

## 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

Secop GmbH • Lise-Meitner-Straße 29 • 24941 Flensburg, Germany • Tel: +49 461 4941 0 • [www.secop.com](http://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	<b>TFS4.5CLX</b>	115-127V/60Hz 1~	Sales code:	<b>102U2115</b>
-------------	------------------	------------------	-------------	-----------------

## 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~

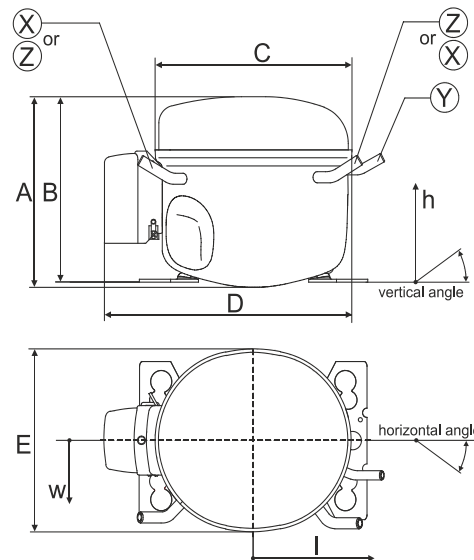
Sales code:

**102U2115**

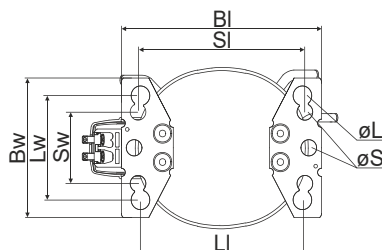
## Compressor dimensions

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

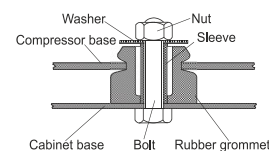


## Compressor fixation

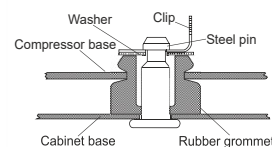


Baseplate	[mm]	[inch]
BI	204	8.03
BW	136	5.35
Large holes	[mm]	[inch]
LI	165	6.5
LW	101.6	4
ØL	ø 19	ø 0.75
Small holes	[mm]	[inch]
SI	170	6.7
SW	70	2.76
ØS	ø 16	ø 0.63

### Bolt joint



### Snap-on



## Mounting accessories

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.

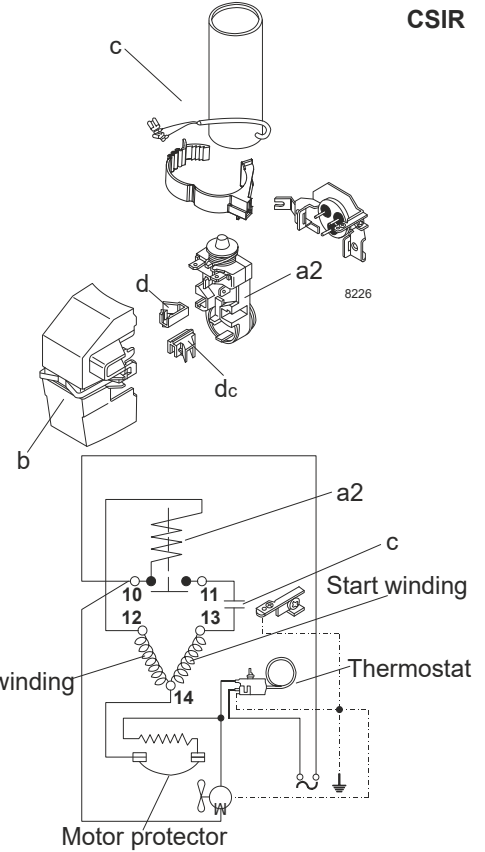
## Model

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

## 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

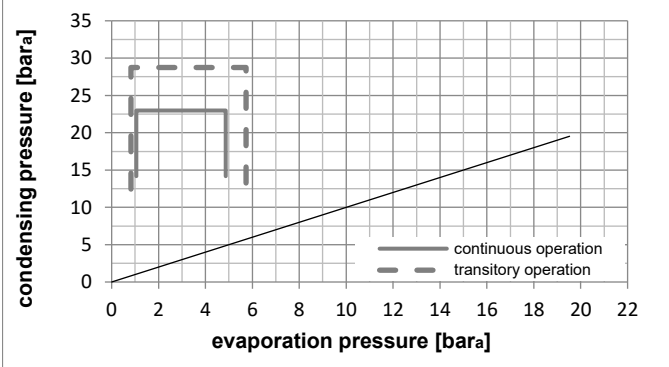
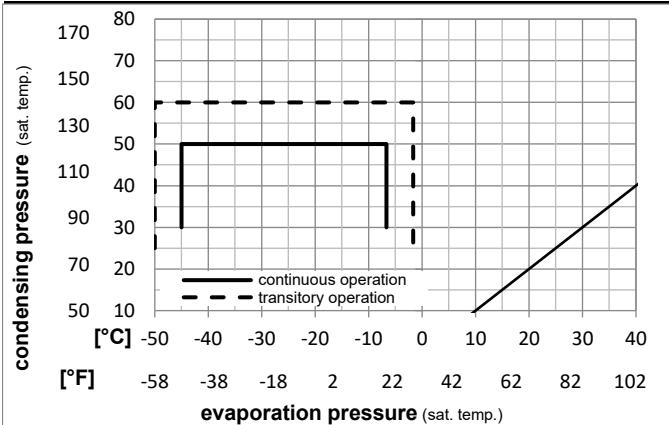


## Ambient temperatures / system cooling

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
---	---------------	----------

## Model

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

## Optimization + standard conditions

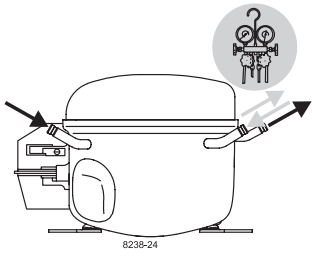
R404A, 115V/60Hz, CSIR, fan 3m/s, UL

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

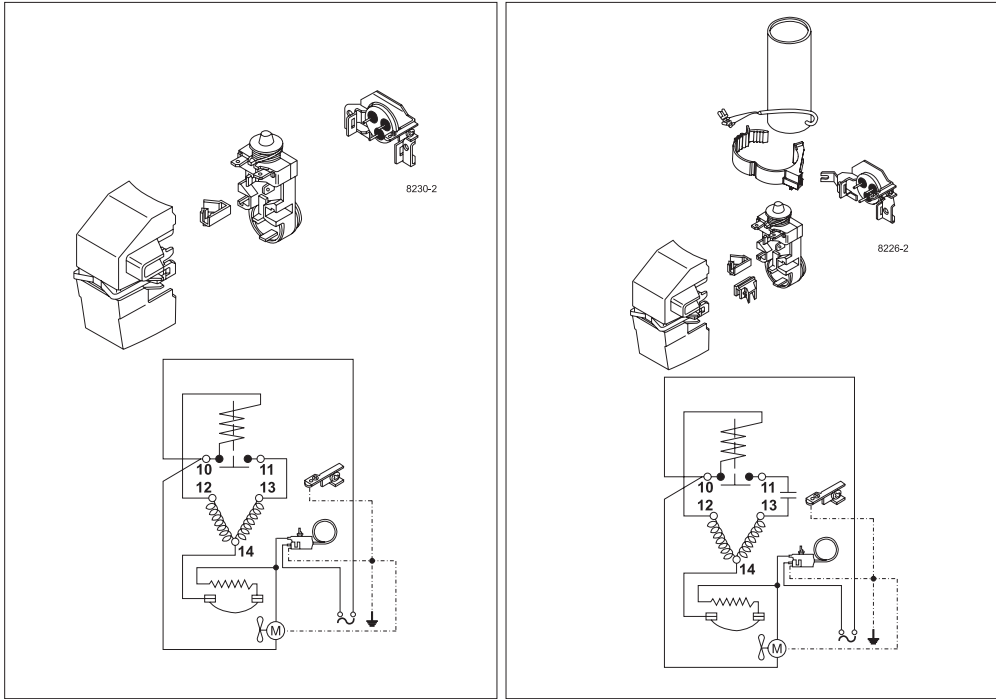
## Performance tables

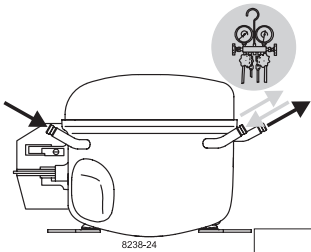
R404A, 115V/60Hz, CSIR, fan 3m/s, UL

	pe		Cooling capacity			COP	EER	P1	I	m	
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]						[W]
[°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

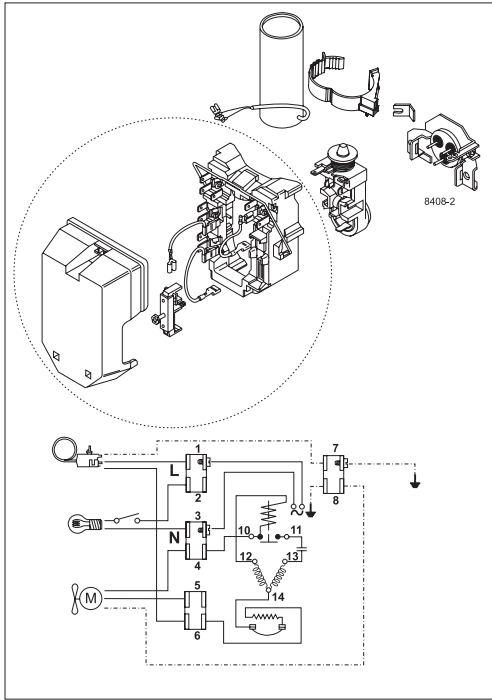
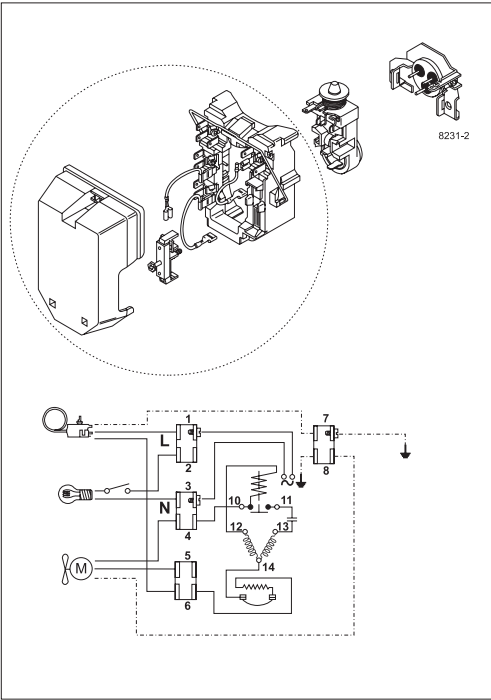


# TF Compressors





8238-24



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](http://www.secop.com)