

Model

Designation	SC21FTX	220-240V/50Hz 1~	Sales code:	104G8105
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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	3,7Ω (at 25°C)		
Winding resistance aux	14Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	135°C / 275°F		



General - Configurations with SC21FTX

	Conf. 1
Motorconfiguration	CSIR
Power supply (nominal)	220-240V/50Hz
Number of phases	1
Voltage range	187-254V
Approvals	CCC, VDE, EAC
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	-/-
Start capacitor	80μF
LRA (locked rotor amps / 4s)	
RLA (rated load amps / 1s)	-/-A
Cut in current	

Model

Designation

SC21FTX

220-240V/50Hz 1~

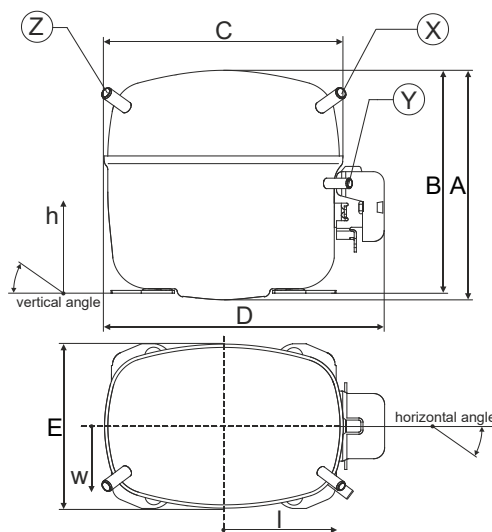
Sales code:

104G8105

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

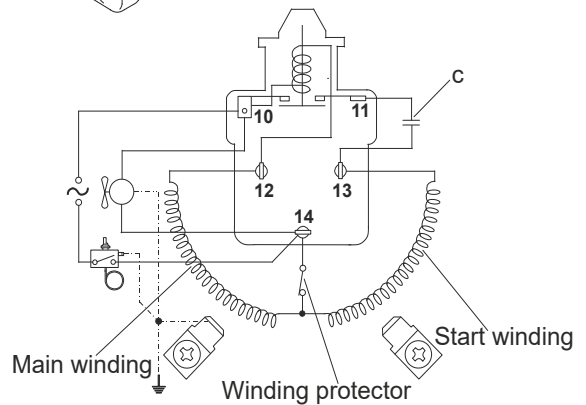
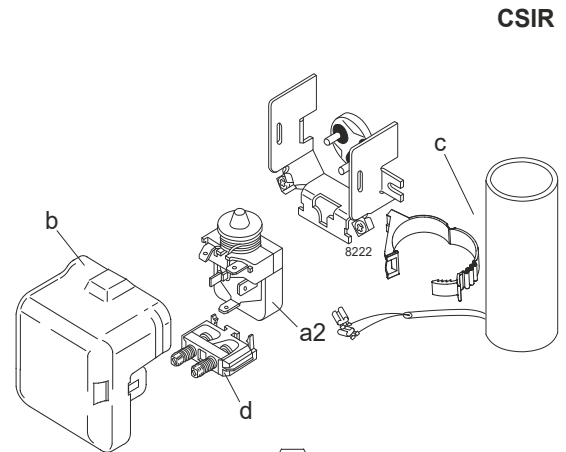
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Configuration

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

Electrical accessories / wiring diagram

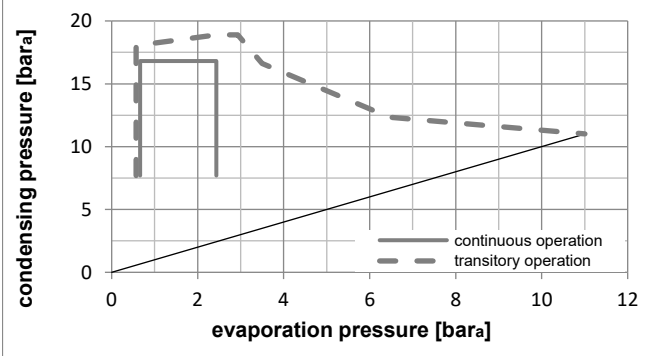
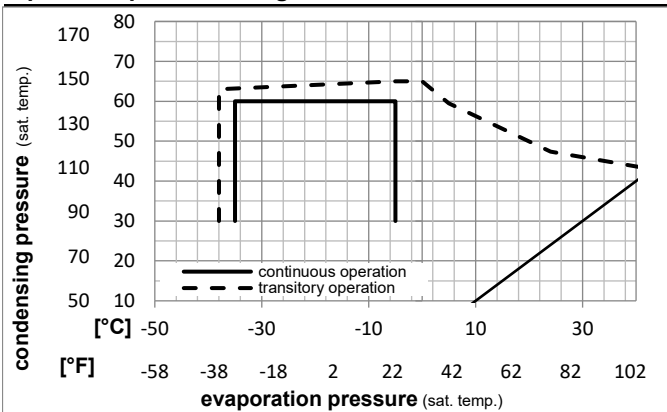


Ambient/ machine room temperatures minimum /maximum

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

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

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Optimization + standard conditions

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

	Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)			Return gas temp.	Liquid temp.	Cooling capacity	COP	EER	Power consumption			ASHRAE LBP
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]						P1	I	Ref. mass flow	
	[°C]	[°F]	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]			
	-23	54	32	32	568,1	1940	488,9	1,27	4,32	1,09	448,9	3,20	11,03	ASHRAE LBP		
	-10	130	90	90												
	-25	55	32	55	415,0	1417	357,2	0,97	3,31	0,83	428,0	3,12	9,92	cecomaf LBP		
	-13	131	90	131												
	-35	40	20	40	280,9	959	241,7	0,89	3,04	0,77	315,7	2,72	6,16	EN12900 LBP		
	-31	104	68	104												
	-23	49	4,4	49	470,3	1606	404,8	1,05	3,60	0,91	446,2	3,20	12,42	ARI540 LBP		
	-10	120	40	120												
	-23	41	32	32	635,3	2170	546,8	1,47	5,02	1,26	432,3	3,16	12,34	AHAM LBP		
	-10	105	90	90												
	-35	45	32	45	259,7	887	223,5	0,83	2,82	0,71	314,2	2,71	5,60	opt		
	-31	113	90	113												

Performance tables

R134a, 220V/50Hz, CSIR, fan 3m/s, CCC, 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	259,7	887	223,5	0,83	2,82	0,71	314,2	2,71	5,60
cond. pressure	-30	-22	367,0	1254	315,9	0,99	3,39	0,85	369,8	2,90	7,93
pc= 45/113	-25	-13	499,4	1705	429,8	1,18	4,03	1,02	423,3	3,11	10,82
return gas temp.	-23	-10	550,8	1881	474,0	1,25	4,26	1,07	441,4	3,19	11,94
RGT= 32/90	-20	-4	660,7	2256	568,6	1,39	4,73	1,19	476,6	3,34	14,35
liquid temp	-15	5	855,0	2920	735,8	1,61	5,49	1,38	531,4	3,58	18,64
Tliq= 45/113	-5	23	1358,3	4639	1168,9	2,08	7,10	1,79	653,5	4,10	29,87
[°C / °F]	-35	-31	192,0	656	165,3	0,65	2,22	0,56	295,7	2,66	4,57
cond. pressure	-30	-22	296,1	1011	254,8	0,81	2,78	0,70	364,0	2,88	7,06
pc= 55/131	-25	-13	415,0	1417	357,2	0,97	3,31	0,83	428,0	3,12	9,92
return gas temp	-23	-10	459,5	1569	395,5	1,02	3,49	0,88	449,2	3,20	11,00
RGT= 32/90	-20	-4	552,8	1888	475,8	1,13	3,86	0,97	489,6	3,37	13,26
liquid temp	-15	5	713,4	2437	614,0	1,30	4,42	1,11	550,7	3,64	17,18
Tliq= 55/131	-5	23	1119,1	3822	963,1	1,65	5,63	1,42	678,7	4,22	27,20