Technical Data Compressor

SECOP

Model

Designation	**NF7.3FX.2**	**115-127V/60Hz 1~**	Sales code:	**105G5722**

Compressor design

Oil type	Polyolester	Refrigerant(s)	**R134a, R513A, 0**
Oil viscosity	32cST	Displacement	7,27cm³ / 0,44cu.in
Oil quantity	268cm³ / 9,1fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	400g / 14,1oz		
Free gas volume comp.	2360cm³ / 79,8fl.oz		
Weight	10kg / 22lbs		
Motor protection	external		
Winding resistance main	1,6Ω (at 25°C)		
Winding resistance aux	6,2Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		

General - Configurations with NF7.3FX.2

	Conf. 1
Motorconfiguration	CSIR
Power supply (nominal)	115V/60Hz
Number of phases	1
Voltage range	95-135V
Approvals	UL, EAC
Starting torque	HST
Note	- / -

Applications with NF7.3FX.2

	Conf. 1
Refrigerant	R134a
Application	LBP+MBP
System cooling	fan 1,5m/s
Hot gas defrost	-/-
Long interval pull down	OK

Electrical data - Configurations with NF7.3FX.2

	Conf. 1
Starting device type	relay
Run capacitor	-/-
Start capacitor	280µF
LRA (locked rotor amps / 4s)	
RLA (rated load amps / 1s)	-/-A
Cut in current	

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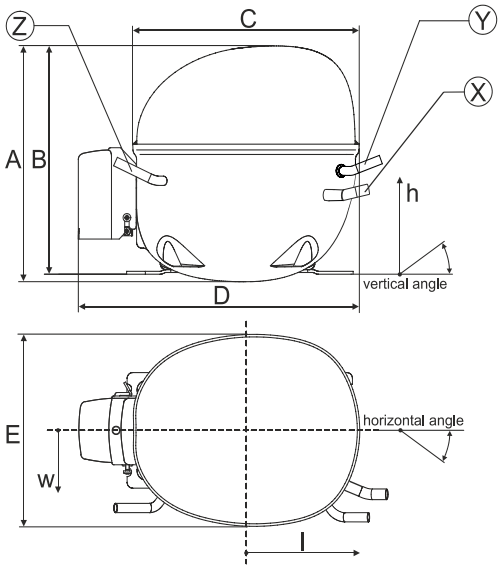
Compressor dimensions

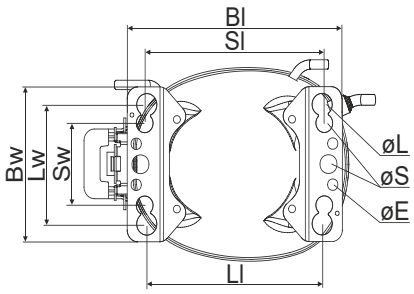
Housing

A Height	197mm / 7,76in
B Height	191mm / 7,52in
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°	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

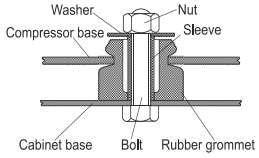


Baseplate	[mm]	[inch]
Bl	204	8.03
Bw	132	5.2
øE	ø 9.7	ø 0.38

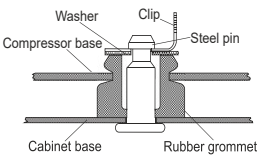
Large holes	[mm]	[inch]
Ll	165	6.5
Lw	101.6	4
øL	ø 19	ø 0.75

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

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

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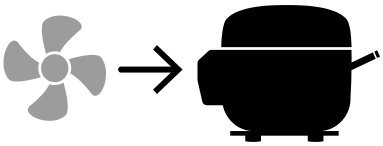
Configuration

Motorconfiguration	CSIR
Power supply (nominal)	115V/60Hz 1~
Refrigerant	R134a
Application	LBP+MBP
Voltage range	95-135V
Starting torque	HST
Approvals	UL
	EAC

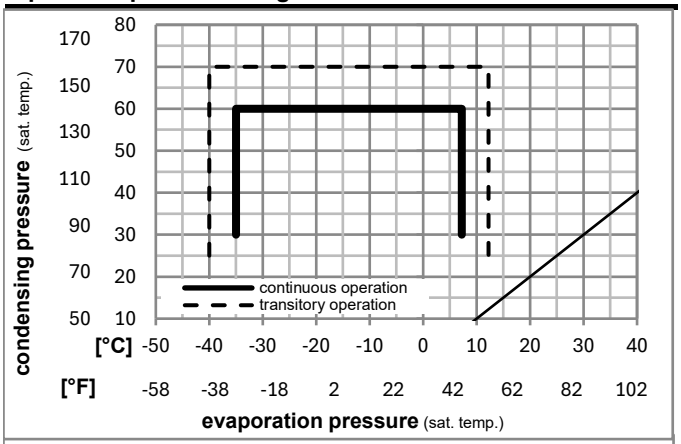
Ambient/ machine room temperatures minimum /maximum

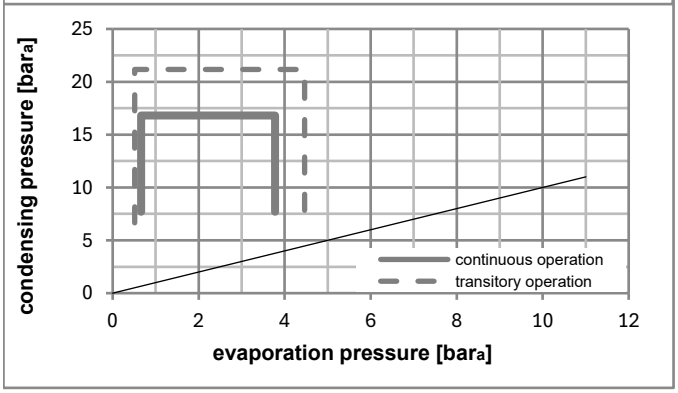
Ambient temperature range:	10 - 43°C / 50 - 110°F
Machine room temperature range:	10 - 48°C / 50 - 119°F
Compressor cooling:	fan 1,5m/s

Compressor with external protector. For max. operation envelope cooling on protector.



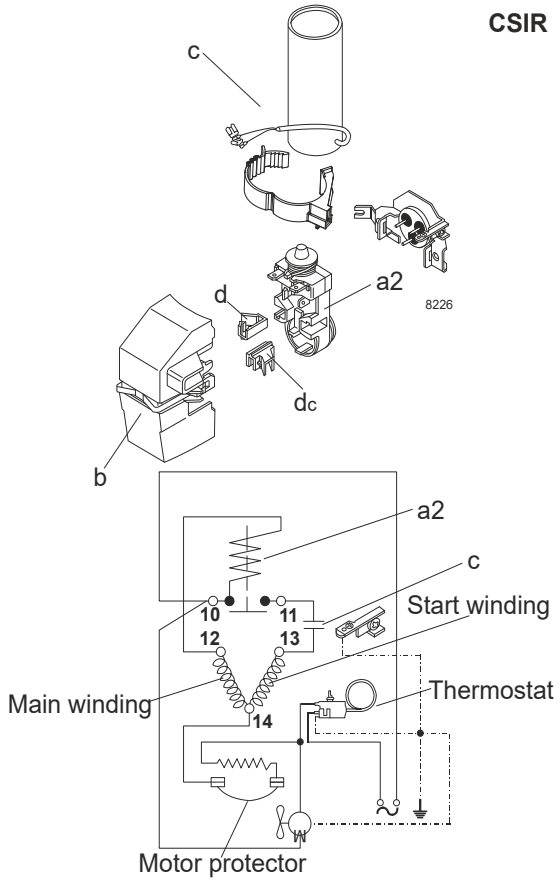
Operation pressure range





Electrical accessories / wiring diagram

CSIR



Components

a2	relay (protector: TI MRP30AEN-6)	117U4061
c	start capacitor (280µF)	117U5025
b	plastic cover	117U1021
d/dc	cord relief	117U0349
d/dc	cord relief	117U0349

Alternative components

b	assy. terminal board 6.3mm	117U1024

Model

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Optimization + standard conditions R134a, 115V/60Hz, CSIR, fan 1,5m/s, UL, EAC

	Evaporating pressure (saturation temperature) pe	Condensing pressure (saturation temperature) pc	Return gas temp. RGT	Liquid temp. Tliq	Cooling capacity [W]	Cooling capacity [Btu/h]	Cooling capacity [kcal/h]	COP [W/W]	EER [Btu/Wh]	EER [kcal/Wh]	Power consumption P1 [W]	Current consumption I [A]	Ref. mass flow ṁ [kg/h]	
[°C]	-23	54	32	32	261,5	893	225,1	1,16	3,95	1,00	226,0	3,57	5,08	**ASHRAE LBP**
[°F]	-10	130	90	90										
[°C]	-25	55	32	55	190,3	650	163,8	0,88	3,01	0,76	215,8	3,53	4,55	**cecomaf LBP**
[°F]	-13	131	90	131										
[°C]	-35	40	20	40	127,5	436	109,8	0,76	2,58	0,65	168,9	3,35	2,80	**EN12900 LBP**
[°F]	-31	104	68	104										
[°C]	-7	54	35	46	548,4	1873	472,0	1,70	5,82	1,47	322,1	4,12	11,97	**ASHRAE MBP**
[°F]	20	130	95	115										
[°C]	-10	55	32	55	425,5	1453	366,2	1,40	4,79	1,21	303,3	4,00	10,29	**cecomaf MBP**
[°F]	14	131	90	131										
[°C]	-10	45	20	45	479,2	1637	412,4	1,66	5,67	1,43	288,9	3,90	11,22	**EN12900 MBP**
[°F]	14	113	68	113										

Performance tables R134a, 115V/60Hz, CSIR, fan 1,5m/s, UL, EAC

	pe [°C]	pe [°F]	Cooling capacity [W]	Cooling capacity [Btu/h]	Cooling capacity [kcal/h]	COP [W/W]	EER [Btu/Wh]	EER [kcal/Wh]	P1 [W]	I [A]	m [kg/h]
[°C / °F]	-35	-31	117,1	400	100,8	0,71	2,43	0,61	164,5	3,34	2,53
cond. pressure	-23	-10	257,3	879	221,4	1,14	3,89	0,98	225,7	3,54	5,58
pc= 45/113	-15	5	395,8	1352	340,6	1,49	5,10	1,28	265,1	3,75	8,63
return gas temp.	-9	15	509,4	1740	438,4	1,75	5,97	1,50	291,6	3,92	11,15
RGT= 32/90	-4	25	642,0	2193	552,5	2,01	6,87	1,73	319,4	4,10	14,14
liquid temp	0	32	747,2	2552	643,1	2,20	7,50	1,89	340,2	4,25	16,52
Tliq= 45/113	7,2	45	971,9	3319	836,4	2,53	8,66	2,18	383,5	4,54	21,71
[°C / °F]	-35	-31	91,4	312	78,6	0,61	2,07	0,52	150,7	3,30	2,17
cond. pressure	-23	-10	210,9	720	181,5	0,93	3,19	0,80	225,8	3,57	5,05
pc= 55/131	-15	5	333,8	1140	287,3	1,22	4,15	1,05	274,4	3,82	8,04
return gas temp	-9	15	436,6	1491	375,8	1,42	4,86	1,23	306,6	4,02	10,56
RGT= 32/90	-4	25	558,3	1907	480,5	1,64	5,61	1,41	339,8	4,23	13,59
liquid temp	0	32	655,6	2239	564,2	1,80	6,15	1,55	364,2	4,40	16,04
Tliq= 55/131	7,2	45	865,1	2955	744,5	2,09	7,14	1,80	413,7	4,73	21,40