

## Single Pack TFS4.5CLX 115-127V 60Hz CSIR

Single pack code number: **195B4228**

Position	Title	Code	Amount
1	Compressor TFS4.5CLX	102U2115	1
2	Starting relay (overload protector MRP36AEN-6)	117U4148	1
3	Starting capacitor (280 $\mu$ F 125V, 6.3mm)	117U5025	1
4	Cord relief	117U0349	2
5	Cover	117U1021	1
6	Bolt joint for one compressor   M6   $\varnothing$ 16mm	118-1917	1

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## Model

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

Oil type	Polyolester	Refrigerant(s)	<b>R404A, R507</b>
Oil viscosity	32cST	Displacement	4,63cm <sup>3</sup> / 0,28cu.in
Oil quantity	283cm <sup>3</sup> / 9,6fl.oz	Compressors on pallet	125
Refr. charge - tech. limit	600g / 21,2oz		
Free gas volume comp.	1690cm <sup>3</sup> / 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

	<b>Conf. 1</b>
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

	<b>Conf. 1</b>
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

	<b>Conf. 1</b>
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~

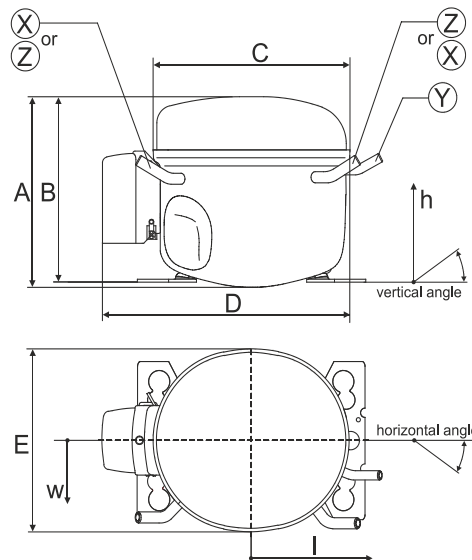
Sales code:

**102U2115**

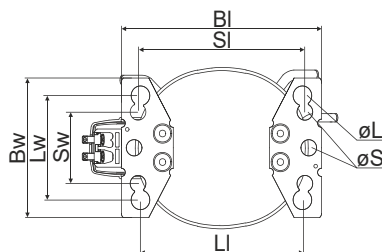
## Compressor dimensions

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

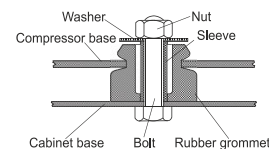


## Compressor fixation

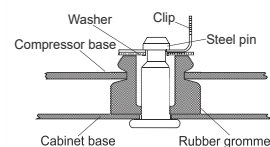


Baseplate	[mm]	[inch]
BI	204	8.03
BW	136	5.35
Large holes	[mm]	[inch]
LI	165	6.5
Lw	101.6	4
øL	ø 19	ø 0.75
Small holes	[mm]	[inch]
SI	170	6.7
Sw	70	2.76
øS	ø 16	ø 0.63

### 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.

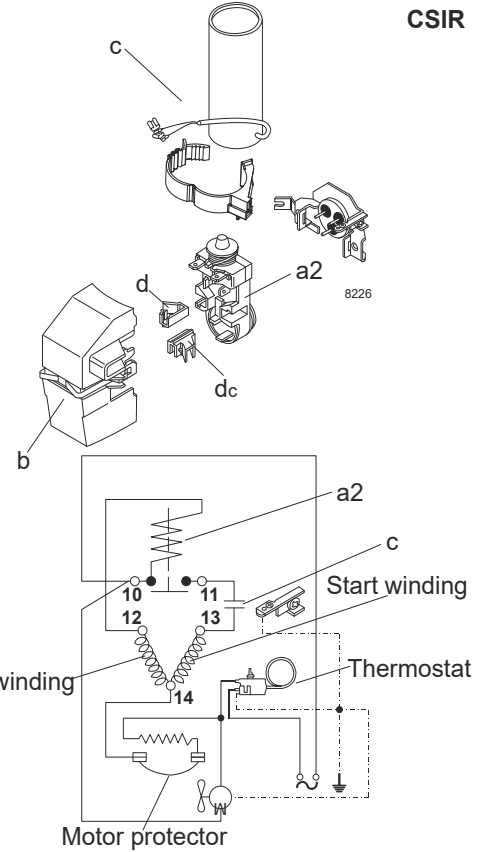
## Model

Designation	<b>TFS4.5CLX</b>	<b>115V/60Hz</b>	<b>Conf. 1</b>	Sales code:	<b>102U2115</b>
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## Configuration

Motorconfiguration	CSIR
Power supply (nominal)	115V/60Hz 1~
Refrigerant	R404A
Application	LBP
Voltage range	103-135V
Starting torque	HST
Approvals	UL

## Electrical accessories / wiring diagram

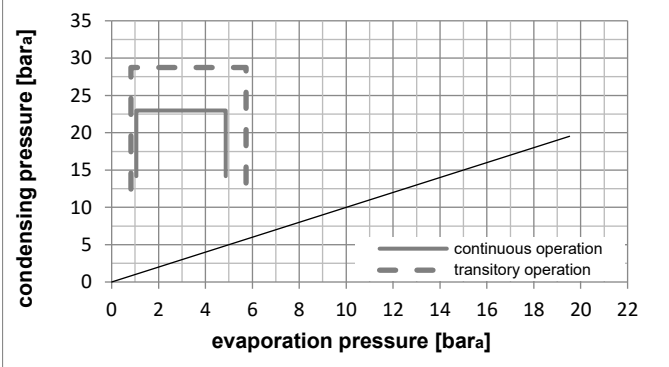
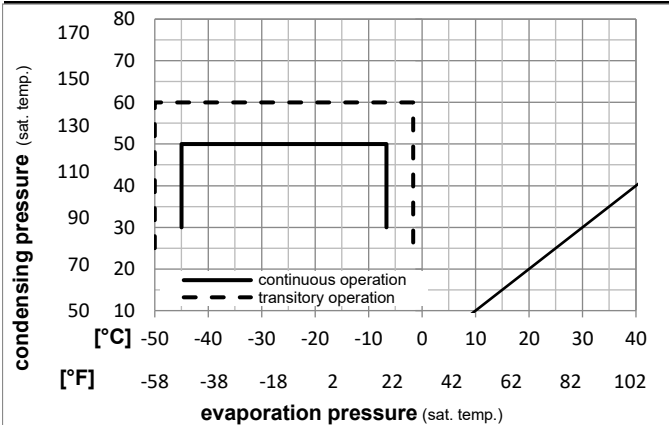


## Ambient temperatures / system cooling

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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## Model

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## Optimization + standard conditions

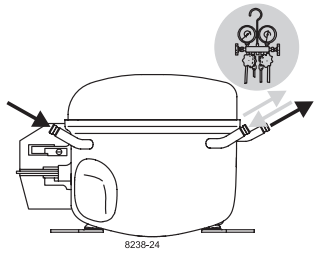
R404A, 115V/60Hz, CSIR, fan 3m/s, UL

	pe	pc	RGT	Tliq	Cooling capacity	COP	EER	P1	I	Ref. mass flow	
	[°C]	[°C]	[°C]	[°C]	[W]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
	[°F]	[°F]	[°F]	[°F]	[Btu/h]	[kcal/h]	[Btu/Wh]	[W]	[A]	[kg/h]	
ASHRAE LBP	-23	54	32	32	271,6	1,19	4,07	228,0	2,84	6,33	
	-10	130	90	90							
cecomaf LBP	-25	55	32	55	184,9	0,85	2,89	218,3	2,77	5,78	
	-13	131	90	131							
EN12900 LBP	-35	40	20	40	147,3	0,94	3,19	157,5	2,40	4,00	
	-31	104	68	104							
ARI540 LBP	-23	49	4,4	49	200,7	0,91	3,11	220,2	2,79	7,10	
	-10	120	40	120							
AHAM LBP	-23	41	32	32	302,2	1,41	4,83	213,7	2,76	7,04	
	-10	105	90	90							
opt	-35	45	32	45	137,0	0,87	2,98	157,1	2,38	3,66	
	-31	113	90	113							

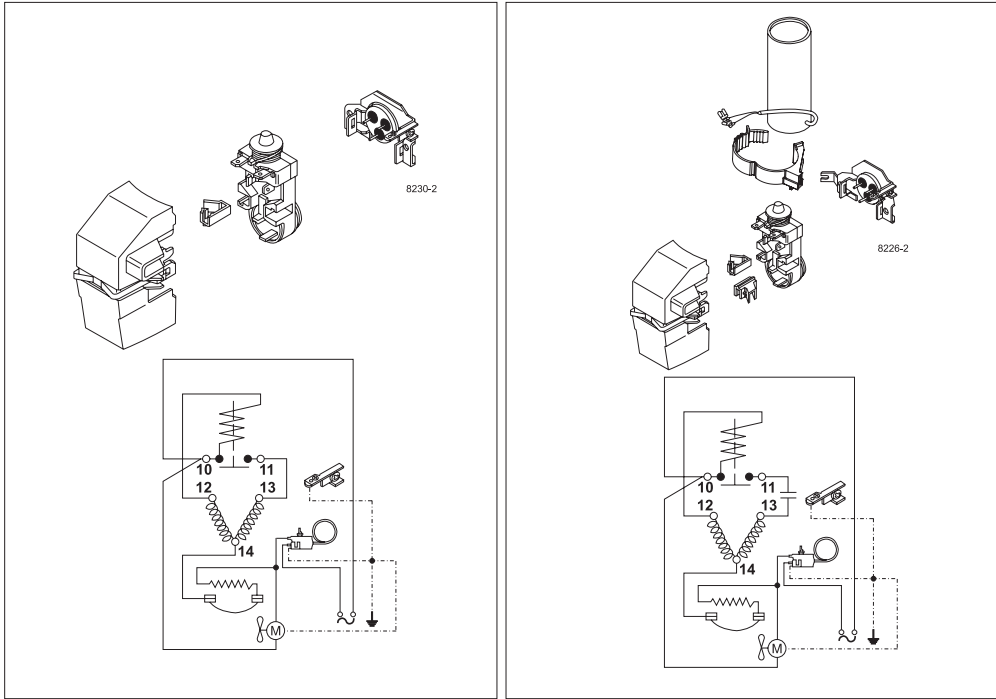
## Performance tables

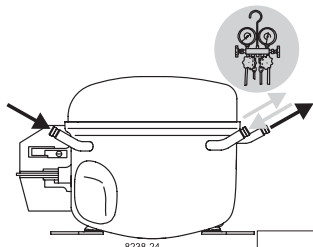
R404A, 115V/60Hz, CSIR, fan 3m/s, UL

	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]	-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

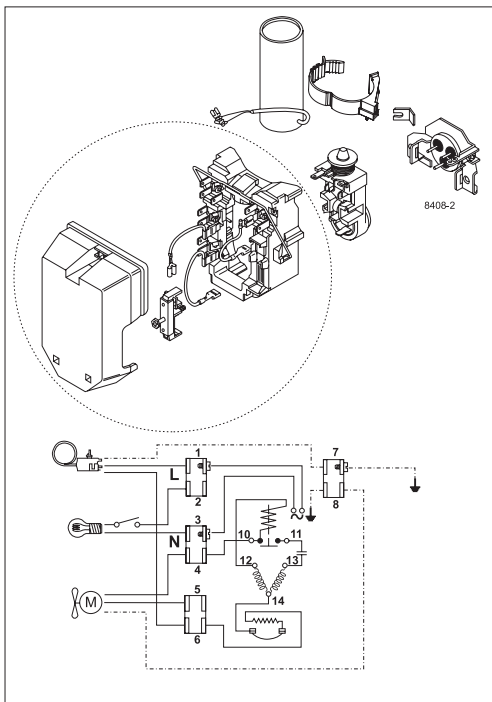
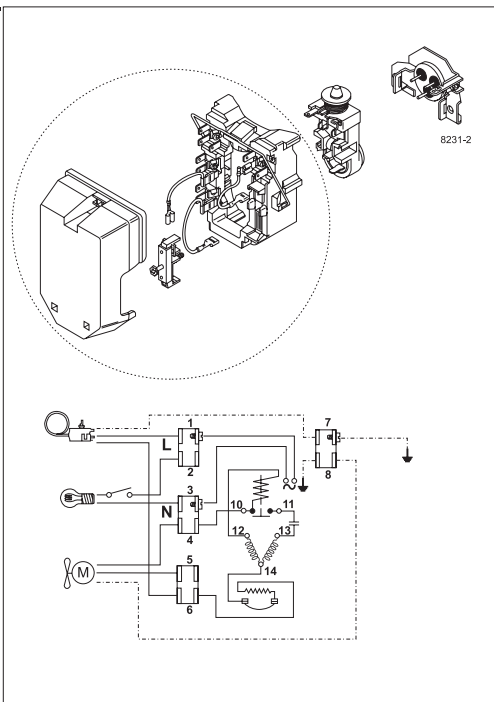


# TF Compressors





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