

Single Pack NLE12.6MN 220-240V 50Hz RSIR

Single pack code number: **195B4541**

Position	Title	Code	Amount
1	Compressor NLE12.6MN	105H6377	1
2	e-PTC starting device (220V, 250hm, 4.8mm)	103N0050	1
3	Cord relief	103N1010	1
4	Cover	103N2010	1
5	Snap-on for one compressor $\varnothing 7,3$ $\varnothing 16$ mm	118-1947	1

Secop GmbH • Lise-Meitner-Straße 29 • 24941 Flensburg, Germany • Tel: +49 461 4941 0 • www.secop.com

Secop accepts no responsibility for possible errors in catalogs, brochures, and other printed material. Secop reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequent changes being necessary to specifications already agreed. All trademarks in this material are the property of the respective companies. Secop and the Secop logotype are trademarks of Secop GmbH. All rights reserved.

Model

Designation	NLE12.6MN	220-240V/50Hz 1~	Sales code:	105H6377
-------------	------------------	------------------	-------------	-----------------

Compressor design

Oil type	Polyolester	Refrigerant(s)	R290
Oil viscosity	32cSt	Displacement	12,55cm ³ / 0,77cu.in
Oil quantity	298cm ³ / 10,1fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	300g / 10,6oz		
Free gas volume comp.	2360cm ³ / 79,8fl.oz		
Weight	12,1kg / 26,7lbs		
Motor protection	1# internal		
Winding resistance main	5Ω (at 25°C)		
Winding resistance aux	9,9Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations with NLE12.6MN

	Conf. 1	Conf. 2	Conf. 3
Motorconfiguration	CSIR	eRSIR	eRSCR
Power supply (nominal)	220-240V/50Hz	220-240V/50Hz	220-240V/50Hz
Number of phases	1	1	1
Voltage range	198-254V	198-254V	198-254V
Approvals	VDE, CCC, EAC	VDE, CCC, EAC	VDE, CCC, EAC
Starting torque	HST	LST	LST
Note	- / -		

Applications with NLE12.6MN

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

Electrical data - Configurations with NLE12.6MN

	Conf. 1	Conf. 2	Conf. 3
Starting device type	relay	e-PTC	e-PTC
Run capacitor	- / -	- / -	4μF
Start capacitor	80μF	- / -	- / -
LRA (locked rotor amps / 4s/ U(N))	15,6A	16A	16A
RLA (rated load amps / 1s/ U(N))	2,7A	2,7A	2,7A
Cut in current (U(N))	21,2A	21,2A	21,2A

Model

Designation

NLE12.6MN

220-240V/50Hz 1~

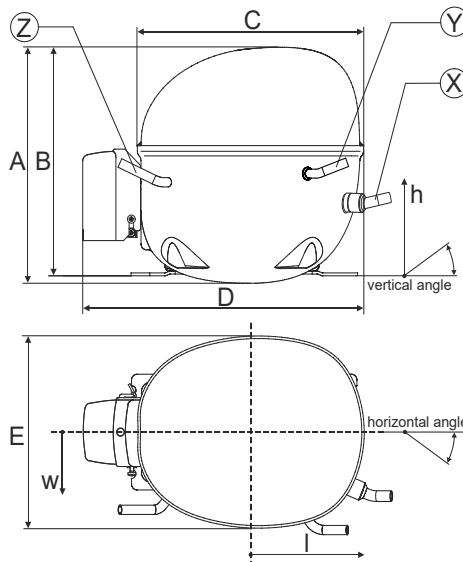
Sales code:

105H6377

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 6,11-6,29	øi 6,11-6,29
(i:inside, o:outside)	[in]	øi 0,32-0,33	øi 0,24-0,25	øi 0,24-0,25
Material		copper	copper	copper
Horizontal angle	±2°	0°	0°	0°
Vertical angle	±2°	15°	21°	155°
Position l/h/w	[mm]	132/69/57	94/102/81	-109/94/72
	[in]	5,2/2,7/2,2	3,7/4/3,2	-4,3/3,7/2,8
Straight tube l.	[mm]	12	12	12
	[in]	0,5	0,5	0,5



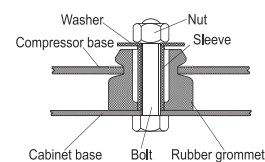
Compressor fixation



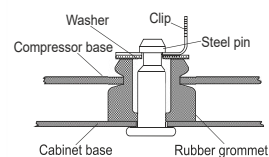
Baseplate	[mm]	[inch]
BI	204	8.03
Bw	100	3.94

Small holes	[mm]	[inch]
SI	170	6.7
Sw	70	2.76
S2l	178	7
øS	ø 16	ø 0.63

Bolt joint



Snap-on



Mounting accessories

Mounting accessories	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

Application notes

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

Model

Designation	NLE12.6MN	220-240V/50Hz	Conf. 1	Sales code:	105H6377
-------------	------------------	----------------------	----------------	-------------	-----------------

Configuration

Motorconfiguration	CSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R290
Application	LBP+MBP
Voltage range	198-254V
Starting torque	HST
Approvals	VDE
	CCC
	EAC

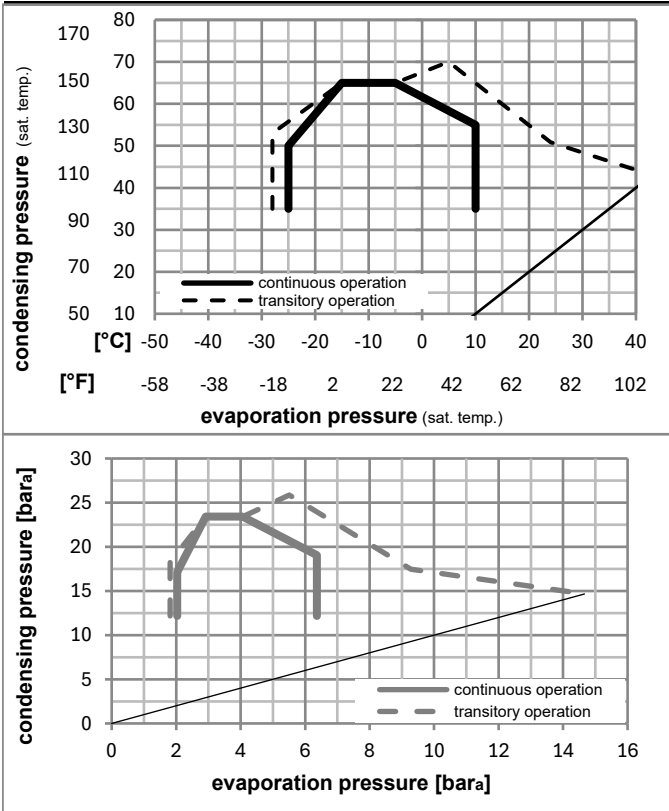
Electrical accessories / wiring diagram



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	117U7011
c	start capacitor (80µF)	117U5015
b	plastic cover	103N2010
d	cord relief	103N1010

Alternative components

b	plastic cover	103N2011
---	---------------	----------

Model

Designation **NLE12.6MN** **220-240V/50Hz** Conf. 1 Sales code: **105H6377**

Optimization + standard conditions

R290, 220V/50Hz, CSIR, fan 3m/s, VDE, CCC, EAC

	Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)			Return gas temp.	Liquid temp.	Cooling capacity	COP	EER	Power consumption			Ref. mass flow
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]						P1	I	m	
	[°C]	[°F]	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]			
ASHRAE LBP	-23	54	32	32	600,6	2051	516,9	1,56	5,32	1,34	385,3	2,54	6,08			
cecomaf LBP	-25	55	32	55	451,6	1542	388,7	1,21	4,14	1,04	372,6	2,49	5,62			
EN12900 LBP	-35	40	20	40	362,2	1237	311,7	1,33	4,55	1,15	272,0	2,14	4,14			
ASHRAE MBP	-7	54	35	46	1060,9	3623	913,0	1,97	6,74	1,70	537,5	3,10	12,10			
cecomaf MBP	-10	55	32	55	842,6	2878	725,2	1,66	5,67	1,43	507,7	2,99	10,66			
EN12900 MBP	-10	45	20	45	949,0	3241	816,7	2,05	7,01	1,77	462,3	2,77	11,65			

Performance tables

R290, 220V/50Hz, CSIR, fan 3m/s, VDE, CCC, 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]	-25	-13	536,2	1831	461,5	1,53	5,21	1,31	351,5	2,41	6,05
cond. pressure	-20	-4	663,0	2264	570,5	1,71	5,84	1,47	387,9	2,52	7,51
pc= 45/113	-15	5	813,0	2776	699,6	1,91	6,53	1,65	425,1	2,65	9,25
return gas temp.	-10	14	987,9	3374	850,2	2,14	7,30	1,84	462,3	2,77	11,30
RGT= 32/90	0	32	1419,6	4848	1221,7	2,66	9,07	2,29	534,6	3,06	16,47
liquid temp	5	41	1679,8	5737	1445,6	2,96	10,09	2,54	568,4	3,22	19,65
Tliq= 45/113	10	50	1971,8	6734	1696,9	3,29	11,23	2,83	599,9	3,39	23,30
[°C / °F]	-25	-13	451,6	1542	388,7	1,21	4,14	1,04	372,6	2,49	5,62
cond. pressure	-20	-4	561,6	1918	483,4	1,35	4,62	1,17	414,9	2,64	7,02
pc= 55/131	-15	5	691,4	2361	595,0	1,50	5,13	1,29	460,1	2,81	8,69
return gas temp	-10	14	842,6	2878	725,2	1,66	5,67	1,43	507,7	2,99	10,66
RGT= 32/90	0	32	1216,3	4154	1046,8	2,00	6,84	1,72	607,6	3,39	15,62
liquid temp	5	41	1442,2	4925	1241,2	2,19	7,48	1,88	658,7	3,61	18,70
Tliq= 55/131	10	50	1696,5	5794	1460,0	2,39	8,16	2,06	709,7	3,85	22,24

Model

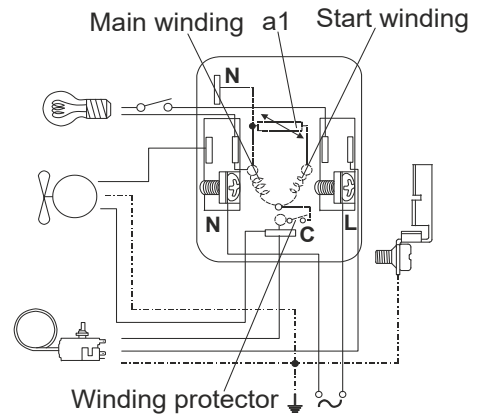
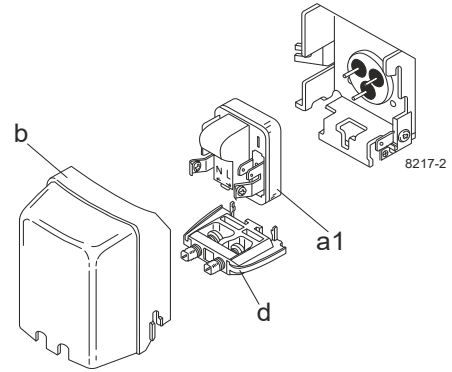
Designation	NLE12.6MN	220-240V/50Hz	Conf. 2	Sales code:	105H6377
-------------	------------------	----------------------	----------------	-------------	-----------------

Configuration

Motorconfiguration	eRSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R290
Application	LBP+MBP
Voltage range	198-254V
Starting torque	LST
Approvals	VDE
	CCC
	EAC

Electrical accessories / wiring diagram

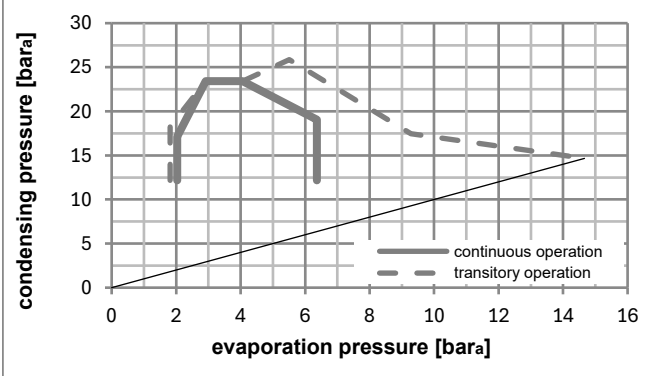
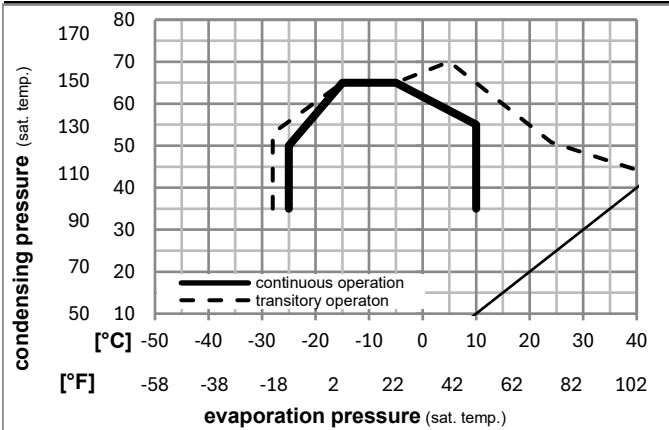
RSIR



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

a1	e-PTC starter (220V, 250hm, 4.8mm)	103N0050
b	plastic cover	103N2010
d	cord relief	103N1010

Alternative components

b	plastic cover	103N2011
---	---------------	----------

Model

Designation **NLE12.6MN** **220-240V/50Hz** Conf. 2 Sales code: **105H6377**

Optimization + standard conditions

R290, 220V/50Hz, eRSIR, fan 3m/s, VDE, CCC, EAC

	Evaporating pressure (saturation temperature)				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	m	
[°C]	-23	54	32	32	600,6	2051	516,9	1,56	5,32	1,34	385,3	2,54	6,08		
[°F]	-10	130	90	90											
[°C]	-25	55	32	55	451,6	1542	388,7	1,21	4,14	1,04	372,6	2,49	5,62	cecomaf LBP	
[°F]	-13	131	90	131											
[°C]	-35	40	20	40	362,2	1237	311,7	1,33	4,55	1,15	272,0	2,14	4,14	EN12900 LBP	
[°F]	-31	104	68	104											
[°C]	-7	54	35	46	1060,9	3623	913,0	1,97	6,74	1,70	537,5	3,10	12,10	ASHRAE MBP	
[°F]	20	130	95	115											
[°C]	-10	55	32	55	842,6	2878	725,2	1,66	5,67	1,43	507,7	2,99	10,66	cecomaf MBP	
[°F]	14	131	90	131											
[°C]	-10	45	20	45	949,0	3241	816,7	2,05	7,01	1,77	462,3	2,77	11,65	EN12900 MBP	
[°F]	14	113	68	113											

Performance tables

R290, 220V/50Hz, eRSIR, fan 3m/s, VDE, CCC, 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]	-25	-13	536,2	1831	461,5	1,53	5,21	1,31	351,5	2,41	6,05
cond. pressure	-20	-4	663,0	2264	570,5	1,71	5,84	1,47	387,9	2,52	7,51
pc= 45/113	-15	5	813,0	2776	699,6	1,91	6,53	1,65	425,1	2,65	9,25
return gas temp.	-10	14	987,9	3374	850,2	2,14	7,30	1,84	462,3	2,77	11,30
RGT= 32/90	0	32	1419,6	4848	1221,7	2,66	9,07	2,29	534,6	3,06	16,47
liquid temp	5	41	1679,8	5737	1445,6	2,96	10,09	2,54	568,4	3,22	19,65
Tliq= 45/113	10	50	1971,8	6734	1696,9	3,29	11,23	2,83	599,9	3,39	23,30
[°C / °F]	-25	-13	451,6	1542	388,7	1,21	4,14	1,04	372,6	2,49	5,62
cond. pressure	-20	-4	561,6	1918	483,4	1,35	4,62	1,17	414,9	2,64	7,02
pc= 55/131	-15	5	691,4	2361	595,0	1,50	5,13	1,29	460,1	2,81	8,69
return gas temp	-10	14	842,6	2878	725,2	1,66	5,67	1,43	507,7	2,99	10,66
RGT= 32/90	0	32	1216,3	4154	1046,8	2,00	6,84	1,72	607,6	3,39	15,62
liquid temp	5	41	1442,2	4925	1241,2	2,19	7,48	1,88	658,7	3,61	18,70
Tliq= 55/131	10	50	1696,5	5794	1460,0	2,39	8,16	2,06	709,7	3,85	22,24

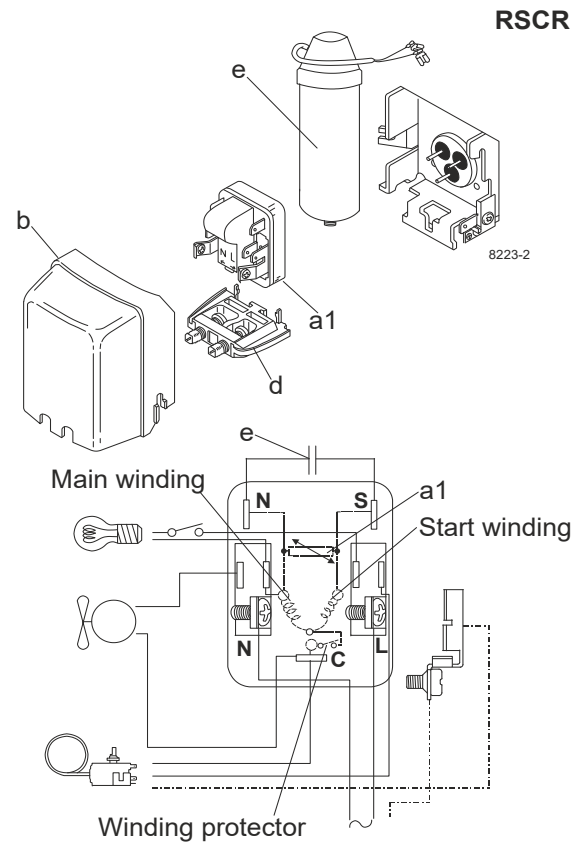
Model

Designation	NLE12.6MN	220-240V/50Hz	Conf. 3	Sales code:	105H6377
-------------	------------------	----------------------	----------------	-------------	-----------------

Configuration

Motorconfiguration	eRSCR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R290
Application	LBP+MBP
Voltage range	198-254V
Starting torque	LST
Approvals	VDE
	CCC
	EAC

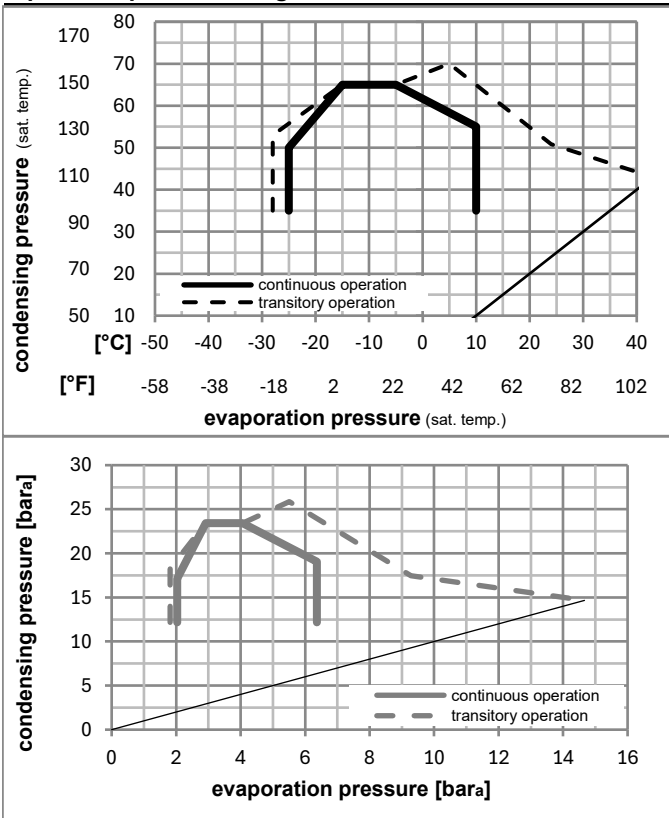
Electrical accessories / wiring diagram



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

a1	e-PTC starter (220V, 250hm, 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
---	---------------	----------

Model

Designation **NLE12.6MN** **220-240V/50Hz** Conf. 3 Sales code: **105H6377**

Optimization + standard conditions

R290, 220V/50Hz, eRSCR, fan 3m/s, VDE, CCC, EAC

	Evaporating pressure (saturation temperature)				Cooling capacity			COP	EER	P1	Power consumption		ASHRAE LBP	
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]				I	m		
	[°C]	[°F]	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
	-23	54	32	32	604,1	2063	519,9	1,64	5,59	1,41	369,4	2,21	6,12	ASHRAE LBP
	-10	130	90	90										
	-25	55	32	55	454,1	1551	390,8	1,27	4,34	1,09	357,1	2,17	5,65	cecomaf LBP
	-13	131	90	131										
	-35	40	20	40	364,0	1243	313,2	1,41	4,82	1,21	258,0	1,83	4,16	EN12900 LBP
	-31	104	68	104										
	-7	54	35	46	1070,3	3655	921,1	2,08	7,12	1,79	513,5	2,78	12,21	ASHRAE MBP
	20	130	95	115										
	-10	55	32	55	849,7	2902	731,3	1,75	5,97	1,51	485,8	2,67	10,75	cecomaf MBP
	14	131	90	131										
	-10	45	20	45	956,9	3268	823,5	2,16	7,39	1,86	442,5	2,49	11,75	EN12900 MBP
	14	113	68	113										

Performance tables

R290, 220V/50Hz, eRSCR, fan 3m/s, VDE, CCC, EAC

	pe		Cooling capacity			COP	EER	P1	I	m	
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]						
[°C / °F]	-25	-13	539,2	1842	464,1	1,60	5,47	1,38	336,8	2,10	6,08
cond. pressure	-20	-4	667,3	2279	574,3	1,79	6,13	1,54	372,1	2,22	7,56
pc= 45/113	-15	5	819,1	2797	704,9	2,01	6,87	1,73	407,5	2,36	9,32
return gas temp.	-10	14	996,2	3402	857,3	2,25	7,69	1,94	442,5	2,49	11,40
RGT= 32/90	0	32	1433,1	4894	1233,3	2,81	9,61	2,42	509,3	2,76	16,62
liquid temp	5	41	1696,2	5793	1459,8	3,14	10,72	2,70	540,2	2,89	19,84
Tliq= 45/113	10	50	1991,4	6801	1713,8	3,50	11,96	3,01	568,7	3,01	23,53
[°C / °F]	-25	-13	454,1	1551	390,8	1,27	4,34	1,09	357,1	2,17	5,65
cond. pressure	-20	-4	565,3	1931	486,5	1,42	4,85	1,22	397,9	2,32	7,07
pc= 55/131	-15	5	696,6	2379	599,5	1,58	5,39	1,36	441,0	2,49	8,76
return gas temp	-10	14	849,7	2902	731,3	1,75	5,97	1,51	485,8	2,67	10,75
RGT= 32/90	0	32	1227,9	4194	1056,8	2,12	7,25	1,83	578,7	3,07	15,77
liquid temp	5	41	1456,5	4974	1253,4	2,33	7,95	2,00	625,8	3,27	18,89
Tliq= 55/131	10	50	1713,5	5852	1474,6	2,55	8,70	2,19	672,8	3,49	22,47

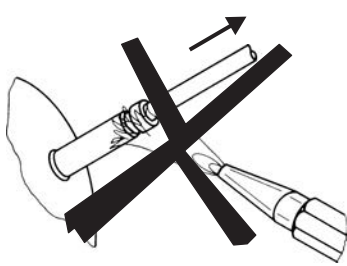


NL Compressors





Service/Repair – R600a, R290



8545

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)**

Secop accepts no responsibility for possible errors in catalogs, brochures, and other printed material. Secop reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary to specifications already agreed. All trademarks in this material are the property of the respective companies. Secop and the Secop logotype are trademarks of Secop GmbH. All rights reserved. www.secop.com