

# Technical Data Sheet

Compressor model **GX18TB**  
 Voltage **220-240V 50Hz ~1**  
 Refrigerant **R134a**

## APPLICATION

## COMPRESSOR

## MOTOR

Application	High-Medium Back Pressure	Displacement	18,40 cm <sup>3</sup>	Nominal Power	1/2 hp
Refrigerant	R134a	Diameter	34,93 mm	Voltage/Frequency	220-240V 50Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	19,20 mm	Voltage range	198-255 V
Expansion	Capillar/Valve	Net Weight	15,44 Kg	Type	CSIR
Comp. Cooling	Fan cooled	Oil type	ISO VG 32 ESTER	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	500 cm <sup>3</sup>	Locked Rotor Amps (LRA)	24,00 A
Compatible refriger.	R1234yf			Max. Cont. Current (MCC)	6,60 A
				Main W. resist. at 25°C	3,40 Ω
				Start W. resist. at 25°C	26,00 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	1.430 kCal/h	1.389 W
COP	2,20 W/W	1,90 W/W
EER	1,89 kCal/Wh	1,64 kCal/Wh
Input Power	755 W	732 W
Current	4,60 A	4,50 A

## APPROVALS



## TEST CYCLE CONDITIONS

	ASHRAE HMBP (D)	CECOMAF HMBP (C)
Evaporating temp. (T <sub>e</sub> )	7,2 °C	5,0 °C
Condensing temp. (T <sub>c</sub> )	55,0 °C	55,0 °C
Liquid temp. (T <sub>liq.</sub> )	46,0 °C	55,0 °C
Ambient temp. (T <sub>amb.</sub> )	35,0 °C	32,0 °C
Suction temp. (T <sub>suction</sub> )	35,0 °C	32,0 °C
Voltage/Frequency	220 V 50 Hz	220 V 50 Hz

## ELECTRICAL COMPONENTS

Starting capacitor	64- 77 μF 330 V			
Relay	Option 1			
Reference	2014 170.			
Pick-Up	12,10 A			
Drop-Out	10,30 A			
Protector	Option 1	Option 2		
Reference	MRA38134	T0348		
Current	15,80 A	15,40 A		
Time check	7,5-14 seg	7,5-14 seg		
Disc temp. (Open/Close)	105,00 / 52,00 °C	105,00 / 52,00 °C		

## ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	372	350	3,18	1,24	1,06
40	-20	512	397	3,31	1,50	1,29
40	-15	679	445	3,45	1,78	1,53
40	-10	874	491	3,60	2,07	1,78
40	-5	1.095	538	3,76	2,37	2,04
40	0	1.344	584	3,92	2,68	2,30
40	5	1.620	630	4,09	2,99	2,57
40	7,2	1.750	650	4,17	3,13	2,69
40	10	1.923	675	4,27	3,31	2,85

45	-25	338	347	3,17	1,13	0,97
45	-20	467	400	3,32	1,36	1,17
45	-15	623	453	3,48	1,60	1,37
45	-10	806	506	3,65	1,85	1,59
45	-5	1.016	558	3,83	2,12	1,82
45	0	1.254	611	4,02	2,39	2,05
45	5	1.518	662	4,22	2,67	2,29
45	7,2	1.643	685	4,31	2,79	2,40
45	10	1.810	714	4,43	2,95	2,54

50	-25	304	343	3,16	1,03	0,89
50	-20	421	403	3,33	1,22	1,05
50	-15	566	462	3,51	1,43	1,23
50	-10	738	520	3,70	1,65	1,42
50	-5	937	579	3,90	1,88	1,62
50	0	1.163	637	4,12	2,12	1,83
50	5	1.417	695	4,35	2,37	2,04
50	7,2	1.537	720	4,45	2,48	2,13
50	10	1.697	752	4,59	2,62	2,26

55	-25	270	340	3,15	0,92	0,79
55	-20	376	405	3,33	1,08	0,93
55	-15	509	470	3,54	1,26	1,08
55	-10	670	535	3,75	1,46	1,25
55	-5	858	599	3,98	1,66	1,43
55	0	1.073	663	4,22	1,88	1,62
55	5	1.315	727	4,48	2,10	1,81
55	7,2	1.430	755	4,60	2,20	1,89
55	10	1.584	790	4,75	2,33	2,00

60	-25	236	337	3,14	0,82	0,70
60	-20	331	408	3,34	0,94	0,81
60	-15	453	479	3,56	1,10	0,95
60	-10	602	550	3,80	1,27	1,10
60	-5	779	620	4,06	1,46	1,26
60	0	982	690	4,33	1,66	1,42
60	5	1.213	759	4,62	1,86	1,60
60	7,2	1.323	790	4,75	1,95	1,68
60	10	1.471	829	4,93	2,06	1,78

65	-25	202	333	3,13	0,70	0,61
65	-20	286	411	3,35	0,81	0,70
65	-15	396	487	3,59	0,95	0,81
65	-10	534	564	3,85	1,10	0,95
65	-5	699	640	4,13	1,27	1,09
65	0	892	716	4,44	1,45	1,25
65	5	1.111	792	4,76	1,63	1,40
65	7,2	1.217	825	4,91	1,72	1,47
65	10	1.358	867	5,10	1,82	1,57

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	401	352	3,18	1,14	0,98
40	-20	553	400	3,32	1,38	1,20
40	-15	734	447	3,46	1,64	1,42
40	-10	944	494	3,61	1,91	1,65
40	-5	1.182	541	3,77	2,18	1,89
40	0	1.449	588	3,94	2,47	2,13
40	5	1.744	634	4,11	2,75	2,38
40	7,2	1.883	654	4,19	2,88	2,49
40	10	2.068	680	4,29	3,04	2,63

45	-25	362	348	3,17	1,04	0,90
45	-20	501	402	3,33	1,25	1,08
45	-15	669	456	3,49	1,47	1,27
45	-10	865	509	3,66	1,70	1,47
45	-5	1.090	562	3,84	1,94	1,68
45	0	1.344	614	4,03	2,19	1,89
45	5	1.626	666	4,24	2,44	2,11
45	7,2	1.759	689	4,33	2,55	2,20
45	10	1.936	719	4,45	2,70	2,33

50	-25	324	345	3,16	0,94	0,81
50	-20	450	405	3,33	1,11	0,96
50	-15	604	464	3,52	1,30	1,12
50	-10	787	523	3,71	1,50	1,30
50	-5	998	582	3,92	1,71	1,48
50	0	1.239	641	4,14	1,93	1,67
50	5	1.507	699	4,37	2,16	1,86
50	7,2	1.635	725	4,47	2,26	1,95
50	10	1.805	757	4,61	2,38	2,06

55	-25	286	342	3,15	0,84	0,72
55	-20	398	407	3,34	0,98	0,84
55	-15	539	473	3,54	1,14	0,98
55	-10	709	538	3,76	1,32	1,14
55	-5	907	603	3,99	1,50	1,30
55	0	1.133	667	4,24	1,70	1,47
55	5	1.389	732	4,50	1,90	1,64
55	7,2	1.510	760	4,62	1,99	1,72
55	10	1.673	796	4,78	2,10	1,82

60	-25	247	338	3,15	0,73	0,63
60	-20	346	410	3,35	0,84	0,73
60	-15	474	482	3,57	0,98	0,85
60	-10	630	553	3,81	1,14	0,99
60	-5	815	623	4,07	1,31	1,13
60	0	1.028	694	4,35	1,48	1,28
60	5	1.270	764	4,64	1,66	1,44
60	7,2	1.386	795	4,77	1,74	1,51
60	10	1.541	834	4,95	1,85	1,60

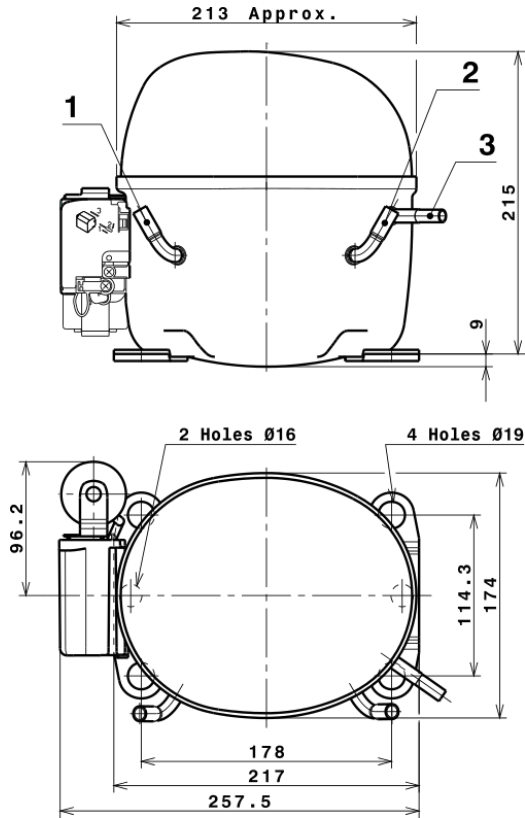
65	-25	209	335	3,14	0,62	0,54
65	-20	295	413	3,36	0,71	0,62
65	-15	409	490	3,60	0,83	0,72
65	-10	552	567	3,86	0,97	0,84
65	-5	723	644	4,15	1,12	0,97
65	0	923	721	4,46	1,28	1,11
65	5	1.152	797	4,78	1,45	1,25
65	7,2	1.262	830	4,93	1,52	1,31
65	10	1.409	873	5,13	1,61	1,39

## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	2,295,5046498451	384,0621384564	3,0415052252	39,040938030717
2	77,7882719762	-0,1599981595	-0,0011441588	1,4590138473417
3	-21,6300258424	5,4700420579	0,0230481927	-0,17946437528525
4	0,5625582919	-0,0015453688	0,0003354237	0,016322879465159
5	-0,5566633547	0,2462067256	0,0009976324	-0,0030684753068318

Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$
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## COMPRESSOR DIMENSIONS

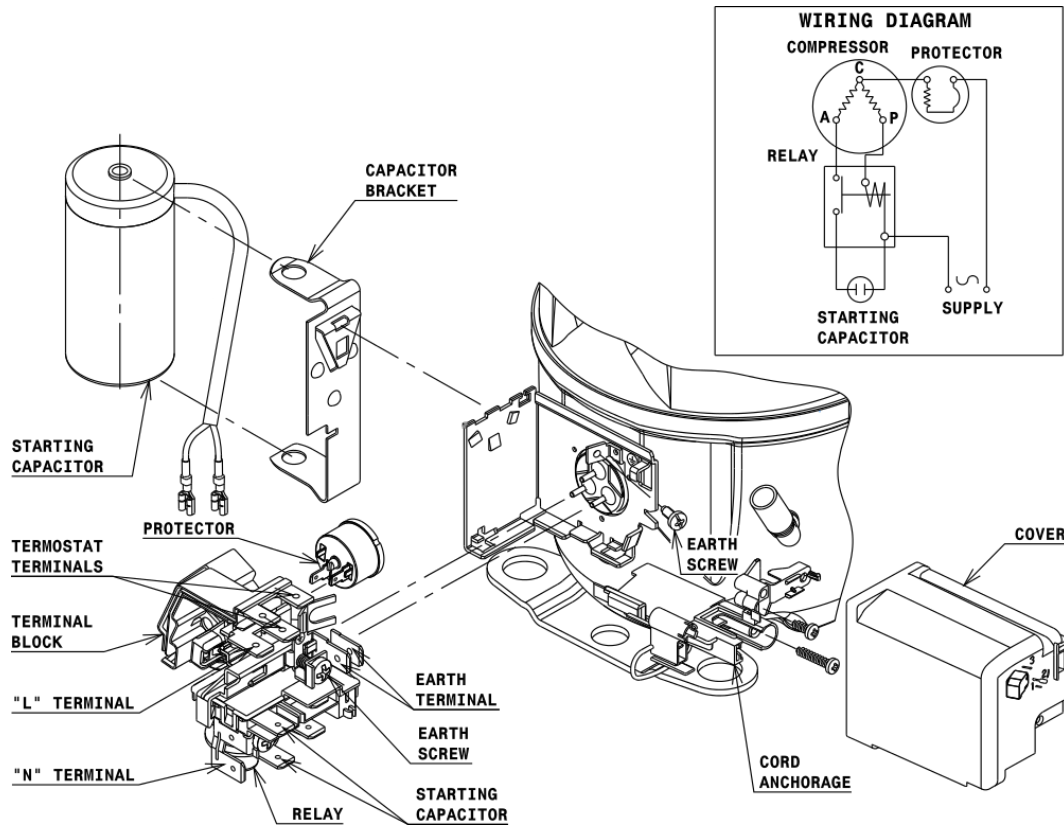


## DESIGNATION INTERNAL DIAM.

DESIGNATION	INTERNAL DIAM.
1 Service	8,1 mm
2 Suction	8,1 mm
3 Discharge	6,5 mm

## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### CSIR CONNECTION (X range)



# Technical Data Sheet

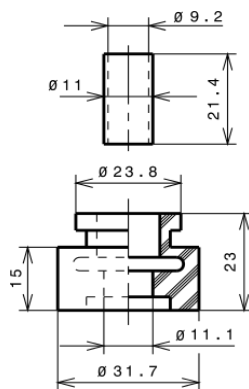
## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

### STANDARD

Ø19 holes (178x114.3 net)



## SOA

SOA R134a HMBP

