

Single Pack SC18G 220-240V 50/60Hz CSIR

Single pack code number: **195B4484**

Position	Title	Code	Amount
1	Compressor SC18G	104G8824	1
2	Starting relay	117U6019	1
3	Starting capacitor (80µF 220V, 6.3mm)	117U5017	1
4	Cord relief	103N1004	1
5	Cover	103N2009	1
6	Bolt joint for one compressor M6 ø16mm	118-1917	1

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Model

Designation	SC18G	220-240V/50Hz 1~ 220-240V/60Hz 1~	Sales code:	104G8824
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R134a
Oil viscosity	22cST	Displacement	17,69cm³ / 1,08cu.in
Oil quantity	550cm³ / 18,6fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	1300g / 45,9oz		
Free gas volume comp.	1460cm³ / 49,4fl.oz		
Weight	13,5kg / 29,8lbs		
Motor protection	1# internal		
Winding resistance main	3,7Ω (at 25°C)		
Winding resistance aux	14Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations with SC18G

	Conf. 1	Conf. 2
Motorconfiguration	CSIR	CSIR
Power supply (nominal)	220-240V/50Hz	208-230V/60Hz
Number of phases	1	1
Voltage range	187-254V	198-254V
Approvals	VDE, UL, CCC	VDE, UL, CCC
Starting torque	HST	HST
Note	- / -	

Applications with SC18G

	Conf. 1	Conf. 2
Refrigerant	R134a	R134a
Application	LBP+MBP+HBP	LBP
System cooling	fan 3m/s	fan 3m/s
Hot gas defrost	OK	OK
Long interval pull down	OK	OK

Electrical data - Configurations with SC18G

	Conf. 1	Conf. 2
Starting device type	relay	relay
Run capacitor	-/-	-/-
Start capacitor	80μF	80μF
LRA (locked rotor amps / 4s)	20,43A	19A
RLA (rated load amps / 1s)	3,9A	3,5A
Cut in current	20,43A	19A

Model

Designation

SC18G

220-240V/50Hz 1~ 220-240V/60Hz 1~

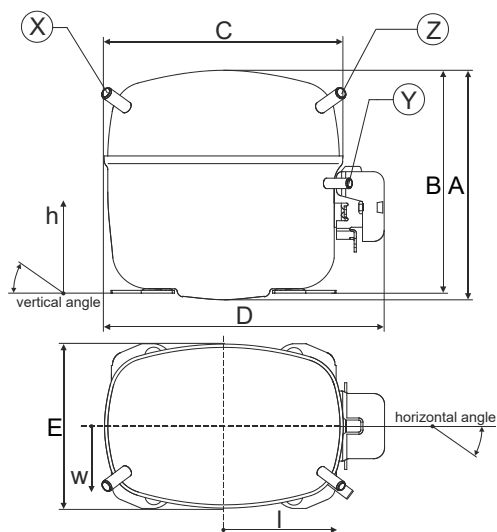
Sales code:

104G8824

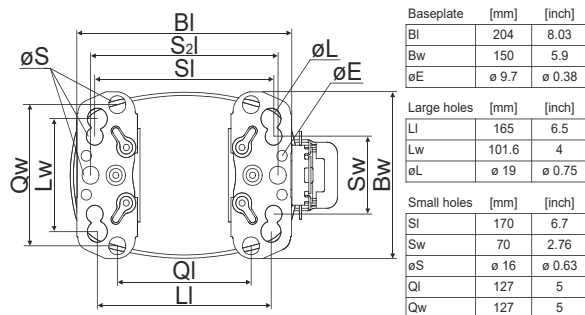
Compressor dimensions

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

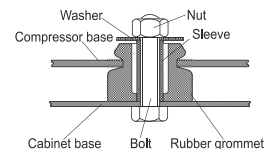
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 10,11-10,29	øi 6,41-6,59	øi 6,41-6,59
(i:inside, o:outside) [in]	øi 0,4-0,41	øi 0,25-0,26	øi 0,25-0,26
Material	copper	copper	copper
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/193/55	115/110/63	-107/193/55
[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



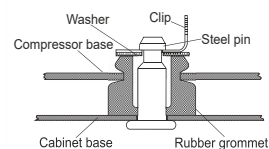
Compressor fixation



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.

Provision for PE Grounding is located at the PE Stamp on the compressor

Model				
Designation	SC18G	220-240V/50Hz	Conf. 1	Sales code: 104G8824

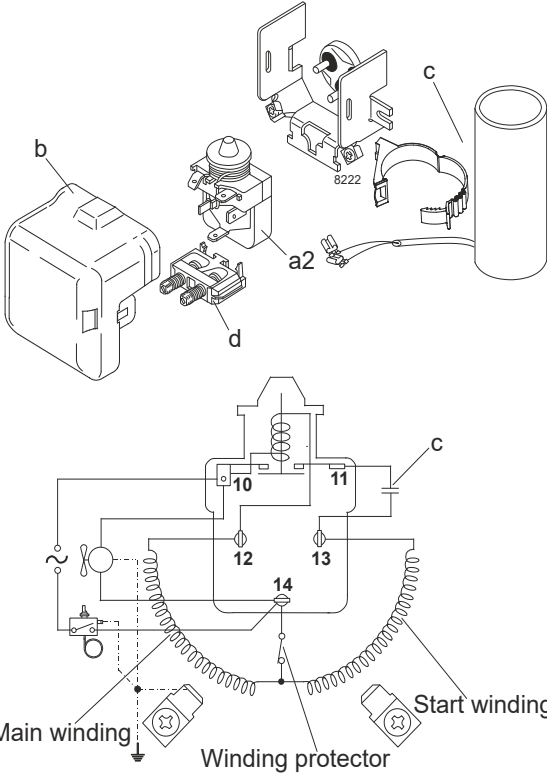
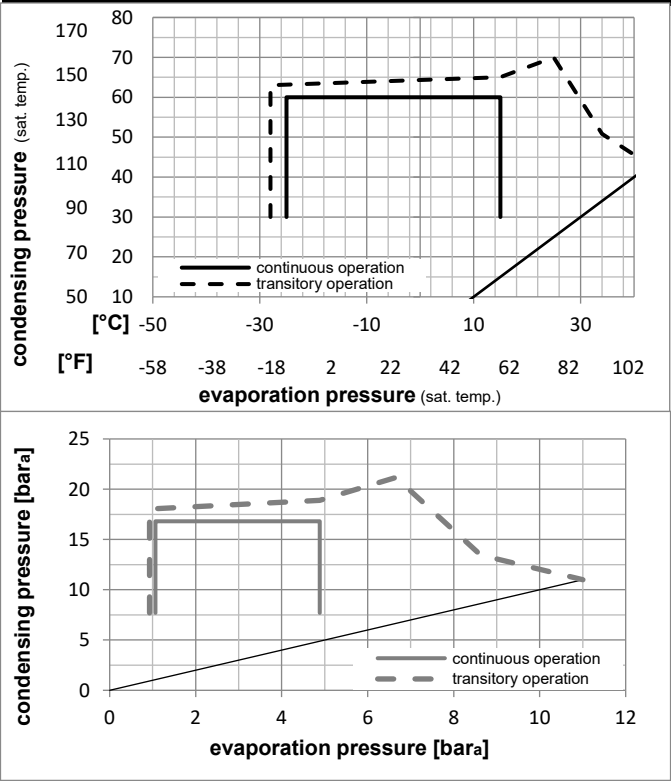
Configuration		Electrical accessories / wiring diagram		
Motorconfiguration	CSIR	CSIR		
Power supply (nominal)	220-240V/50Hz 1~			
Refrigerant	R134a			
Application	LBP+MBP+HBP			
Voltage range	187-254V			
Starting torque	HST			
Approvals	VDE			
	UL			
	CCC			

Ambient/ machine room temperatures minimum /maximum

Ambient temperature range:	10 - 43°C / 50 - 110°F
Machine room temperature range:	10 - 48°C / 50 - 119°F
Compressor cooling:	fan 3m/s

Operation Limits

Operation pressure range



Components		
a2	relay	117U6019
c	start capacitor (80µF)	117U5017
d	cord relief	103N1004
b	plastic cover	103N2009

Model

Designation

SC18G

220-240V/50Hz

Conf. 1

Sales code:

104G8824

Optimization + standard conditions

R134a, 220V/50Hz, CSIR, fan 3m/s, VDE, UL, CCC

Evaporating pressure (saturation temperature)														
Condensing pressure (saturation temperature)														
Return gas temp.														
Liquid temp.														
Cooling capacity														
COP														
EER														
Power consumption														
Current 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	396,4	1354	341,2	1,13	3,87	0,97	350,1	2,61	7,70	ASHRAE LBP
[°F]	-10	130	90	90										
[°C]	-25	55	32	55	285,6	975	245,8	0,88	2,99	0,75	325,8	2,56	6,83	cecomaf LBP
[°F]	-13	131	90	131										
[°C]	-35	40	20	40	146,0	499	125,7	0,67	2,30	0,58	217,1	2,26	3,20	EN12900 LBP
[°F]	-31	104	68	104										
[°C]	-7	54	35	46	894,7	3055	770,0	1,58	5,41	1,36	565,2	3,17	19,52	ASHRAE MBP
[°F]	20	130	95	115										
[°C]	-10	55	32	55	689,1	2353	593,1	1,31	4,47	1,13	526,8	3,05	16,66	cecomaf MBP
[°F]	14	131	90	131										
[°C]	-10	45	20	45	763,6	2608	657,2	1,54	5,27	1,33	495,2	2,91	17,87	EN12900 MBP
[°F]	14	113	68	113										

Performance tables

R134a, 220V/50Hz, CSIR, fan 3m/s, VDE, UL, CCC

	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	332,6	1136	286,2	1,00	3,42	0,86		332,4		2,51		7,21	
cond. pressure	-20	-4	462,8	1581	398,3	1,18	4,04	1,02		390,9		2,64		10,05	
pc= 45/113	-10	14	792,2	2706	681,8	1,60	5,46	1,38		495,2		2,91		17,34	
return gas temp.	-5	23	997,8	3408	858,7	1,84	6,27	1,58		543,4		3,07		21,94	
RGT= 32/90	0	32	1235,0	4218	1062,8	2,09	7,14	1,80		590,3		3,25		27,31	
liquid temp	5	41	1506,8	5146	1296,8	2,36	8,08	2,03		637,3		3,46		33,55	
Tliq= 45/113	15	59	2167,5	7402	1865,3	2,95	10,06	2,54		735,6		4,00		49,09	
[°C / °F]	-25	-13	285,6	975	245,8	0,88	2,99	0,75		325,8		2,56		6,83	
cond. pressure	-20	-4	398,5	1361	343,0	1,00	3,43	0,86		397,0		2,72		9,56	
pc= 55/131	-10	14	689,1	2353	593,1	1,31	4,47	1,13		526,8		3,05		16,66	
return gas temp	-5	23	873,2	2982	751,5	1,49	5,07	1,28		587,8		3,24		21,23	
RGT= 32/90	0	32	1087,4	3714	935,8	1,68	5,73	1,44		647,7		3,46		26,60	
liquid temp	5	41	1334,8	4559	1148,8	1,89	6,44	1,62		707,6		3,71		32,89	
Tliq= 55/131	15	59	1942,4	6634	1671,7	2,33	7,97	2,01		832,0		4,34		48,79	

Model				
Designation	SC18G	208-230V/60Hz	Conf. 2	Sales code: 104G8824

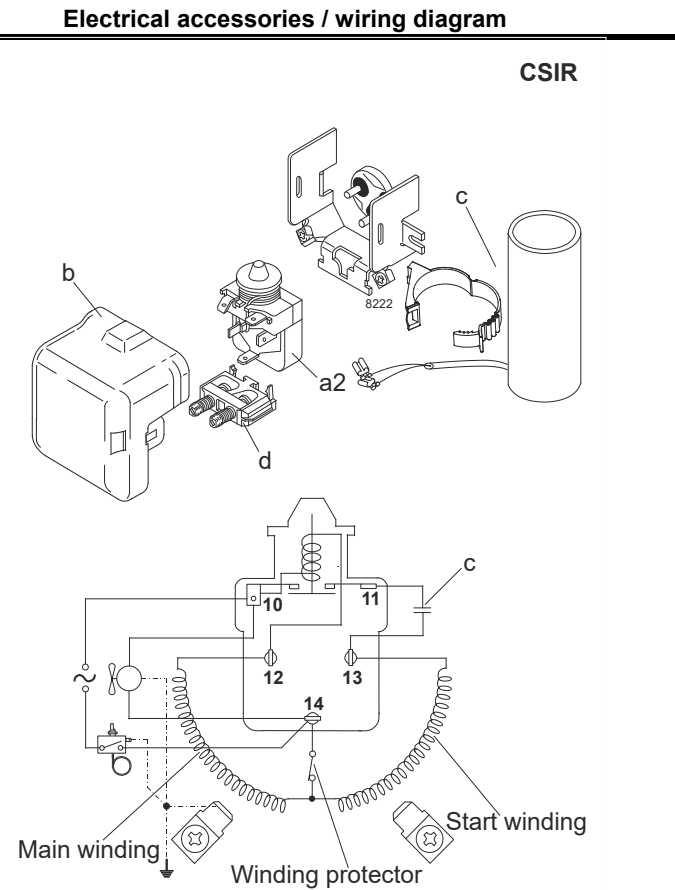
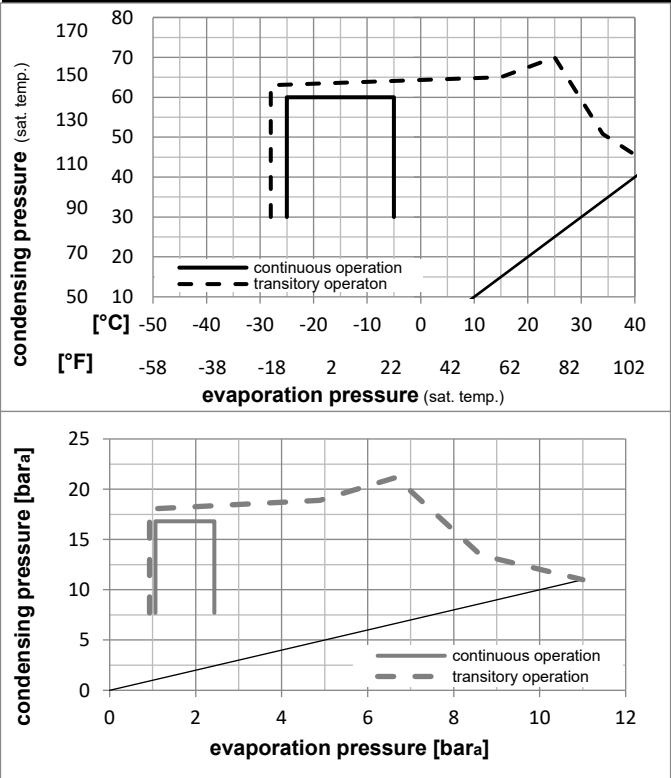
Configuration		Electrical accessories / wiring diagram	
Motorconfiguration	CSIR	CSIR	
Power supply (nominal)	208-230V/60Hz 1~		
Refrigerant	R134a		
Application	LBP		
Voltage range	198-254V		
Starting torque	HST		
Approvals	VDE		
	UL		
	CCC		

Ambient/ machine room temperatures minimum /maximum

Ambient temperature range:	10 - 43°C / 50 - 110°F
Machine room temperature range:	10 - 48°C / 50 - 119°F
Compressor cooling:	fan 3m/s

Operation Limits

Operation pressure range



Components		
a2	relay	117U6019
c	start capacitor (80μF)	117U5017
d	cord relief	103N1004
b	plastic cover	103N2009

Model

Designation

SC18G

208-230V/60Hz

Conf. 2

Sales code:

104G8824

Optimization + standard conditions

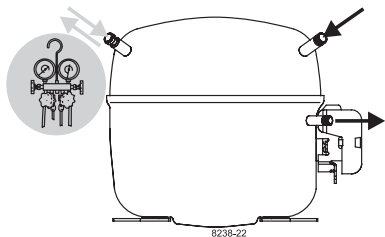
R134a, 230V/60Hz, CSIR, fan 3m/s, VDE, UL, CCC

Evaporating pressure (saturation temperature)														
Condensing pressure (saturation temperature)														
Return gas temp.														
Liquid temp.														
Cooling capacity														
COP														
EER														
Power consumption														
Current 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	467,3	1596	402,2	1,13	3,86	0,97	413,1	3,09	9,07	ASHRAE LBP
[°F]	-10	130	90	90										
[°C]	-25	55	32	55	337,6	1153	290,6	0,88	2,99	0,75	385,7	3,05	8,07	cecomaf LBP
[°F]	-13	131	90	131										
[°C]	-35	40	20	40	185,4	633	159,5	0,68	2,31	0,58	274,4	2,85	4,07	EN12900 LBP
[°F]	-31	104	68	104										
[°C]	-7	54	35	46	1046,2	3573	900,4	1,58	5,41	1,36	660,6	3,69	22,83	ASHRAE MBP
[°F]	20	130	95	115										
[°C]	-10	55	32	55	806,5	2754	694,1	1,31	4,47	1,13	616,0	3,56	19,50	cecomaf MBP
[°F]	14	131	90	131										
[°C]	-10	45	20	45	893,1	3050	768,6	1,54	5,27	1,33	578,6	3,40	20,91	EN12900 MBP
[°F]	14	113	68	113										

Performance tables

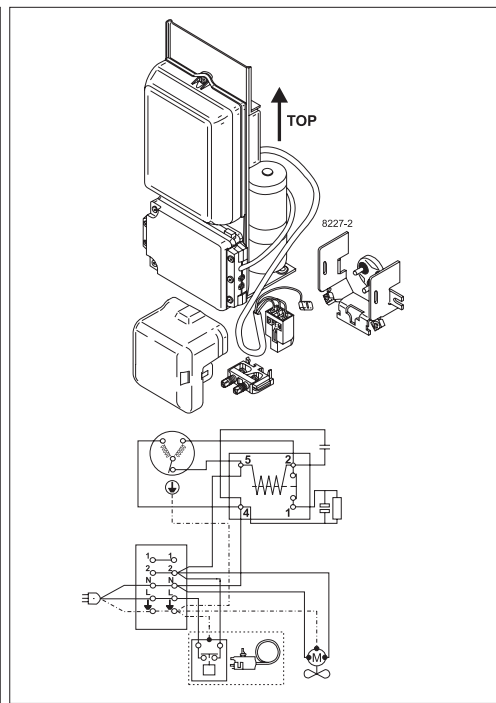
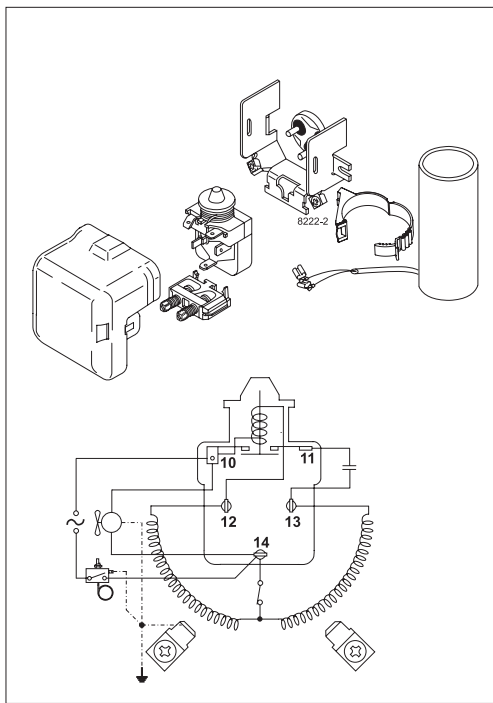
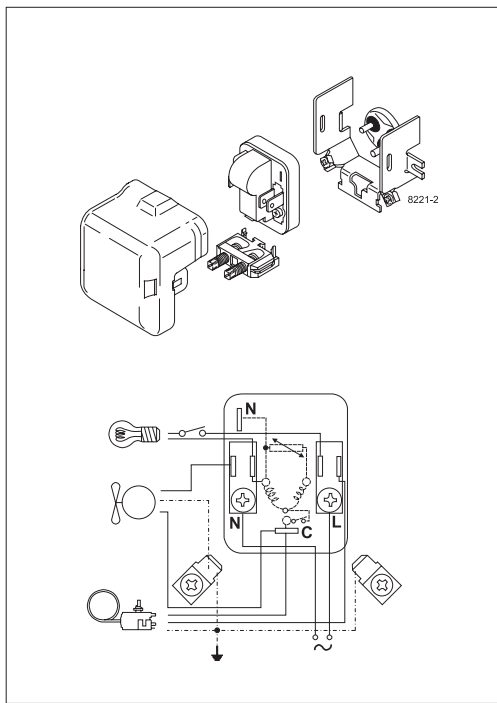
R134a, 230V/60Hz, CSIR, fan 3m/s, VDE, UL, CCC

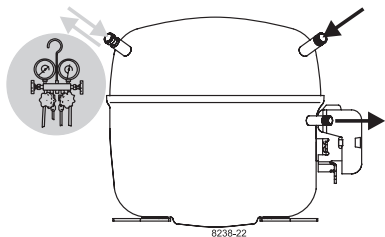
	pe		Cooling capacity			COP		EER		P1		I		m	
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]		[W]		[A]		[kg/h]	
[°C / °F]	-25	-13	393,7	1344	338,8	1,00	3,41	0,86		394,6		2,99		8,53	
cond. pressure	-23	-10	442,0	1509	380,4	1,06	3,62	0,91		417,1		3,03		9,58	
pc= 45/113	-20	-4	543,8	1857	468,0	1,18	4,04	1,02		459,5		3,10		11,81	
return gas temp.	-18	0	618,0	2111	531,9	1,27	4,34	1,09		486,8		3,16		13,45	
RGT= 32/90	-15	5	720,3	2460	619,9	1,38	4,73	1,19		520,6		3,24		15,70	
liquid temp	-10	14	926,5	3164	797,4	1,60	5,47	1,38		578,6		3,40		20,28	
Tliq= 45/113	-5	23	1165,7	3981	1003,2	1,84	6,27	1,58		634,5		3,58		25,63	
[°C / °F]	-25	-13	337,6	1153	290,6	0,88	2,99	0,75		385,7		3,05		8,07	
cond. pressure	-23	-10	379,5	1296	326,6	0,92	3,13	0,79		413,6		3,10		9,08	
pc= 55/131	-20	-4	468,2	1599	402,9	1,00	3,43	0,86		466,2		3,19		11,23	
return gas temp	-18	0	533,3	1821	458,9	1,07	3,64	0,92		500,3		3,26		12,81	
RGT= 32/90	-15	5	623,4	2129	536,5	1,15	3,92	0,99		542,7		3,36		15,01	
liquid temp	-10	14	806,5	2754	694,1	1,31	4,47	1,13		616,0		3,56		19,50	
Tliq= 55/131	-5	23	1020,8	3486	878,6	1,49	5,07	1,28		687,0		3,79		24,81	



SC Compressors

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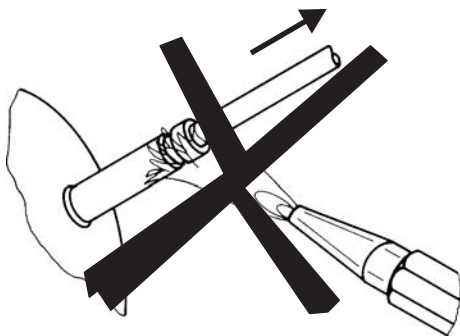




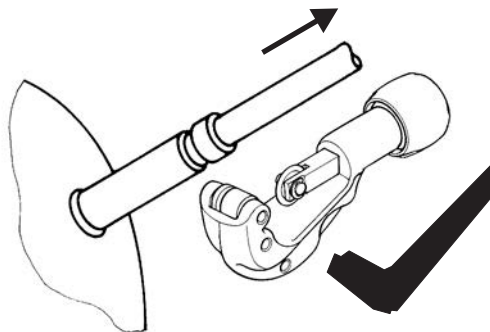
SC Compressors

Service/Repair – R290

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