

Single Pack SC18MLX 115V 60Hz CSCR

Single pack code number: **195B4159**

Position	Title	Code	Amount
1	Compressor SC18MLX	104L2105	1
2	Starting relay (RVA 7AA3R435)	117-7441	1
3	Run capacitor (23.5 μ F 190V, 6.3mm)	117-7114	1
4	Starting capacitor (410 μ F 125V, 6.3mm)	117U5043	1
5	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	SC18MLX	115V/60Hz 1~	Sales code:	104L2105
-------------	----------------	---------------------	-------------	-----------------

Compressor design

Oil type	Polyolester	Refrigerant(s)	R404A, R452A, R507
Oil viscosity	32cST	Displacement	17,69cm ³ / 1,08cu.in
Oil quantity	556cm ³ / 18,8fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	1300g / 45,9oz		
Free gas volume comp.	1460cm ³ / 49,4fl.oz		
Weight	14kg / 30,9lbs		
Motor protection	external		
Winding resistance main	0,6Ω (at 25°C)		
Winding resistance aux	2,6Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations with SC18MLX

	Conf. 1	Conf. 2
Motorconfiguration	CSCR	CSCR
Power supply (nominal)	115V/60Hz	115V/60Hz
Number of phases	1	1
Voltage range	103-127V	103-127V
Approvals	UL	UL
Starting torque	HST	HST
Note	Protector and cover are included and pre-assembled to compressor.	

Applications with SC18MLX

	Conf. 1	Conf. 2
Refrigerant	R404A	R452A
Application	MBP	MBP
System cooling	fan 3m/s	fan 3m/s
Hot gas defrost	OK	OK
Long interval pull down	OK	OK

Electrical data - Configurations with SC18MLX

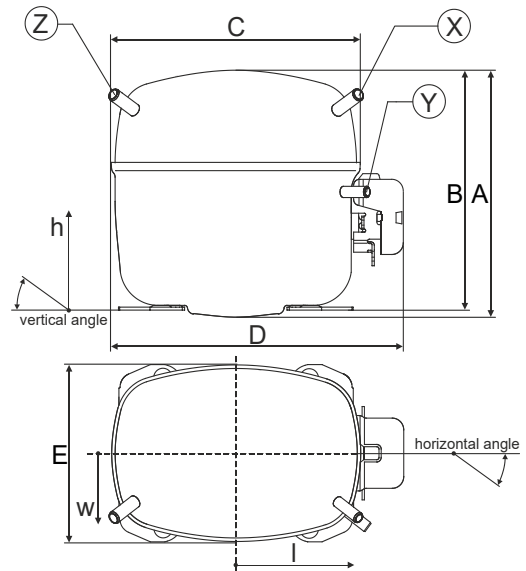
	Conf. 1	Conf. 2
Starting device type	relay	relay
Run capacitor	23,5μF	23,5μF
Start capacitor	410μF	410μF
LRA (locked rotor amps / 4s)	69A	69A
RLA (rated load amps / 1s)	13A	13A
Cut in current	69A	69A

Model

Designation	SC18MLX	115V/60Hz 1~	Sales code:	104L2105
-------------	----------------	---------------------	-------------	-----------------

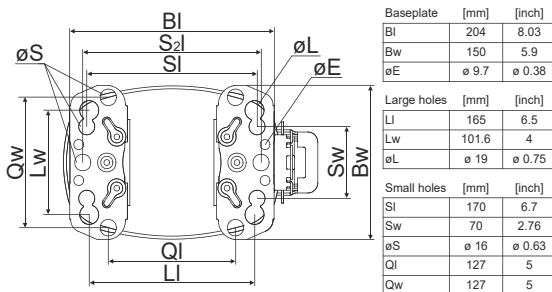
Compressor dimensions

Housing	A Height	219mm / 8,62in
	B Height	213mm / 8,39in
	C Length shell	218mm / 8,58in
	D Length w. cover	255mm / 10,04in
	E Width	151mm / 5,94in

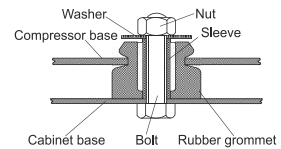


Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 9,54-9,72	øi 6,41-6,59	øi 6,41-6,59
	(i:inside, o:outside) [in]	øi 0,38-0,38	øi 0,25-0,26	øi 0,25-0,26
Material		copper	copper	copper
Horizontal angle	±2°	37°	37°	143°
Vertical angle	±2°	30°	0°	150°
Position l/h/w	[mm]	107/193/55	115/110/63	-107/193/55
	[in]	4,2/7,6/2,2	4,5/4,3/2,5	-4,2/7,6/2,2
Straight tube l.	[mm]	12	12	12
	[in]	0,5	0,5	0,5

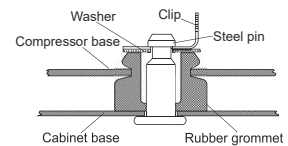
Compressor fixation



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.

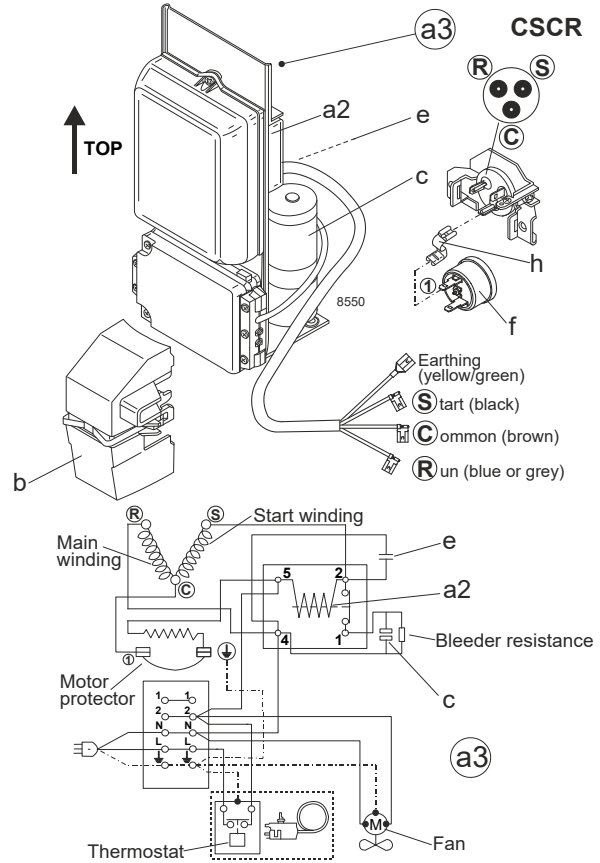
Model

Designation	SC18MLX	115V/60Hz	Conf. 1	Sales code:	104L2105
-------------	----------------	------------------	----------------	-------------	-----------------

Configuration

Motorconfiguration	CSCR
Power supply (nominal)	115V/60Hz 1~
Refrigerant	R404A
Application	MBP
Voltage range	103-127V
Starting torque	HST
Approvals	UL

Electrical accessories / wiring diagram

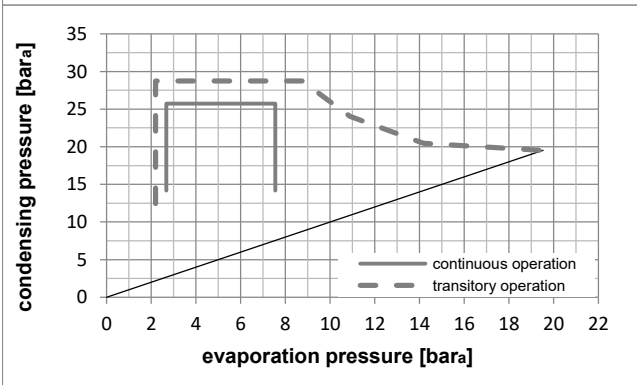
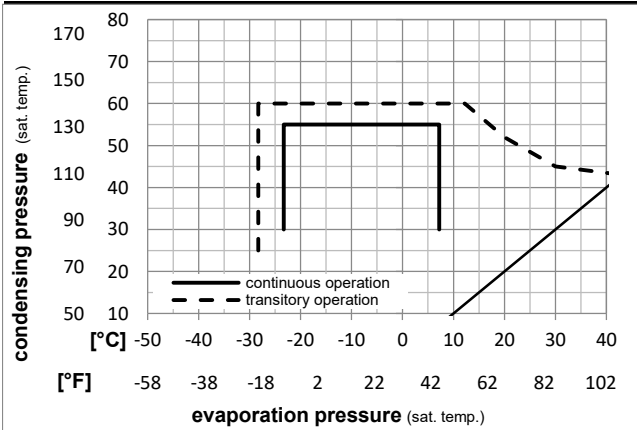


Ambient temperatures / system cooling

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	n/a	fan 3m/s	n/a
38°C / 100°F	n/a	fan 3m/s	n/a
43°C / 110°F	n/a	fan 3m/s	n/a

Operation pressure range



Components (protector + ~holder + cover: pre assembled)

a3	SC starter kit	117-7045
f	ext. protector (T0777/46)	117U3188
h	protector holder	117U0439
b	plastic cover	117U1021

Alternative comp. (protector + ~holder + cover: pre assemb.)

a2	potential relay (RVA 7AA3R)	117-7441
f	ext. protector (T0777/46)	117U3188
h	protector holder	117U0439
c	start capacitor (410µF, 6.3mm)	117U5043
e	run capacitor (23,5µF, 6.3mm)	117-7114
b	plastic cover	117U1021

Model

Designation	SC18MLX	115V/60Hz	Conf. 1	Sales code:	104L2105
-------------	----------------	------------------	----------------	-------------	-----------------

Optimization + standard conditions

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

		Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)						Power consumption			
		Return gas temp.				Liquid temp.						Current consumption			Ref. mass flow
		Cooling capacity				COP		EER		P1	I	m			
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
[°C]	-6,66	54,4	35	46,1	1868,1	6380	1607,7	1,47	5,03	1,27	1268,3	12,75	51,40	ASHRAE MBP	
[°F]	20	130	95	115											
[°C]	-10	55	32	55	1392,8	4757	1198,7	1,17	3,98	1,00	1193,7	12,22	44,59	cecomaf MBP	
[°F]	14	131	89,6	131											
[°C]	-10	45	20	45	1631,9	5573	1404,4	1,44	4,93	1,24	1131,2	11,79	49,15	EN12900 MBP	
[°F]	14	113	68	113											
[°C]	-6,66	48,9	18,3	48,9	1697,4	5797	1460,8	1,39	4,73	1,19	1224,2	12,45	55,46	ARI540 MBP	
[°F]	20	120	65	120											
[°C]	-10	45	32	45	1731,9	5915	1490,5	1,53	5,23	1,32	1131,2	11,79	47,69	opt	
[°F]	14	113	89,6	113											
[°C]	-25	45	32	45	913,7	3120	786,3	1,06	3,63	0,91	859,8	10,14	24,65	opt	
[°F]	-13	113	89,6	113											

Performance tables

R404A, 115V/60Hz, CSCR, 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]	-25	-13	913,7	3120	786,3	1,06	3,63	0,91	859,8	10,14	24,65	
cond. pressure	-23,3	-10	984,6	3363	847,4	1,11	3,78	0,95	889,6	10,29	26,61	
pc= 45/113	-15	5	1411,6	4821	1214,8	1,36	4,64	1,17	1039,3	11,18	38,56	
return gas temp.	-9,4	15	1770,7	6047	1523,9	1,55	5,30	1,33	1141,6	11,87	48,81	
RGT= 32/90	-3,9	25	2196,9	7503	1890,6	1,76	6,01	1,52	1247,6	12,63	61,22	
liquid temp	0	32	2538,5	8669	2184,6	1,92	6,54	1,65	1324,9	13,21	71,36	
Tliq= 45/113	7,2	45	3275,7	11187	2819,1	2,22	7,57	1,91	1477,2	14,40	93,94	
[°C / °F]	-25	-13	701,6	2396	603,8	0,84	2,87	0,72	835,8	10,08	21,93	
cond. pressure	-23,3	-10	761,4	2600	655,3	0,87	2,97	0,75	876,4	10,29	23,85	
pc= 55/131	-15	5	1121,6	3831	965,3	1,04	3,56	0,90	1075,5	11,44	35,57	
return gas temp	-9,4	15	1425,7	4869	1227,0	1,18	4,03	1,02	1206,8	12,31	45,69	
RGT= 32/90	-3,9	25	1788,4	6108	1539,1	1,34	4,56	1,15	1338,7	13,26	58,04	
liquid temp	0	32	2080,5	7105	1790,5	1,45	4,96	1,25	1432,2	13,97	68,23	
Tliq= 55/131	7,2	45	2715,0	9272	2336,6	1,69	5,76	1,45	1610,4	15,39	91,12	

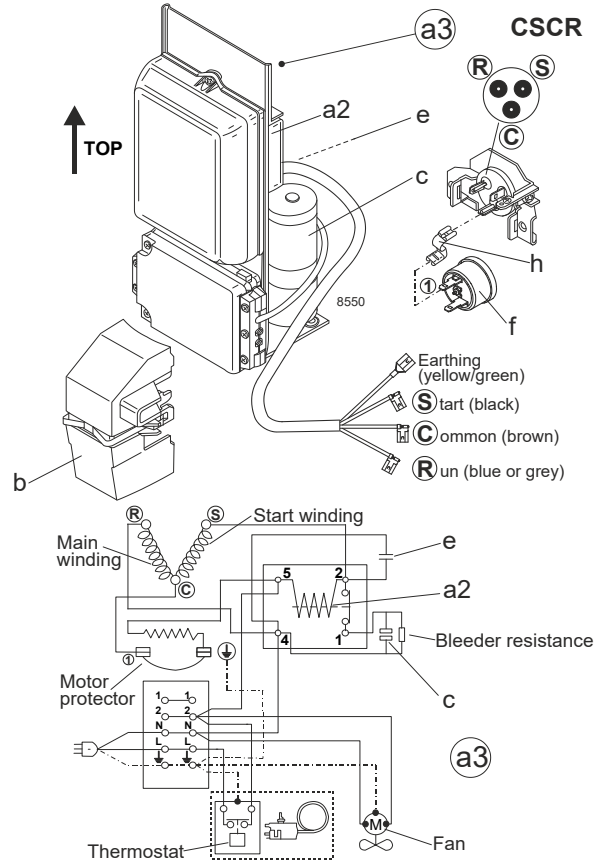
Model

Designation	SC18MLX	115V/60Hz	Conf. 2	Sales code:	104L2105
-------------	----------------	------------------	----------------	-------------	-----------------

Configuration

Motorconfiguration	CSCR
Power supply (nominal)	115V/60Hz 1~
Refrigerant	R452A
Application	MBP
Voltage range	103-127V
Starting torque	HST
Approvals	UL

Electrical accessories / wiring diagram

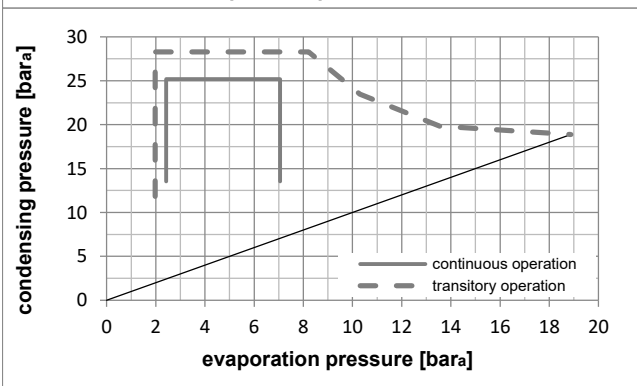
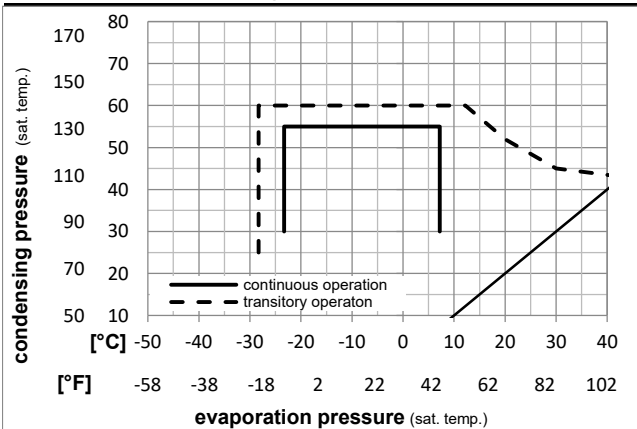


Ambient temperatures / system cooling

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	n/a	fan 3m/s	n/a
38°C / 100°F	n/a	fan 3m/s	n/a
43°C / 110°F	n/a	fan 3m/s	n/a

Operation pressure range



Components (protector + ~holder + cover: pre assembled)

a3	SC starter kit	117-7045
f	ext. protector (T0777/46)	117U3188
h	protector holder	117U0439
b	plastic cover	117U1021

Alternative comp. (protector + ~holder + cover: pre assemb.)

a2	potential relay (RVA 7AA3R)	117-7441
f	ext. protector (T0777/46)	117U3188
h	protector holder	117U0439
c	start capacitor (410µF, 6.3mm)	117U5043
e	run capacitor (23,5µF, 6.3mm)	117-7114
b	plastic cover	117U1021

Model

Designation	SC18MLX	115V/60Hz	Conf. 2	Sales code:	104L2105
-------------	----------------	------------------	----------------	-------------	-----------------

Optimization + standard conditions

R452A, 115V/60Hz, CSCR, fan 3m/s, UL

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)						Power consumption			ASHRAE MBP	
Return gas temp.					Liquid temp.						Current consumption				cecomaf MBP
Cooling capacity					COP		EER		P1	I	Ref. mass flow	EN12900 MBP			
pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]		[kg/h]		
[°C]	-6,7	54,4	35	46,1	1767,3	6036	1521,0	1,47	5,02	1,27	1202,0		12,44	49,72	
[°F]	20	130	95	115											
[°C]	-10	55	32	55	1319,9	4508	1135,9	1,17	4,00	1,01	1126,7	11,92	42,90		
[°F]	14	131	89,6	131											
[°C]	-10	45	20	45	1540,9	5262	1326,1	1,44	4,92	1,24	1069,0	11,53	47,35		
[°F]	14	113	68	113											
[°C]	-6,7	48,9	18,3	48,9	1613,7	5511	1388,8	1,39	4,75	1,20	1161,0	12,16	53,54		
[°F]	20	120	65	120											
[°C]	-10	45	32	45	1632,9	5576	1405,2	1,53	5,22	1,31	1069,0	11,53	46,01	opt	
[°F]	14	113	89,6	113											
[°C]	-25	45	32	45	841,6	2874	724,3	1,06	3,61	0,91	796,7	9,68	23,28	opt	
[°F]	-13	113	89,6	113											

Performance tables

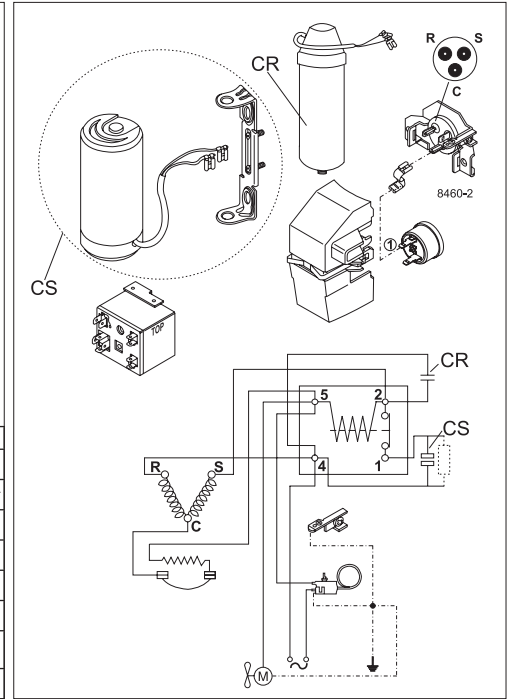
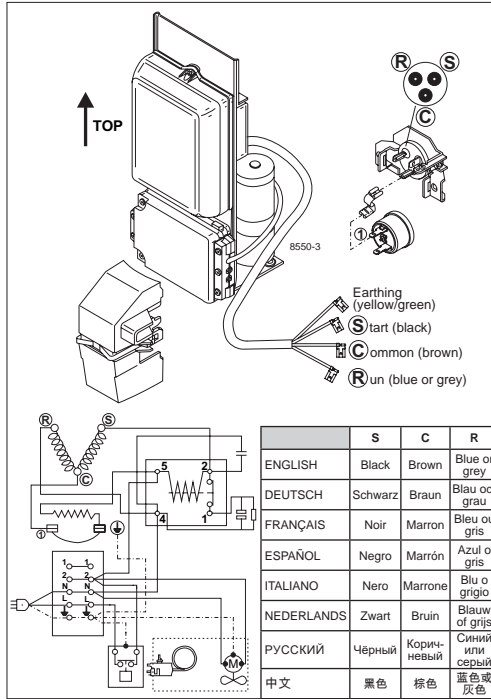
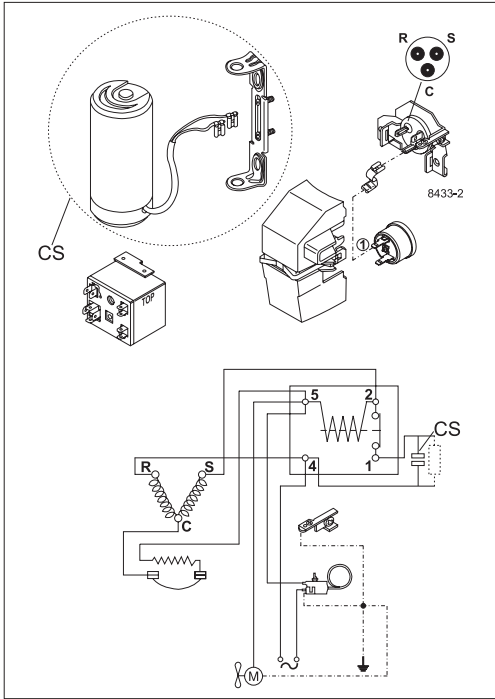
R452A, 115V/60Hz, CSCR, fan 3m/s, UL

	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]	-25	-13	841,6	2874	724,3	1,06	3,61	0,91	796,7	9,68	23,28	
cond. pressure	-23	-10	909,7	3107	782,9	1,10	3,76	0,95	826,6	9,88	25,21	
pc= 45/113	-15	5	1321,9	4514	1137,6	1,35	4,62	1,16	976,6	10,90	36,98	
return gas temp.	-9,4	15	1670,6	5706	1437,8	1,55	5,29	1,33	1079,5	11,60	47,11	
RGT= 32/90	-3,9	25	2086,5	7126	1795,7	1,76	6,00	1,51	1186,9	12,33	59,41	
liquid temp	0	32	2421,2	8269	2083,7	1,91	6,53	1,65	1265,8	12,87	69,49	
Tliq= 45/113	7,2	45	3146,7	10747	2708,1	2,21	7,55	1,90	1422,7	13,94	91,93	
[°C / °F]	-25	-13	646,3	2207	556,2	0,84	2,86	0,72	771,7	9,51	20,57	
cond. pressure	-23	-10	704,2	2405	606,0	0,87	2,96	0,75	811,6	9,78	22,45	
pc= 55/131	-15	5	1054,4	3601	907,4	1,05	3,57	0,90	1008,8	11,12	33,99	
return gas temp	-9,4	15	1352,2	4618	1163,7	1,19	4,05	1,02	1139,8	12,01	43,99	
RGT= 32/90	-3,9	25	1709,4	5838	1471,1	1,34	4,59	1,16	1272,8	12,92	56,24	
liquid temp	0	32	1998,3	6825	1719,8	1,46	4,99	1,26	1368,0	13,57	66,35	
Tliq= 55/131	7,2	45	2628,9	8978	2262,4	1,69	5,79	1,46	1551,9	14,82	89,10	



SC Compressors

(External Protector)



	S	C	R
ENGLISH	Black	Brown	Blue or grey
DEUTSCH	Schwarz	Braun	Blau od. grau
FRANÇAIS	Noir	Marron	Bleu ou gris
ESPAÑOL	Negro	Marrón	Azul o gris
ITALIANO	Nero	Marrone	Blu o grigio
NEDERLANDS	Zwart	Bruin	Vlaauw of grijs
РУССКИЙ	Чёрный	Коричневый	Синий или серый
中文	黑色	棕色	蓝色或灰色



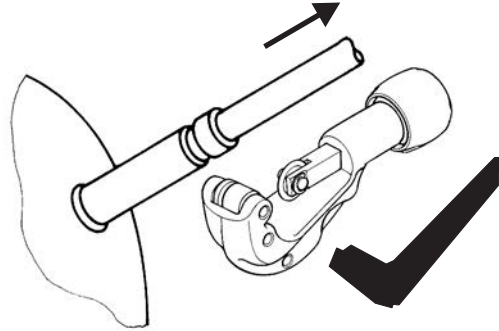
SC Compressors (External Protector)



Service/Repair – R290



8545



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. www.secop.com