

Model

Designation	TL5CN	220-240V/50Hz 1~	Sales code:	102H5502
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R290
Oil viscosity	32cSt	Displacement	5,08cm ³ / 0,31cu.in
Oil quantity	280cm ³ / 9,5fl.oz	Compressors on pallet	125
Refr. charge - tech. limit	150g / 5,3oz		
Free gas volume comp.	1690cm ³ / 57,1fl.oz		
Weight	7,5kg / 16,5lbs		
Motor protection	1# internal		
Winding resistance main	14,5Ω (at 25°C)		
Winding resistance aux	14,8Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations with TL5CN

	Conf. 1
Motorconfiguration	RSIR
Power supply (nominal)	220-240V/50Hz
Number of phases	1
Voltage range	198-254V
Approvals	VDE, EAC
Starting torque	LST
Note	- / -

Applications with TL5CN

	Conf. 1
Refrigerant	R290
Application	LBP+MBP
System cooling	fan 1,5m/s
Hot gas defrost	OK
Long interval pull down	OK

Electrical data - Configurations with TL5CN

	Conf. 1
Starting device type	PTC
Run capacitor	-/-
Start capacitor	-/-
LRA (locked rotor amps / 4s)	5,4A
RLA (rated load amps / 1s)	1,1A
Cut in current	9,7A
IP class	21

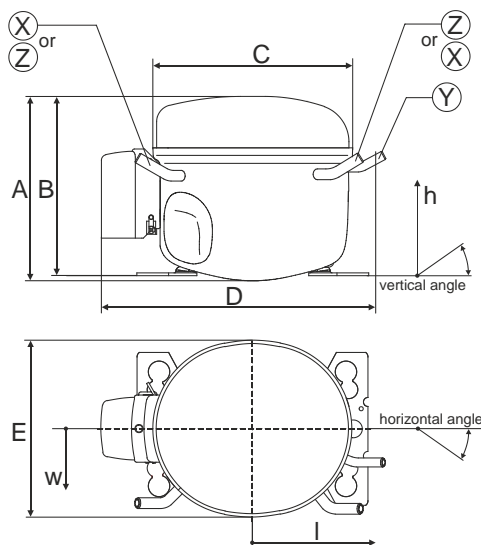
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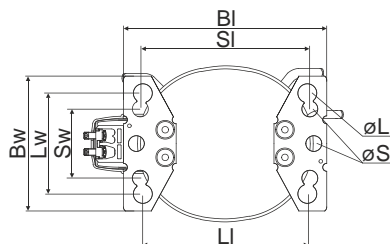
Compressor dimensions

Housing	A Height	163mm / 6,42in
	B Height	159mm / 6,26in
	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

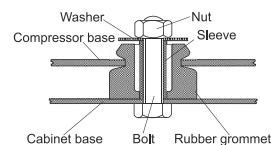


Compressor fixation

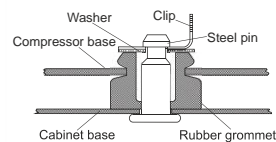


Baseplate	[mm]	[inch]
BI	204	8.03
Bw	136	5.35
Large holes		
LI	165	6.5
Lw	101.6	4
øL	ø 19	ø 0.75
Small holes		
SI	170	6.7
Sw	70	2.76
øS	ø 16	ø 0.63

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	
Bolt joint ø1/4" ø19mm	118-1949	
Snap-on ø7,3 ø16mm	118-1947	118-1919

Model

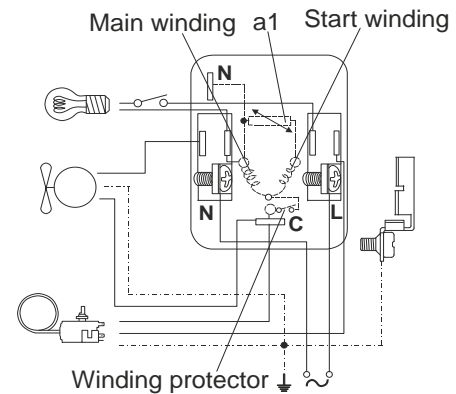
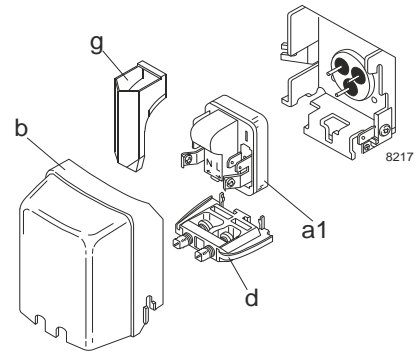
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Configuration

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Voltage range	198-254V
Starting torque	LST
Approvals	VDE EAC

Electrical accessories / wiring diagram

RSIR

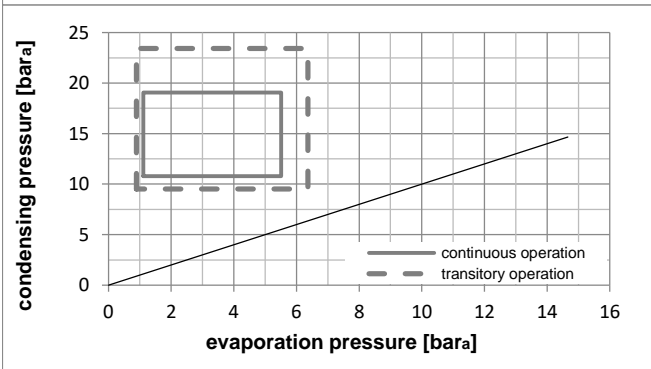
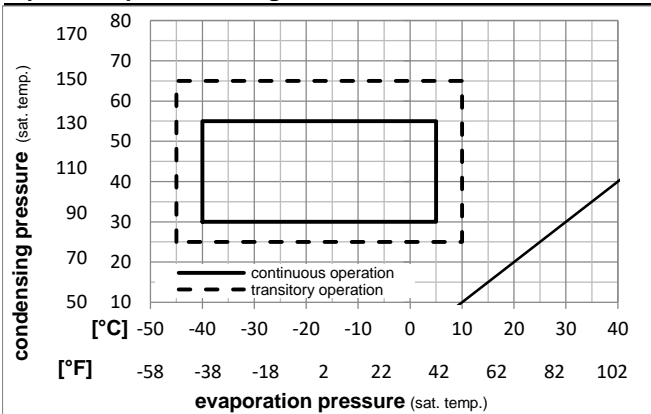


Ambient temperatures / system cooling

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	fan 1,5m/s	fan 1,5m/s	n/a
38°C / 100°F	fan 1,5m/s	fan 1,5m/s	n/a
43°C / 110°F	fan 1,5m/s	fan 1,5m/s	n/a

Operation pressure range



Components

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

Alternative components

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

Model

Designation **TL5CN 220-240V/50Hz** Conf. 1 Sales code: **102H5502**

Optimization + standard conditions

220V/50Hz, RSIR, fan 1,5m/s, VDE, EAC

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)						Power consumption				ASHRAE LBP
					Return gas temp.			Liquid temp.			Current consumption		Ref. mass flow		
					Cooling capacity			COP	EER	P1	I	ṁ			
pe	pc	RGT	Tliq		[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]		[A]	[kg/h]	
[°C]	-23,3	54,4	32,2	32,2	204,7	699	176,2	1,18	4,02	1,01	174,1	1,18	2,07	ASHRAE LBP	
[°F]	-10	130	90	90											
[°C]	-25	55	32	55	152,8	522	131,5	0,91	3,11	0,78	168,0	1,16	1,90	cecomaf LBP	
[°F]	-13	131	89,6	131											
[°C]	-35	40	20	40	116,0	396	99,8	0,90	3,08	0,78	128,7	1,04	1,32	EN12900 LBP	
[°F]	-31	104	68	104											
[°C]	-6,66	54,4	35	46,1	367,1	1254	315,9	1,53	5,24	1,32	239,2	1,43	4,19	ASHRAE MBP	
[°F]	20	130	95	115											
[°C]	-10	55	32	55	291,4	995	250,8	1,29	4,39	1,11	226,6	1,38	3,69	cecomaf MBP	
[°F]	14	131	89,6	131											
[°C]	-10	45	20	45	331,7	1133	285,5	1,57	5,37	1,35	211,1	1,32	4,07	EN12900 MBP	
[°F]	14	113	68	113											

Performance tables

220V/50Hz, RSIR, fan 1,5m/s, 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]	-40	-40	80,8	276	69,5	0,71	2,44	0,61	113,3	1,00	0,90
cond. pressure	-35	-31	109,3	373	94,1	0,84	2,88	0,72	129,8	1,04	1,23
pc= 45/113	-30	-22	143,2	489	123,2	0,98	3,35	0,84	146,0	1,09	1,61
return gas temp.	-25	-13	183,0	625	157,5	1,13	3,86	0,97	162,0	1,14	2,06
RGT= 32/90	-15	5	283,4	968	243,9	1,46	4,98	1,25	194,4	1,25	3,22
liquid temp	-5	23	416,0	1421	358,0	1,82	6,22	1,57	228,5	1,39	4,79
Tliq= 45/113	5	41	586,5	2003	504,7	2,21	7,53	1,90	265,9	1,54	6,86
[°C / °F]	-40	-40	61,6	210	53,0	0,57	1,93	0,49	108,9	0,98	0,76
cond. pressure	-35	-31	87,9	300	75,7	0,68	2,33	0,59	129,0	1,03	1,09
pc= 55/131	-30	-22	118,1	403	101,6	0,79	2,71	0,68	148,6	1,09	1,46
return gas temp	-25	-13	152,8	522	131,5	0,91	3,11	0,78	168,0	1,16	1,90
RGT= 32/90	-15	5	238,8	816	205,5	1,15	3,94	0,99	206,8	1,30	3,00
liquid temp	-5	23	351,4	1200	302,4	1,42	4,86	1,22	247,0	1,46	4,48
Tliq= 55/131	5	41	496,1	1694	426,9	1,71	5,84	1,47	290,1	1,64	6,43