

Model

Designation	SC21FTX	208-230V/60Hz 1~	Sales code:	104G8106
-------------	----------------	------------------	-------------	-----------------

Compressor design

Oil type	Polyolester	Refrigerant(s)	R134a
Oil viscosity	22cST	Displacement	20,95cm ³ / 1,28cu.in
Oil quantity	550cm ³ / 18,6fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	1300g / 45,9oz		
Free gas volume comp.	1460cm ³ / 49,4fl.oz		
Weight	13,7kg / 30,2lbs		
Motor protection	1# internal		
Winding resistance main	3,4Ω (at 25°C)		
Winding resistance aux	14,4Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	135°C / 275°F		



General - Configurations with SC21FTX

	Conf. 1
Motorconfiguration	CSCR
Power supply (nominal)	208-230V/60Hz
Number of phases	1
Voltage range	187-254V
Approvals	VDE, UL, KC
Starting torque	HST
Note	- / -

Applications with SC21FTX

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

Electrical data - Configurations with SC21FTX

	Conf. 1
Starting device type	relay
Run capacitor	10μF
Start capacitor	80μF
LRA (locked rotor amps / 4s)	
RLA (rated load amps / 1s)	-/A
Cut in current	

Model

Designation

SC21FTX

208-230V/60Hz 1~

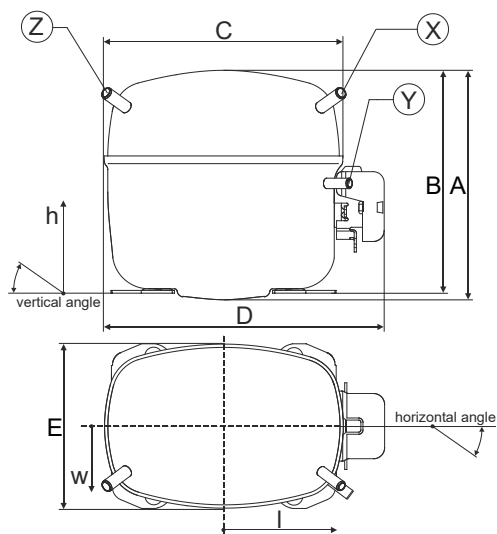
Sales code:

104G8106

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 10,11-10,29	øi 6,11-6,29	øi 6,11-6,29
(i:inside, o:outside)	[in]	øi 0,4-0,41	øi 0,24-0,25	øi 0,24-0,25
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

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

LRA value on compressor label and datasheet may differ due to different test conditions for UL approval.

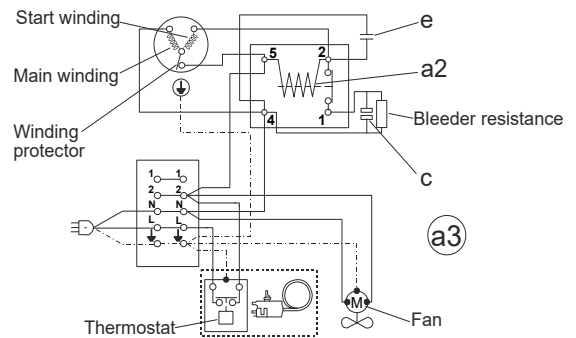
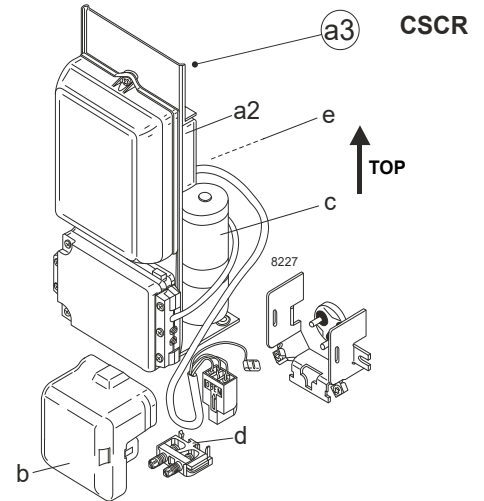
Model

Designation	SC21FTX	208-230V/60Hz	Conf. 1	Sales code:	104G8106
-------------	----------------	----------------------	----------------	-------------	-----------------

Configuration

Motorconfiguration	CSCR
Power supply (nominal)	208-230V/60Hz 1~
Refrigerant	R134a
Application	LBP
Voltage range	187-254V
Starting torque	HST
Approvals	VDE
	UL
	KC

Electrical accessories / wiring diagram

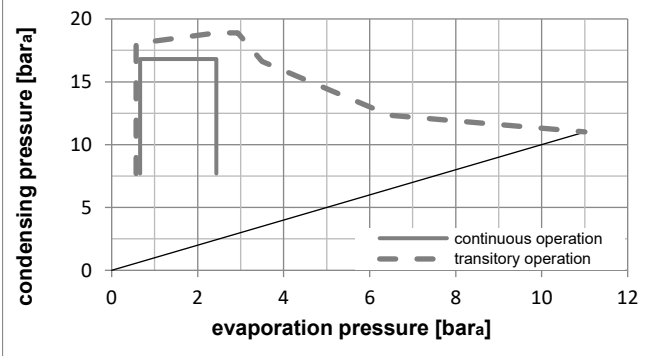
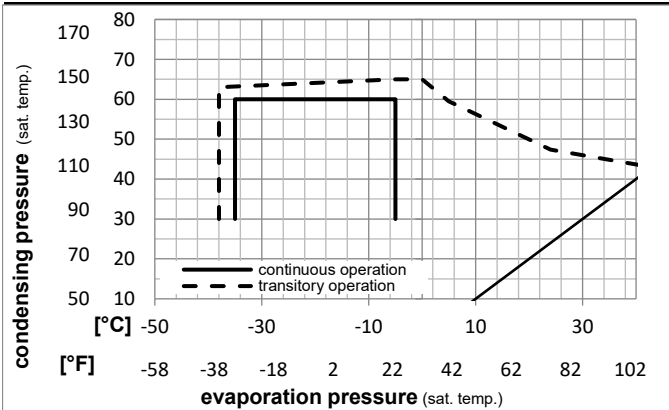


Ambient/ machine room temperatures minimum /maximum

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

a3	SC starter kit (550mm)	117-7039
b	plastic cover	103N2008
d	cord relief	103N1004

Alternative components

a3	SC starter kit (1000mm)	117-7043
----	-------------------------	----------

Model

Designation **SC21FTX** **208-230V/60Hz** Conf. 1 Sales code: **104G8106**

Optimization + standard conditions

R134a, 230V/60Hz, CSCR, fan 3m/s, VDE, UL, KC

		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	Ref. mass flow									
[°C]	[°F]											[W]	[A]	[kg/h]									
-23	54	32	32	639,4	2184	550,3	1,29	4,39	1,11	497,3	2,36	12,42	ASHRAE LBP										
-10	130	90	90																				
-25	55	32	55	470,0	1605	404,5	0,99	3,38	0,85	475,4	2,25	11,24	cecomaf LBP										
-13	131	90	131																				
-35	40	20	40	316,1	1079	272,0	0,91	3,11	0,78	346,9	1,70	6,93	EN12900 LBP										
-31	104	68	104																				
-23	49	4,4	49	523,5	1788	450,5	1,07	3,66	0,92	487,8	2,34	13,83	ARI540 LBP										
-10	120	40	120																				
-23	41	32	32	696,8	2380	599,7	1,47	5,03	1,27	473,2	2,29	13,53	AHAM LBP										
-10	105	90	90																				
-35	45	32	45	296,6	1013	255,2	0,85	2,92	0,74	347,2	1,70	6,40	opt										
-31	113	90	113																				

Performance tables

R134a, 230V/60Hz, CSCR, fan 3m/s, VDE, UL, KC

	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	296,6	1013	255,2	0,85	2,92	0,74	347,2	1,70	6,40
cond. pressure	-30	-22	413,3	1412	355,7	1,02	3,50	0,88	403,2	1,95	8,93
pc= 45/113	-25	-13	554,8	1895	477,5	1,20	4,11	1,04	460,9	2,22	12,02
return gas temp.	-23	-10	609,3	2081	524,4	1,27	4,32	1,09	481,5	2,32	13,21
RGT= 32/90	-20	-4	725,1	2476	624,0	1,39	4,73	1,19	523,5	2,52	15,75
liquid temp	-15	5	928,1	3170	798,8	1,56	5,34	1,34	594,1	2,83	20,23
Tliq= 45/113	-5	23	1448,3	4946	1246,5	1,88	6,41	1,61	772,2	3,53	31,85
[°C / °F]	-35	-31	240,3	821	206,8	0,70	2,40	0,61	341,7	1,66	5,72
cond. pressure	-30	-22	344,6	1177	296,6	0,84	2,88	0,73	408,6	1,95	8,22
pc= 55/131	-25	-13	470,0	1605	404,5	0,99	3,38	0,85	475,4	2,25	11,24
return gas temp	-23	-10	518,1	1769	445,9	1,04	3,55	0,89	498,7	2,36	12,40
RGT= 32/90	-20	-4	620,4	2119	533,9	1,14	3,89	0,98	545,3	2,58	14,88
liquid temp	-15	5	799,9	2732	688,4	1,29	4,40	1,11	621,4	2,93	19,26
Tliq= 55/131	-5	23	1262,0	4310	1086,1	1,57	5,35	1,35	805,1	3,69	30,68