36	AHAM LBP
[°F]	-10	105	90	90										
[°C]	-35	45	32	45	62,1	212	53,4	0,72	2,47	0,62	85,9	0,79	1,34	opt
[°F]	-31	113	90	113										

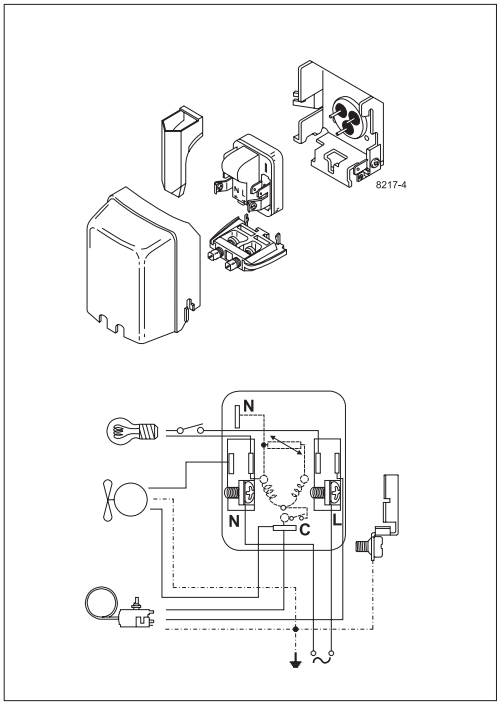
Performance tables R134a, 220V/50Hz, CSIR, static, VDE, EAC

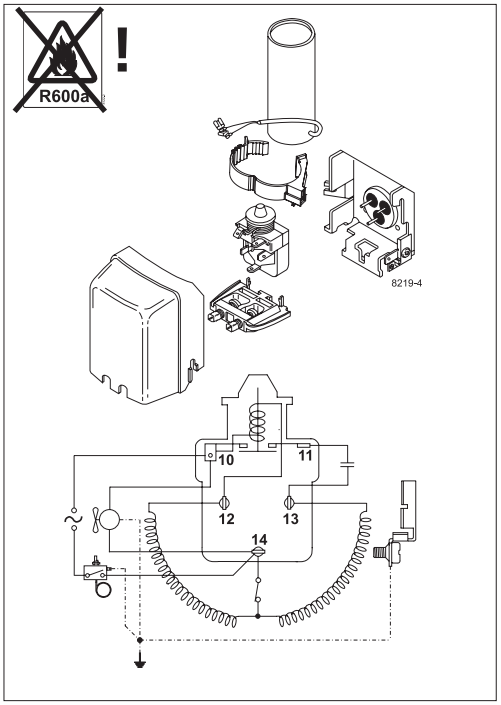
	pe		Cooling capacity			COP	EER		P1	I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-35	-31	62,1	212	53,4	0,72	2,47	0,62	85,9	0,79	1,34
cond. pressure	-30	-22	93,7	320	80,6	0,92	3,15	0,79	101,4	0,81	2,02
pc= 45/113	-25	-13	133,0	454	114,4	1,13	3,84	0,97	118,2	0,85	2,88
return gas temp.	-23	-10	148,1	506	127,5	1,19	4,07	1,03	124,2	0,87	3,21
RGT= 32/90	-20	-4	180,2	616	155,1	1,32	4,51	1,14	136,3	0,90	3,92
liquid temp	-15	5	235,9	805	203,0	1,51	5,16	1,30	156,2	0,97	5,14
Tliq= 45/113	-10	14	300,1	1025	258,3	1,69	5,76	1,45	177,8	1,04	6,57
[°C / °F]	-35	-31	52,0	177	44,7	0,65	2,22	0,56	80,1	0,78	1,24
cond. pressure	-30	-22	77,2	264	66,4	0,78	2,68	0,67	98,4	0,81	1,84
pc= 55/131	-25	-13	110,0	376	94,7	0,93	3,19	0,80	117,9	0,86	2,63
return gas temp	-23	-10	123,0	420	105,9	0,99	3,37	0,85	124,8	0,88	2,94
RGT= 32/90	-20	-4	150,9	515	129,9	1,09	3,72	0,94	138,7	0,92	3,62
liquid temp	-15	5	200,1	683	172,2	1,24	4,24	1,07	161,0	0,99	4,82
Tliq= 55/131	-10	14	257,9	881	222,0	1,39	4,76	1,20	185,1	1,08	6,24

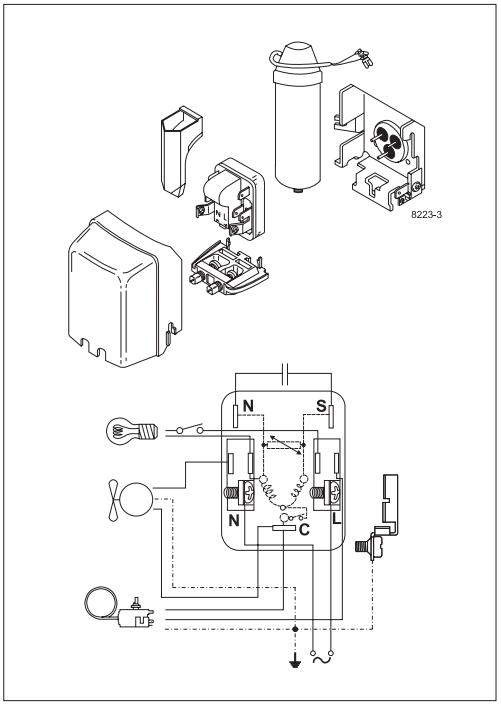


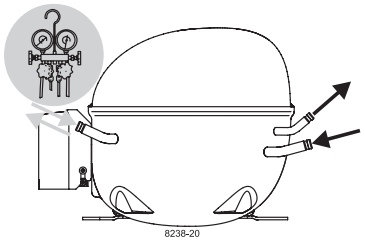
NL Compressors

SECOP





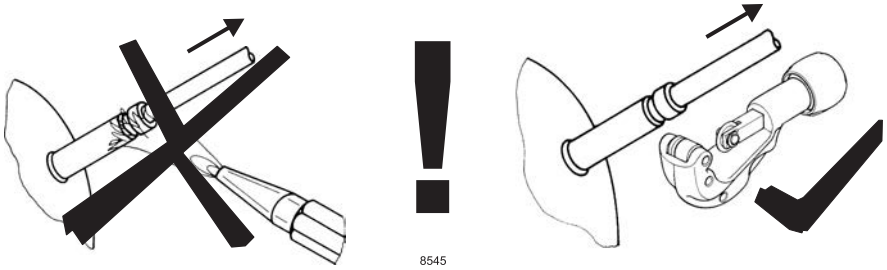




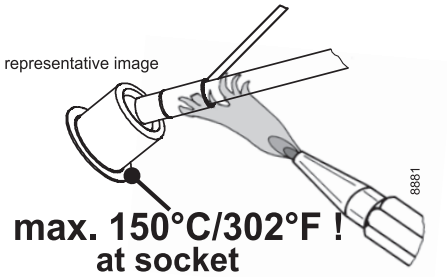
NL Compressors

SECOP

Service/Repair – R600a, R290



Brazing on Suction Connectors (Direct Intake)



! 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)