

Model

Designation	GTK80AT	200-240V/50Hz 1~	Sales code:	CDO00155
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R134a
Oil viscosity	10,4cSt	Displacement	7,7cm ³ / 0,47cu.in
Oil quantity	170cm ³ / 5,7fl.oz	Compressors on pallet	100
Refr. charge - tech. limit			
Free gas volume comp.	1560cm ³ / 52,7fl.oz		
Weight	8,6kg / 19lbs		
Motor protection	external		
Winding resistance main	10,4Ω (at 25°C)		
Winding resistance aux	20,5Ω (at 25°C)		
Max. winding temp.	130°C / 266°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations with GTK80AT

	Conf. 1	Conf. 2
Motor configuration	RSCR	RSIR
Power supply (nominal)	200-240V/50Hz	200-240V/50Hz
Number of phases	1	1
Voltage range	170-264V	170-264V
Approvals	VDE, EAC	VDE, EAC
Starting torque	LST	LST
Note	- / -	

Applications with GTK80AT

	Conf. 1	Conf. 2
Refrigerant	R134a	R134a
Application	LBP	LBP
System cooling	static	static
Hot gas defrost	-/-	-/-
Long interval pull down	-/-	-/-

Electrical data - Configurations with GTK80AT

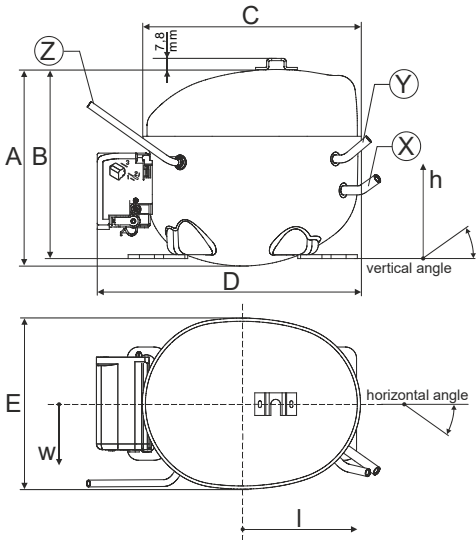
	Conf. 1	Conf. 2
Starting device type	PTC	PTC
Run capacitor	4μF	-/-
Start capacitor	-/-	-/-
LRA (locked rotor amps / 4s/ U(N))	8,25A	8,25A
RLA (rated load amps / 1s/ U(N))		
Cut in current (U(N))	15,5A	15,5A

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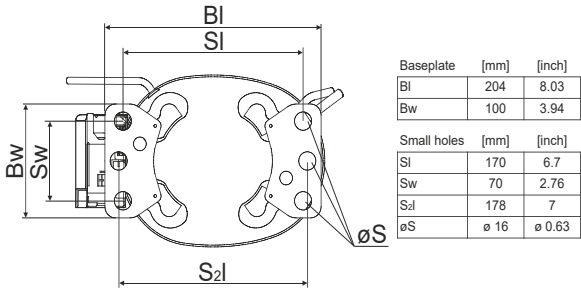
Compressor dimensions

Housing	A Height	177mm / 6,97in
	B Height	170mm / 6,69in
	C Length shell	194mm / 7,64in
	D Length w. cover	238mm / 9,37in
	E Width	151mm / 5,94in

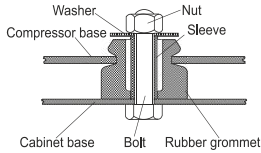
Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 6,1-6,2	øi 5,1-5,2	øo 5,92-6,08
(i:inside, o:outside)	[in]	øi 0,24-0,24	øi 0,2-0,2	øo 0,23-0,24
Material		copper	copper	copper
Horizontal angle	±2°	45°	13°	0°
Vertical angle	±2°	30°	40°	145°
Position l/h/w	[mm]	120/72/62	112/106/62	-140/136/70
	[in]	4,7/2,8/2,4	4,4/4,2/2,4	-5,5/5,4/2,8
Straight tube l.	[mm]	14	14	75
	[in]	0,5	0,5	3



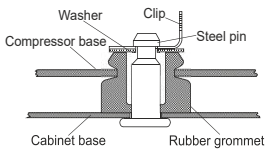
Compressor fixation



Bolt joint



Snap-on



Mounting accessories

- '4ZN' with rubber grommet
- '4ZN' with rubber grommet and sleeve for M6
- Bolt joint kit
- '4ZN' with Snap on kit

- order code
- 772N
- 768N
- 4ZN + 118-1917 (18)
- 776N

Application notes

Various options of housing are possible (dip-tray fixture) - please contact SECOP-Sales.

Various options of connectors are possible - please contact SECOP-Sales.

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

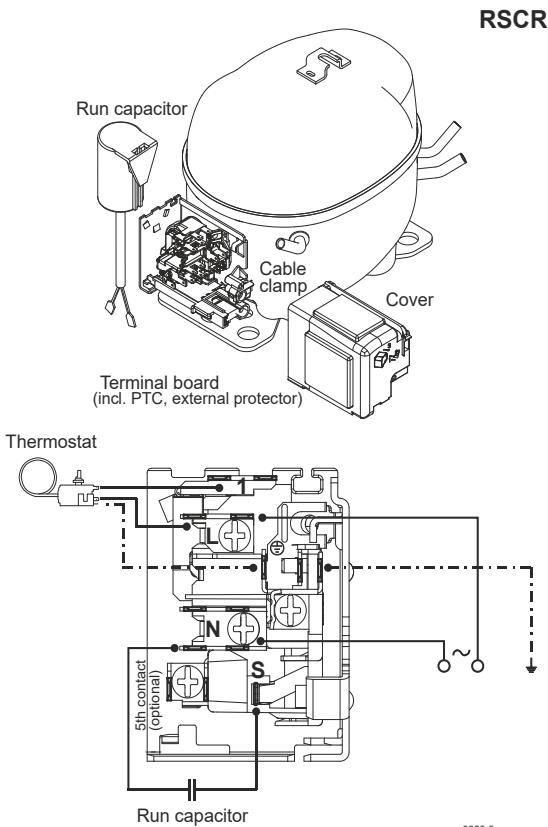
Model

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Configuration

Motor configuration	RSCR
Power supply (nominal)	200-240V/50Hz 1~
Refrigerant	R134a
Application	LBP
Voltage range	170-264V
Starting torque	LST
Approvals	VDE
	EAC

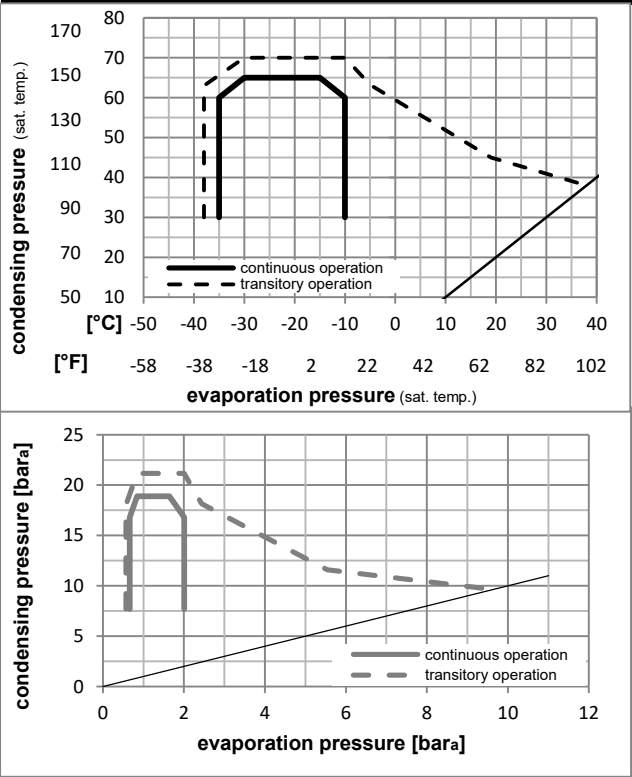
Electrical accessories / wiring diagram



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:	static

Operation pressure range



Components

terminal board (PTC, 4.8mm)	ZC FP
run capacitor (4µF, 4.8/6,3mm)	cap. 4µF
motor protector BDG AE 72 FU x	AE72FUX
cover + clamp + screws (Nr. 4ZN)	16168000

Alternative components

terminal board (PTC, 6.3mm)	DC FP
run capacitor (4µF, 4.8/6,3mm)	cap. 4µF
motor protector BDG AE 72 FU x	AE72FUX
cover + clamp + screws (Nr. 4ZN)	16168000

Model

Designation **GTK80AT** **200-240V/50Hz** Conf. 1 Sales code: **CDO00155**

Optimization + standard conditions

R134a, 200V/50Hz, RSCR, static, VDE, EAC

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)						Power consumption																																																																																								
Return gas temp.					Current consumption						Ref. mass flow																																																																																								
Liquid temp.					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					54					32					32					231,5					791					199,2					1,60					5,46					1,38					144,8					0,66					4,49					ASHRAE LBP																													
[°F]					-10					130					90					90																																																																															
[°C]					-25					55					32					55					170,5					582					146,7					1,23					4,19					1,06					138,8					0,63					4,08					cecomaf LBP																													
[°F]					-13					131					90					131																																																																															
[°C]					-35					40					20					40					121,3					414					104,4					1,16					3,96					1,00					104,7					0,48					2,66					EN12900 LBP																													
[°F]					-31					104					68					104																																																																															
[°C]					-23					49					4,4					49					190,7					651					164,1					1,35					4,62					1,16					141,1					0,64					5,04					ARI540 LBP																													
[°F]					-10					120					40					120																																																																															
[°C]					-23					41					32					32					253,4					865					218,0					1,87					6,39					1,61					135,4					0,66					4,92					AHAM LBP																													
[°F]					-10					105					90					90																																																																															
[°C]					-35					45					32					45					112,9					386					97,2					1,06					3,62					0,91					106,4					0,46					2,44					opt																													
[°F]					-31					113					90					113																																																																															

Performance tables

R134a, 200V/50Hz, RSCR, static, VDE, EAC

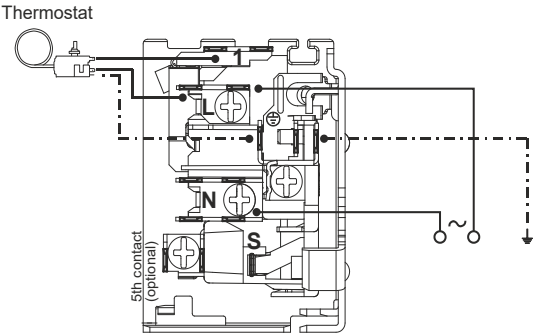
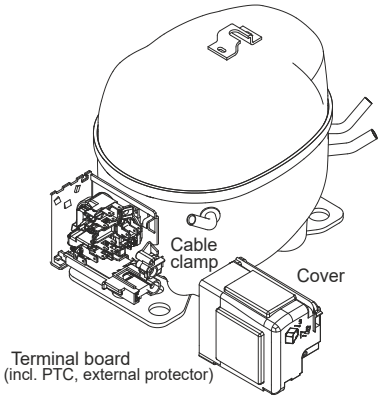
	pe		Cooling capacity			COP			EER			P1			I			m		
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	[W]	[A]	[kg/h]	[W]	[A]	[kg/h]	[W]	[A]	[kg/h]
[°C / °F]	-35	-31	112,9	386	97,2	1,06	3,62	0,91	106,4	0,46	2,44	106,4	0,46	2,44	106,4	0,46	2,44	106,4	0,46	2,44
cond. pressure	-30	-22	154,5	528	133,0	1,31	4,47	1,13	118,2	0,54	3,34	118,2	0,54	3,34	118,2	0,54	3,34	118,2	0,54	3,34
pc= 45/113	-25	-13	203,5	695	175,2	1,53	5,23	1,32	132,8	0,62	4,41	132,8	0,62	4,41	132,8	0,62	4,41	132,8	0,62	4,41
return gas temp.	-23	-10	222,2	759	191,2	1,61	5,48	1,38	138,4	0,65	4,82	138,4	0,65	4,82	138,4	0,65	4,82	138,4	0,65	4,82
RGT= 32/90	-20	-4	261,7	894	225,2	1,75	5,97	1,50	149,7	0,71	5,68	149,7	0,71	5,68	149,7	0,71	5,68	149,7	0,71	5,68
liquid temp	-15	5	330,7	1129	284,6	1,97	6,73	1,70	167,8	0,81	7,21	167,8	0,81	7,21	167,8	0,81	7,21	167,8	0,81	7,21
Tliq= 45/113	-10	14	412,5	1409	355,0	2,21	7,55	1,90	186,6	0,90	9,03	186,6	0,90	9,03	186,6	0,90	9,03	186,6	0,90	9,03
[°C / °F]	-35	-31	85,6	292	73,7	0,80	2,73	0,69	107,1	0,45	2,04	107,1	0,45	2,04	107,1	0,45	2,04	107,1	0,45	2,04
cond. pressure	-30	-22	125,3	428	107,8	1,03	3,53	0,89	121,3	0,53	2,99	121,3	0,53	2,99	121,3	0,53	2,99	121,3	0,53	2,99
pc= 55/131	-25	-13	170,5	582	146,7	1,23	4,19	1,06	138,8	0,63	4,08	138,8	0,63	4,08	138,8	0,63	4,08	138,8	0,63	4,08
return gas temp	-23	-10	187,4	640	161,3	1,29	4,40	1,11	145,3	0,66	4,48	145,3	0,66	4,48	145,3	0,66	4,48	145,3	0,66	4,48
RGT= 32/90	-20	-4	222,9	761	191,8	1,41	4,80	1,21	158,6	0,73	5,35	158,6	0,73	5,35	158,6	0,73	5,35	158,6	0,73	5,35
liquid temp	-15	5	284,4	971	244,8	1,58	5,39	1,36	180,0	0,84	6,85	180,0	0,84	6,85	180,0	0,84	6,85	180,0	0,84	6,85
Tliq= 55/131	-10	14	356,8	1218	307,1	1,76	6,02	1,52	202,3	0,95	8,63	202,3	0,95	8,63	202,3	0,95	8,63	202,3	0,95	8,63

Model				
Designation	GTK80AT	200-240V/50Hz	Conf. 2	Sales code: CDO00155

Configuration	Electrical accessories / wiring diagram
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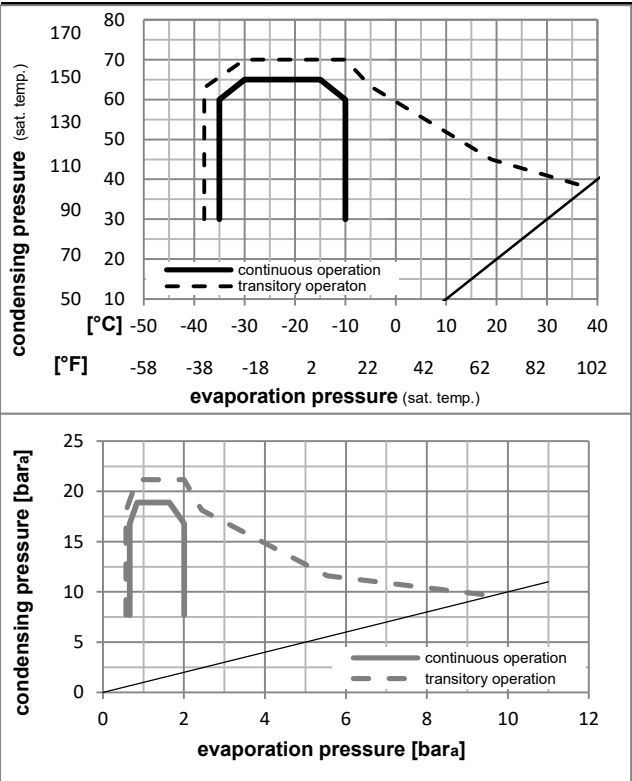
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Refrigerant	R134a
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Voltage range	170-264V
Starting torque	LST
Approvals	VDE
	EAC

RSIR



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Model

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Optimization + standard conditions

R134a, 200V/50Hz, RSIR, static, VDE, EAC

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]	[W]	[A]	[kg/h]	P1	I	m	[W]	[A]	[kg/h]	P1	I	m	[W]	[A]	[kg/h]	P1	I	m	[W]	[A]	[kg/h]
[°C]	-23	54	32	32	231,4	790	199,2	1,52	5,18	1,31	152,5	0,73	4,49	ASHRAE LBP																
[°F]	-10	130	90	90																										
[°C]	-25	55	32	55	170,4	582	146,7	1,17	3,99	1,00	146,0	0,70	4,07	cecomaf LBP																
[°F]	-13	131	90	131																										
[°C]	-35	40	20	40	120,9	413	104,1	1,11	3,78	0,95	109,2	0,51	2,65	EN12900 LBP																
[°F]	-31	104	68	104																										
[°C]	-23	49	4,4	49	190,6	651	164,0	1,28	4,38	1,10	148,6	0,71	5,03	ARI540 LBP																
[°F]	-10	120	40	120																										
[°C]	-23	41	32	32	252,8	864	217,6	1,77	6,05	1,52	142,8	0,68	4,91	AHAM LBP																
[°F]	-10	105	90	90																										
[°C]	-35	45	32	45	112,6	384	96,9	1,01	3,46	0,87	111,0	0,53	2,43	opt																
[°F]	-31	113	90	113																										

Performance tables

R134a, 200V/50Hz, RSIR, static, 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]	[W]	[A]	[kg/h]	[kg/h]
[°C / °F]	-35	-31	112,6	384	96,9	1,01	3,46	0,87	111,0	0,53	2,43				
cond. pressure	-30	-22	154,3	527	132,8	1,24	4,25	1,07	124,0	0,59	3,34				
pc= 45/113	-25	-13	203,3	694	175,0	1,45	4,96	1,25	140,0	0,67	4,40				
return gas temp.	-23	-10	221,9	758	191,0	1,52	5,20	1,31	145,9	0,70	4,81				
RGT= 32/90	-20	-4	261,3	892	224,9	1,65	5,65	1,42	157,9	0,76	5,68				
liquid temp	-15	5	330,1	1127	284,1	1,86	6,36	1,60	177,2	0,85	7,20				
Tliq= 45/113	-10	14	411,6	1406	354,2	2,09	7,14	1,80	196,9	0,95	9,01				
[°C / °F]	-35	-31	85,2	291	73,3	0,77	2,61	0,66	111,4	0,55	2,03				
cond. pressure	-30	-22	125,1	427	107,7	0,98	3,36	0,85	127,1	0,62	2,98				
pc= 55/131	-25	-13	170,4	582	146,7	1,17	3,99	1,00	146,0	0,70	4,07				
return gas temp	-23	-10	187,4	640	161,2	1,23	4,18	1,05	152,9	0,73	4,48				
RGT= 32/90	-20	-4	222,8	761	191,8	1,33	4,55	1,15	167,1	0,80	5,34				
liquid temp	-15	5	284,2	971	244,6	1,50	5,11	1,29	189,9	0,90	6,84				
Tliq= 55/131	-10	14	356,2	1217	306,6	1,67	5,70	1,44	213,4	1,01	8,61				