

Single Pack TLS3FT 220-240V 50Hz CSIR

Single pack code number: **195B4375**

Position	Title	Code	Amount
1	Compressor TLS3FT	102G4325	1
2	Starting relay	117U6004	1
3	Starting capacitor (60 μ F 220V, 6.3mm)	117U5014	1
4	Cord relief	103N1010	1
5	Cover	103N2010	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

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	TLS3FT	220-240V/50Hz 1~	Sales code:	102G4325
-------------	---------------	-------------------------	-------------	-----------------

Compressor design

Oil type	Polyolester	Refrigerant(s)	R134a
Oil viscosity	15cST	Displacement	3,13cm ³ / 0,19cu.in
Oil quantity	184cm ³ / 6,2fl.oz	Compressors on pallet	125
Refr. charge - tech. limit	400g / 14,1oz		
Free gas volume comp.	1790cm ³ / 60,5fl.oz		
Weight	7,5kg / 16,5lbs		
Motor protection	1# internal		
Winding resistance main	27,5Ω (at 25°C)		
Winding resistance aux	15,1Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations with TLS3FT

	Conf. 1	Conf. 2
Motorconfiguration	CSIR	RSIR
Power supply (nominal)	220-240V/50Hz	220-240V/50Hz
Number of phases	1	1
Voltage range	187-254V	187-254V
Approvals	VDE, EAC	VDE, EAC
Starting torque	HST	LST
Note	- / -	

Applications with TLS3FT

	Conf. 1	Conf. 2
Refrigerant	R134a	R134a
Application	LBP	LBP
System cooling	static	static
Hot gas defrost	- / -	- / -
Long interval pull down	- / -	- / -

Electrical data - Configurations with TLS3FT

	Conf. 1	Conf. 2
Starting device type	relay	PTC
Run capacitor	- / -	- / -
Start capacitor	60μF	- / -
LRA (locked rotor amps / 4s)		2,6A
RLA (rated load amps / 1s)	0,5A	0,5A
Cut in current	6,9A	6,9A

Model

Designation

TLS3FT

220-240V/50Hz 1~

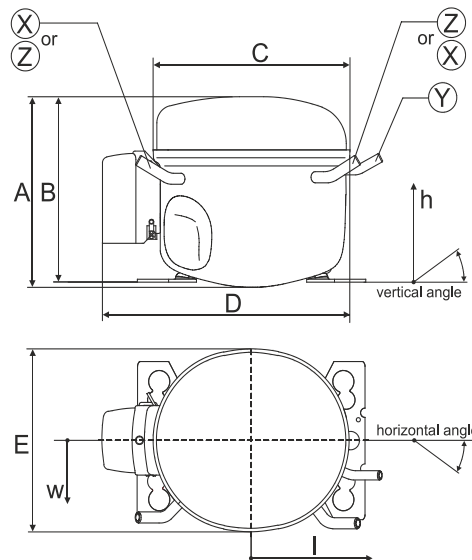
Sales code:

102G4325

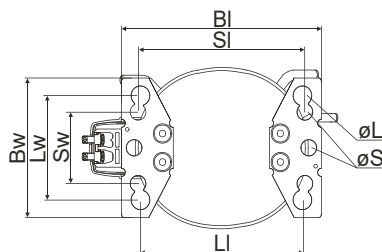
Compressor dimensions

Housing	A Height	174mm / 6,85in
	B Height	170mm / 6,69in
	C Length shell	176mm / 6,93in
	D Length w. cover	222mm / 8,74in
	E Width	157mm / 6,18in

Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 6,11-6,29	øi 5,12-5,22	øi 6,11-6,29
(i:inside, o:outside)	[in]	øi 0,24-0,25	øi 0,2-0,21	øi 0,24-0,25
Material		copper	copper	copper
Horizontal angle	±2°	0°	0°	0°
Vertical angle	±2°	150°	28°	31,5°
Position l/h/w	[mm]	-102/105/66	117/108/30	96/105/71
	[in]	-4/4,1/2,6	4,6/4,3/1,2	3,8/4,1/2,8
Straight tube l.	[mm]	12	12	12
	[in]	0,5	0,5	0,5



Compressor fixation

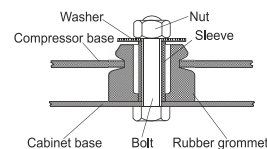


Baseplate	[mm]	[inch]
BI	204	8.03
BW	136	5.35

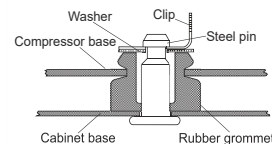
Large holes	[mm]	[inch]
LI	165	6.5
Lw	101.6	4
øL	ø 19	ø 0.75

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	
Snap-on ø7,3 ø16mm	118-1947	118-1919

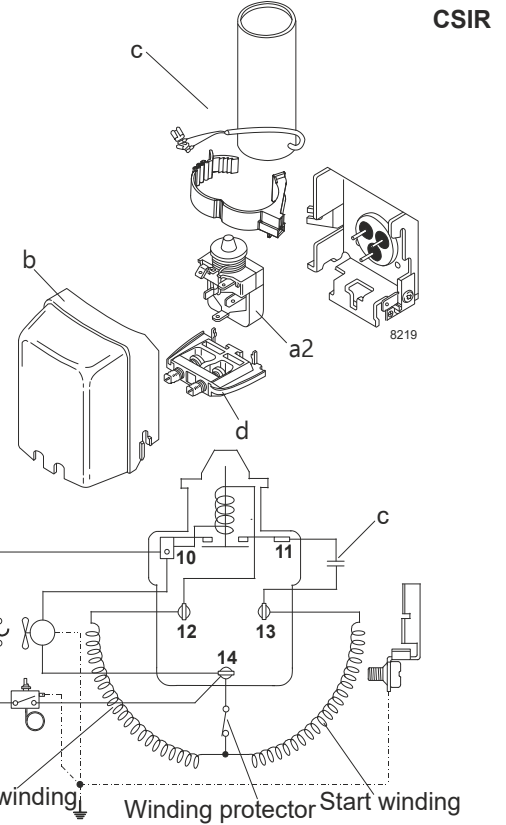
Model

Designation	TLS3FT	220-240V/50Hz	Conf. 1	Sales code:	102G4325
-------------	---------------	----------------------	----------------	-------------	-----------------

Configuration

Motorconfiguration	CSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R134a
Application	LBP
Voltage range	187-254V
Starting torque	HST
Approvals	VDE
	EAC

Electrical accessories / wiring diagram

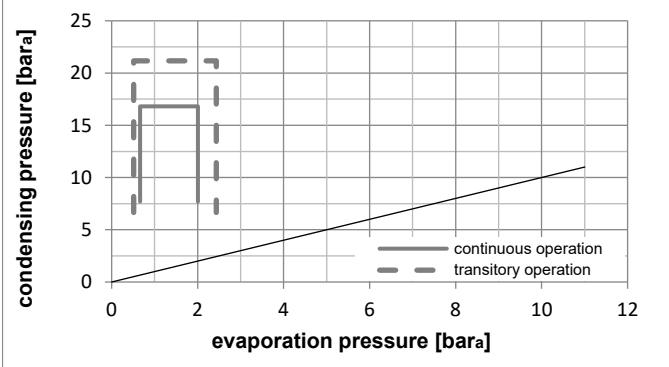
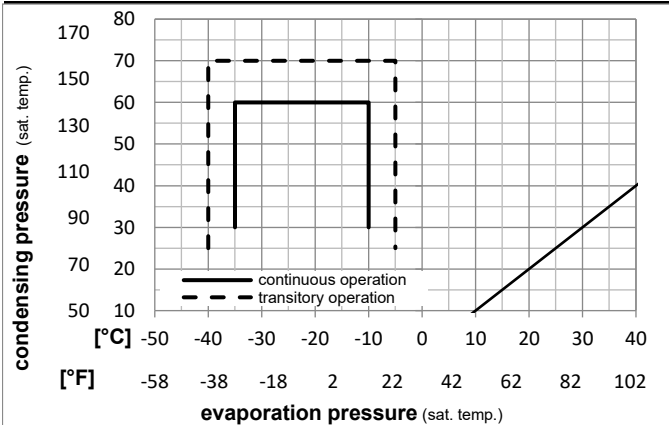


Ambient temperatures / system cooling

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	static	n/a	n/a
38°C / 100°F	static	n/a	n/a
43°C / 110°F	static	n/a	n/a

Operation pressure range



Components

a2	current relay	117U6007
c	start capacitor (60μF)	117U5014
b	plastic cover	103N2010
d	cord relief	103N1010

Alternative components

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

Model

Designation **TLS3FT** **220-240V/50Hz** Conf. 1 Sales code: **102G4325**

Optimization + standard conditions

R134a, 220V/50Hz, CSIR, static, VDE, EAC

	Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)			Return gas temp.			Liquid temp.			Cooling capacity			COP	EER	Power consumption			
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	m	[W]	[A]	[kg/h]						
[°C]	-23	54	32	32	69,0	236	59,3	1,06	3,64	0,92	64,8	0,46	1,34									
[°F]	-10	130	90	90																ASHRAE LBP		
[°C]	-25	55	32	55	49,6	170	42,7	0,80	2,74	0,69	61,9	0,45	1,19							cecomaf LBP		
[°F]	-13	131	90	131																		
[°C]	-35	40	20	40	32,1	110	27,7	0,71	2,42	0,61	45,3	0,40	0,70							EN12900 LBP		
[°F]	-31	104	68	104																		
[°C]	-23	49	4,4	49	57,6	197	49,6	0,90	3,07	0,77	64,0	0,46	1,52							ARI540 LBP		
[°F]	-10	120	40	120																		
[°C]	-23	41	32	32	80,2	274	69,1	1,26	4,29	1,08	63,8	0,45	1,56							AHAM LBP		
[°F]	-10	105	90	90																		
[°C]	-35	45	32	45	28,2	96	24,3	0,63	2,17	0,55	44,5	0,40	0,61							opt		
[°F]	-31	113	90	113																		

Performance tables

R134a, 220V/50Hz, CSIR, static, VDE, 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]	-35	-31	28,2	96	24,3	0,63	2,17	0,55	44,5	0,40	0,61
cond. pressure	-30	-22	43,0	147	37,0	0,81	2,78	0,70	52,9	0,42	0,93
pc= 45/113	-25	-13	61,3	209	52,8	1,00	3,43	0,86	61,1	0,44	1,33
return gas temp.	-23	-10	68,4	234	58,9	1,07	3,66	0,92	63,9	0,45	1,48
RGT= 32/90	-20	-4	83,7	286	72,1	1,21	4,12	1,04	69,5	0,47	1,82
liquid temp	-15	5	110,8	378	95,4	1,41	4,83	1,22	78,4	0,51	2,42
Tliq= 45/113	-10	14	143,1	489	123,1	1,62	5,54	1,40	88,2	0,54	3,13
[°C / °F]	-35	-31	20,7	71	17,8	0,46	1,57	0,39	45,2	0,39	0,49
cond. pressure	-30	-22	33,7	115	29,0	0,63	2,15	0,54	53,4	0,42	0,80
pc= 55/131	-25	-13	49,6	170	42,7	0,80	2,74	0,69	61,9	0,45	1,19
return gas temp	-23	-10	55,8	191	48,0	0,86	2,94	0,74	64,9	0,46	1,34
RGT= 32/90	-20	-4	69,1	236	59,4	0,97	3,32	0,84	71,0	0,48	1,66
liquid temp	-15	5	92,5	316	79,6	1,14	3,90	0,98	81,0	0,52	2,23
Tliq= 55/131	-10	14	120,4	411	103,6	1,30	4,46	1,12	92,3	0,56	2,91

Model

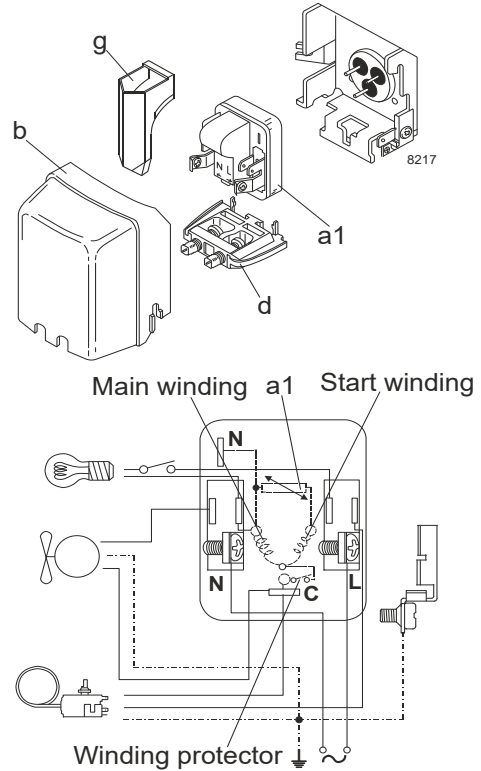
Designation	TLS3FT	220-240V/50Hz	Conf. 2	Sales code:	102G4325
-------------	---------------	----------------------	----------------	-------------	-----------------

Configuration

Motorconfiguration	RSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R134a
Application	LBP
Voltage range	187-254V
Starting torque	LST
Approvals	VDE
	EAC

Electrical accessories / wiring diagram

RSIR

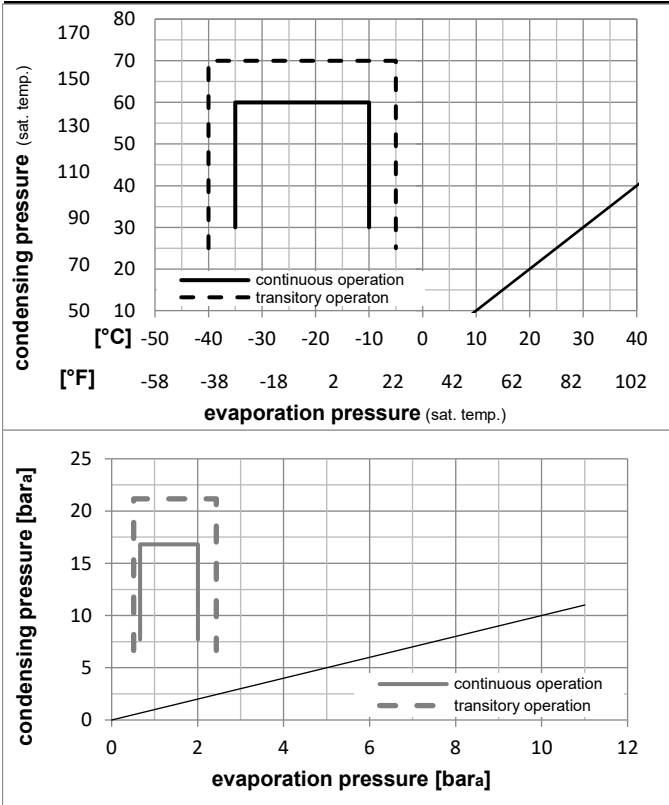


Ambient temperatures / system cooling

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	static	n/a	n/a
38°C / 100°F	static	n/a	n/a
43°C / 110°F	static	n/a	n/a

Operation pressure range



Components

a1	PTC starter (220V, 250Ohm, 4.8mm)	103N0018
b	plastic cover	103N2010
d	cord relief	103N1010
g	protection screen for PTC	103N0476

Alternative components

a1	PTC starter (220V, 250Ohm, 6.3mm)	103N0011
b	plastic cover	103N2011
d	cord relief	103N1010
g	protection screen for PTC	103N0476

Model

Designation	TLS3FT	220-240V/50Hz	Conf. 2	Sales code:	102G4325
-------------	---------------	----------------------	----------------	-------------	-----------------

Optimization + standard conditions

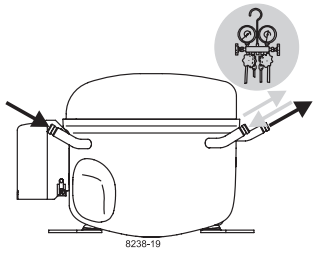
R134a, 220V/50Hz, RSIR, static, VDE, EAC

	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]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	m				[W]	[A]	[kg/h]	
[°C]	-23	54	32	32	69,0	236	59,3	1,06	3,64	0,92	64,8	0,46	1,34	ASHRAE LBP						
[°F]	-10	130	90	90																
[°C]	-25	55	32	55	49,6	170	42,7	0,80	2,74	0,69	61,9	0,45	1,19	cecomaf LBP						
[°F]	-13	131	90	131																
[°C]	-35	40	20	40	32,1	110	27,7	0,71	2,42	0,61	45,3	0,40	0,70	EN12900 LBP						
[°F]	-31	104	68	104																
[°C]	-23	49	4,4	49	57,6	197	49,6	0,90	3,07	0,77	64,0	0,46	1,52	ARI540 LBP						
[°F]	-10	120	40	120																
[°C]	-23	41	32	32	80,2	274	69,1	1,26	4,29	1,08	63,8	0,45	1,56	AHAM LBP						
[°F]	-10	105	90	90																
[°C]	-35	45	32	45	28,2	96	24,3	0,63	2,17	0,55	44,5	0,40	0,61	opt						
[°F]	-31	113	90	113																

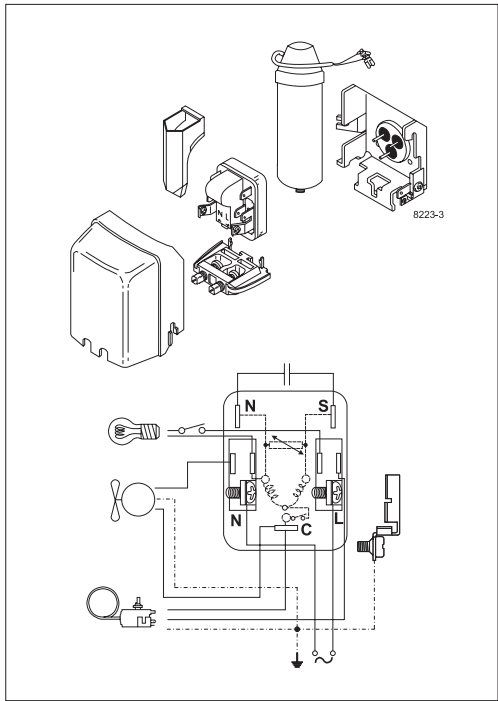
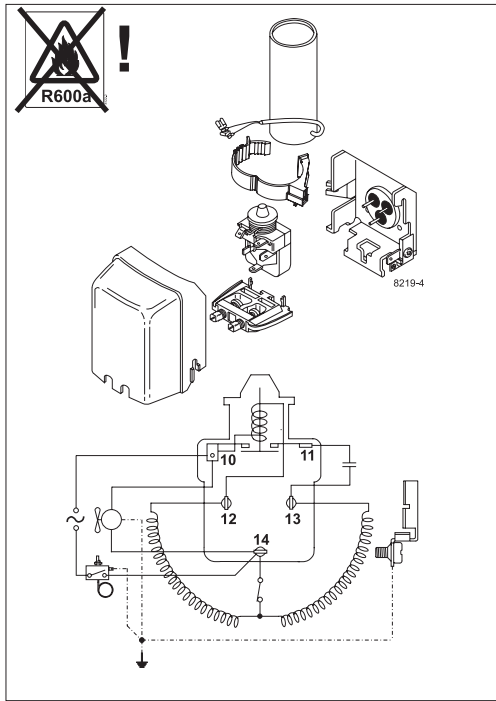
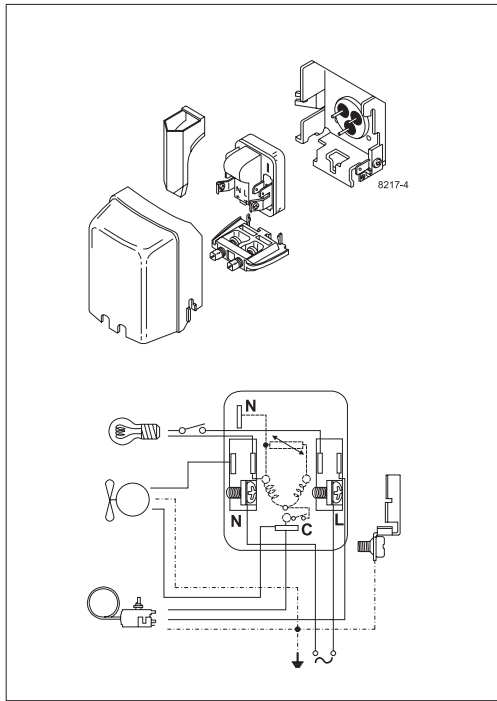
Performance tables

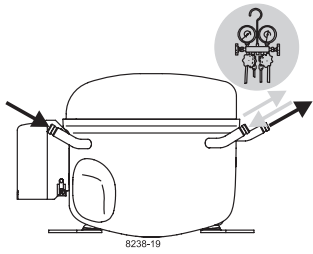
R134a, 220V/50Hz, RSIR, static, VDE, EAC

	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]	-35	-31	28,2	96	24,3	0,63	2,17	0,55	44,5	0,40	0,61
cond. pressure	-30	-22	43,0	147	37,0	0,81	2,78	0,70	52,9	0,42	0,93
pc= 45/113	-25	-13	61,3	209	52,8	1,00	3,43	0,86	61,1	0,44	1,33
return gas temp.	-23	-10	68,4	234	58,9	1,07	3,66	0,92	63,9	0,45	1,48
RGT= 32/90	-20	-4	83,7	286	72,1	1,21	4,12	1,04	69,5	0,47	1,82
liquid temp	-15	5	110,8	378	95,4	1,41	4,83	1,22	78,4	0,51	2,42
Tliq= 45/113	-10	14	143,1	489	123,1	1,62	5,54	1,40	88,2	0,54	3,13
[°C / °F]	-35	-31	20,7	71	17,8	0,46	1,57	0,39	45,2	0,39	0,49
cond. pressure	-30	-22	33,7	115	29,0	0,63	2,15	0,54	53,4	0,42	0,80
pc= 55/131	-25	-13	49,6	170	42,7	0,80	2,74	0,69	61,9	0,45	1,19
return gas temp	-23	-10	55,8	191	48,0	0,86	2,94	0,74	64,9	0,46	1,34
RGT= 32/90	-20	-4	69,1	236	59,4	0,97	3,32	0,84	71,0	0,48	1,66
liquid temp	-15	5	92,5	316	79,6	1,14	3,90	0,98	81,0	0,52	2,23
Tliq= 55/131	-10	14	120,4	411	103,6	1,30	4,46	1,12	92,3	0,56	2,91

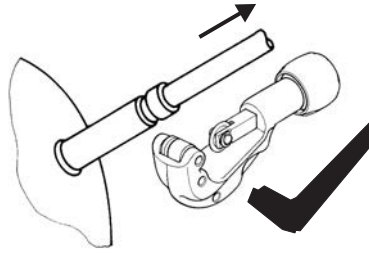
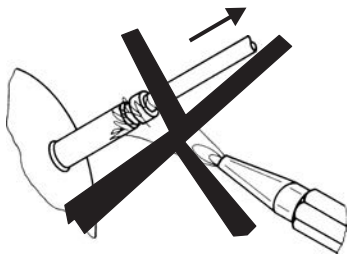


TL Compressors





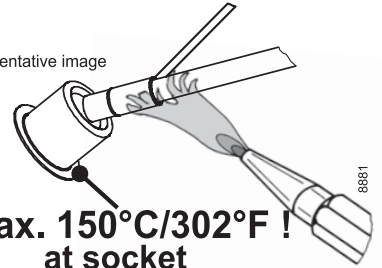
Service/Repair – R600a, R290



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