

Model

Designation	TFS4.5CLX	115-127V/60Hz 1~	Sales code:	102U2115
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R404A, R507
Oil viscosity	32cST	Displacement	4,63cm ³ / 0,28cu.in
Oil quantity	283cm ³ / 9,6fl.oz	Compressors on pallet	125
Refr. charge - tech. limit	600g / 21,2oz		
Free gas volume comp.	1690cm ³ / 57,1fl.oz		
Weight	8,1kg / 17,9lbs		
Motor protection	external		
Winding resistance main	2,6Ω (at 25°C)		
Winding resistance aux	3,8Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations with TFS4.5CLX

	Conf. 1
Motorconfiguration	CSIR
Power supply (nominal)	115V/60Hz
Number of phases	1
Voltage range	103-135V
Approvals	UL
Starting torque	HST
Note	- / -

Applications with TFS4.5CLX

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

Electrical data - Configurations with TFS4.5CLX

	Conf. 1
Starting device type	relay
Run capacitor	-/-
Start capacitor	280μF
LRA (locked rotor amps / 4s)	20A
RLA (rated load amps / 1s)	3,2A
Cut in current	20A

Model

Designation

TFS4.5CLX

115-127V/60Hz 1~

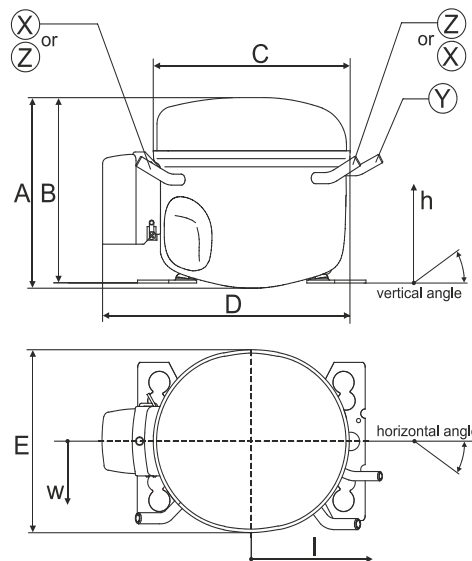
Sales code:

102U2115

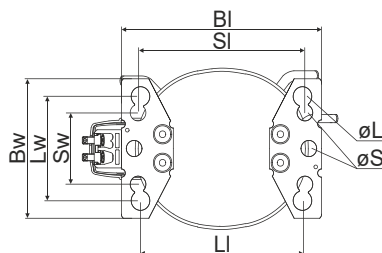
Compressor dimensions

Housing	A Height	174mm / 6,85in
	B Height	168mm / 6,61in
	C Length shell	176,5mm / 6,95in
	D Length w. cover	226mm / 8,9in
	E Width	156mm / 6,14in

Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 6,41-6,59	øi 6,41-6,59	øi 6,41-6,59
	(i:inside, o:outside) [in]	øi 0,25-0,26	øi 0,25-0,26	øi 0,25-0,26
Material		copper	copper	copper
Horizontal angle	±2°	0°	0°	0°
Vertical angle	±2°	31,5°	28°	30°
Position l/h/w	[mm]	96/104/71	117/106/29	102/104/66
	[in]	3,8/4,1/2,8	4,6/4,2/1,1	4/4,1/2,6
Straight tube l.	[mm]	12	12	12
	[in]	0,5	0,5	0,5

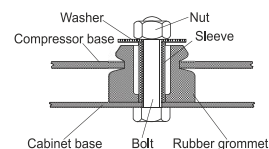


Compressor fixation

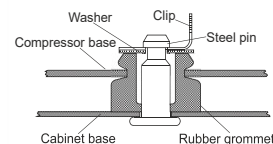


Baseplate	[mm]	[inch]
BI	204	8.03
BW	136	5.35
Large holes		
LI	165	6.5
Lw	101.6	4
øL	ø 19	ø 0.75
Small holes		
SI	170	6.7
Sw	70	2.76
øS	ø 16	ø 0.63

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	
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.

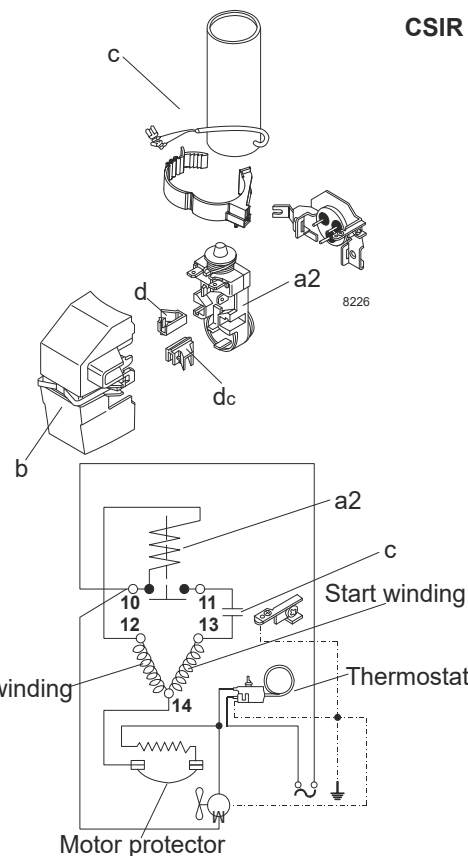
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Application	LBP
Voltage range	103-135V
Starting torque	HST
Approvals	UL

Electrical accessories / wiring diagram

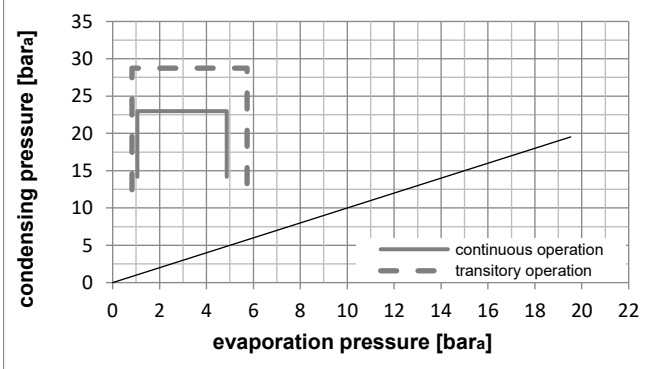
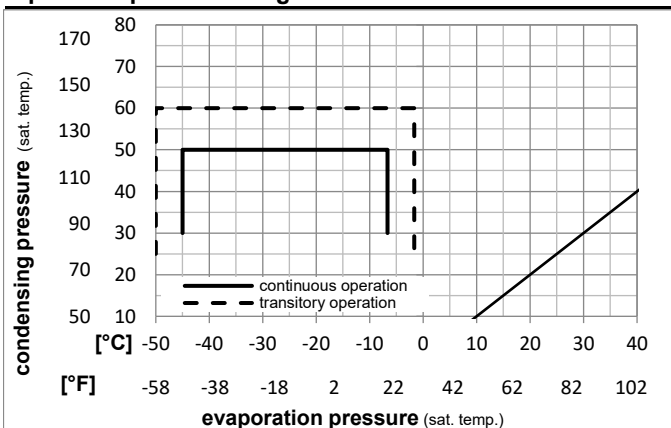


Ambient temperatures / system cooling

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	n/a	n/a
38°C / 100°F	fan 1,5m/s	n/a	n/a
43°C / 110°F	fan 1,5m/s	n/a	n/a

Operation pressure range



Components

a2	assy. relay + ext. protector (MRP36EN-6)	117U4148
c	start capacitor (280µF)	117U5025
b	plastic cover	117U1021
d/dc	cord relief	117U0349
d/dc	cord relief	117U0349

Alternative components

b	plastic cover	117U1027
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Optimization + standard conditions

R404A, 115V/60Hz, CSIR, fan 3m/s, UL

	Evaporating pressure (saturation temperature)				Cooling capacity			COP	EER	P1	Power consumption		ASHRAE LBP	
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]				l	m		
	[°C]	[°F]	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
	-23	54	32	32	271,6	928	233,7	1,19	4,07	1,02	228,0	2,84	6,33	ASHRAE LBP
	-10	130	90	90										
	-25	55	32	55	184,9	631	159,1	0,85	2,89	0,73	218,3	2,77	5,78	cecomaf LBP
	-13	131	90	131										
	-35	40	20	40	147,3	503	126,8	0,94	3,19	0,80	157,5	2,40	4,00	EN12900 LBP
	-31	104	68	104										
	-23	49	4,4	49	200,7	685	172,7	0,91	3,11	0,78	220,2	2,79	7,10	ARI540 LBP
	-10	120	40	120										
	-23	41	32	32	302,2	1032	260,1	1,41	4,83	1,22	213,7	2,76	7,04	AHAM LBP
	-10	105	90	90										
	-35	45	32	45	137,0	468	117,9	0,87	2,98	0,75	157,1	2,38	3,66	opt
	-31	113	90	113										

Performance tables

R404A, 115V/60Hz, CSIR, fan 3m/s, UL

	pe		Cooling capacity			COP	EER	P1	l	m	
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]						
[°C / °F]	-45	-49	70,4	240	60,6	0,63	2,16	0,54	111,3	2,22	1,87
cond. pressure	-34	-30	141,5	483	121,8	0,89	3,03	0,76	159,7	2,39	3,78
pc= 45/113	-29	-20	191,7	655	165,0	1,03	3,51	0,88	186,5	2,55	5,15
return gas temp.	-23	-10	252,3	862	217,2	1,17	3,98	1,00	216,5	2,77	6,82
RGT= 32/90	-21	-5	287,0	980	247,0	1,23	4,20	1,06	233,2	2,90	7,78
liquid temp	-15	5	365,5	1248	314,6	1,35	4,61	1,16	271,0	3,19	9,98
Tliq= 45/113	-7	20	508,3	1736	437,5	1,49	5,08	1,28	341,5	3,72	14,08
[°C / °F]	-45	-49	45,0	154	38,7	0,45	1,55	0,39	99,4	2,18	1,38
cond. pressure	-34	-30	107,4	367	92,4	0,66	2,27	0,57	161,7	2,41	3,32
pc= 55/131	-29	-20	150,1	513	129,1	0,77	2,64	0,66	194,3	2,60	4,67
return gas temp	-23	-10	201,2	687	173,2	0,88	3,00	0,76	229,0	2,85	6,30
RGT= 32/90	-21	-5	230,3	787	198,2	0,93	3,18	0,80	247,7	2,99	7,24
liquid temp	-15	5	296,4	1012	255,1	1,03	3,51	0,88	288,6	3,31	9,40
Tliq= 55/131	-7	20	416,8	1424	358,7	1,15	3,93	0,99	361,8	3,89	13,44