

# Technical Data Sheet

Compressor model **GX23TB**  
 Voltage **220-240V 50Hz ~1**  
 Refrigerant **R134a**

## APPLICATION

## COMPRESSOR

## MOTOR

Application	High-Medium Back Pressure	Displacement	23,20 cm <sup>3</sup>	Nominal Power	5/8 hp
Refrigerant	R134a	Diameter	34,93 mm	Voltage/Frequency	220-240V 50Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	24,20 mm	Voltage range	187-255 V
Expansion	Capillar/Valve	Net Weight	16,33 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)	29,00 A
Compatible refriger.	R1234yf			Max. Cont. Current (MCC)	8,50 A
				Main W. resist. at 25°C	2,70 Ω
				Start W. resist. at 25°C	15,50 Ω

## NOMINAL PERFORMANCE

## APPROVALS

	ASHRAE	CECOMAF
Cooling Capacity	1.780 kCal/h	1.729 W
COP	2,18 W/W	1,88 W/W
EER	1,87 kCal/Wh	1,63 kCal/Wh
Input Power	950 W	919 W
Current	5,80 A	5,67 A

## 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

	Option 1	Option 2		
Starting capacitor	72- 88 μF 330 V			
Relay	Option 1	Option 2		
Reference	2014 180.	QLZ-16.7A		
Pick-Up	16,70 A	16,70 A		
Drop-Out	14,00 A	14,00 A		
Protector	Option 1	Option 2		
Reference	MRA38152	T0260		
Current	27,50 A	22,00 A		
Time check	2,8-5,2 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	470	440	3,90	1,24	1,07
40	-20	636	493	4,08	1,50	1,29
40	-15	836	548	4,27	1,77	1,52
40	-10	1.071	605	4,46	2,06	1,77
40	-5	1.340	663	4,67	2,35	2,02
40	0	1.643	722	4,89	2,65	2,28
40	5	1.981	783	5,13	2,94	2,53
40	7,2	2.140	810	5,23	3,07	2,64
40	10	2.352	845	5,37	3,24	2,78

45	-25	429	440	3,90	1,13	0,98
45	-20	583	501	4,10	1,35	1,16
45	-15	771	563	4,32	1,59	1,37
45	-10	993	627	4,54	1,84	1,59
45	-5	1.250	692	4,78	2,10	1,81
45	0	1.541	758	5,03	2,36	2,03
45	5	1.866	826	5,30	2,63	2,26
45	7,2	2.020	857	5,42	2,74	2,36
45	10	2.226	896	5,58	2,89	2,48

50	-25	389	440	3,90	1,03	0,88
50	-20	530	508	4,13	1,21	1,04
50	-15	706	577	4,37	1,42	1,22
50	-10	916	648	4,62	1,64	1,41
50	-5	1.160	721	4,89	1,87	1,61
50	0	1.439	794	5,17	2,11	1,81
50	5	1.751	870	5,47	2,34	2,01
50	7,2	1.900	903	5,61	2,45	2,10
50	10	2.099	947	5,79	2,58	2,22

55	-25	348	440	3,90	0,92	0,79
55	-20	477	515	4,15	1,08	0,93
55	-15	640	592	4,42	1,26	1,08
55	-10	838	670	4,70	1,45	1,25
55	-5	1.070	750	5,00	1,66	1,43
55	0	1.336	831	5,31	1,87	1,61
55	5	1.637	913	5,65	2,08	1,79
55	7,2	1.780	950	5,80	2,18	1,87
55	10	1.972	997	6,00	2,30	1,98

60	-25	307	440	3,90	0,81	0,70
60	-20	424	522	4,18	0,94	0,81
60	-15	575	606	4,47	1,10	0,95
60	-10	760	692	4,78	1,28	1,10
60	-5	980	779	5,11	1,46	1,26
60	0	1.234	867	5,46	1,66	1,42
60	5	1.522	957	5,83	1,85	1,59
60	7,2	1.660	997	6,00	1,94	1,67
60	10	1.845	1.048	6,22	2,05	1,76

65	-25	267	440	3,90	0,70	0,61
65	-20	371	530	4,20	0,81	0,70
65	-15	510	621	4,52	0,95	0,82
65	-10	683	713	4,86	1,11	0,96
65	-5	890	808	5,22	1,28	1,10
65	0	1.132	903	5,61	1,46	1,25
65	5	1.408	1.000	6,01	1,64	1,41
65	7,2	1.540	1.043	6,20	1,72	1,48
65	10	1.718	1.099	6,44	1,82	1,56

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	506	442	3,91	1,14	0,99
40	-20	687	496	4,09	1,39	1,20
40	-15	904	551	4,28	1,64	1,42
40	-10	1.157	608	4,48	1,90	1,64
40	-5	1.446	666	4,69	2,17	1,87
40	0	1.771	726	4,91	2,44	2,11
40	5	2.133	788	5,15	2,71	2,34
40	7,2	2.303	815	5,25	2,83	2,44
40	10	2.530	851	5,39	2,97	2,57

45	-25	460	442	3,91	1,04	0,90
45	-20	626	503	4,11	1,24	1,08
45	-15	829	566	4,33	1,46	1,26
45	-10	1.067	630	4,55	1,69	1,46
45	-5	1.341	696	4,79	1,93	1,67
45	0	1.652	763	5,05	2,17	1,87
45	5	1.998	831	5,32	2,40	2,08
45	7,2	2.162	862	5,44	2,51	2,17
45	10	2.381	902	5,60	2,64	2,28

50	-25	414	442	3,91	0,94	0,81
50	-20	566	511	4,14	1,11	0,96
50	-15	753	581	4,38	1,30	1,12
50	-10	976	652	4,63	1,50	1,29
50	-5	1.236	725	4,90	1,71	1,47
50	0	1.532	799	5,19	1,92	1,66
50	5	1.864	875	5,49	2,13	1,84
50	7,2	2.021	909	5,63	2,22	1,92
50	10	2.231	953	5,81	2,34	2,02

55	-25	368	442	3,91	0,83	0,72
55	-20	505	518	4,16	0,97	0,84
55	-15	677	595	4,43	1,14	0,98
55	-10	886	674	4,71	1,32	1,14
55	-5	1.131	754	5,02	1,50	1,30
55	0	1.412	836	5,33	1,69	1,46
55	5	1.729	919	5,67	1,88	1,63
55	7,2	1.880	956	5,83	1,97	1,70
55	10	2.082	1.004	6,03	2,07	1,79

60	-25	322	442	3,91	0,73	0,63
60	-20	444	525	4,19	0,85	0,73
60	-15	602	610	4,48	0,99	0,85
60	-10	796	696	4,80	1,14	0,99
60	-5	1.026	783	5,13	1,31	1,13
60	0	1.292	872	5,48	1,48	1,28
60	5	1.595	963	5,85	1,66	1,43
60	7,2	1.739	1.003	6,02	1,73	1,50
60	10	1.933	1.055	6,25	1,83	1,58

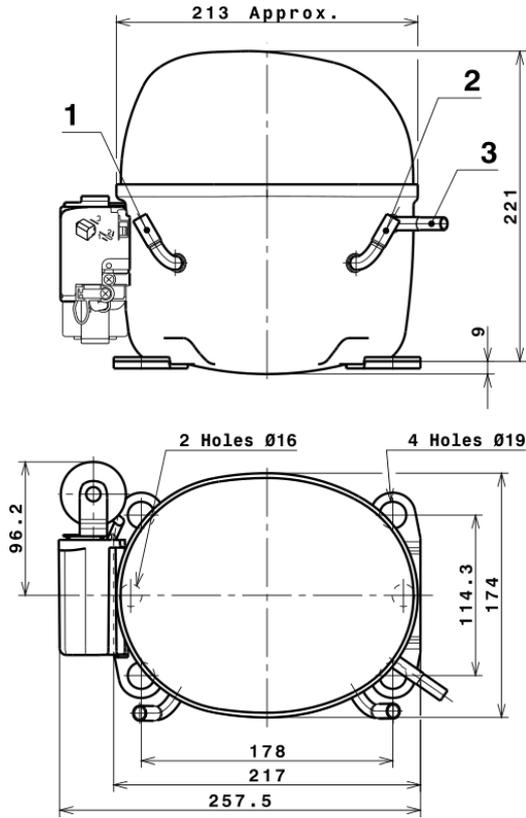
65	-25	276	442	3,91	0,62	0,54
65	-20	383	533	4,21	0,72	0,62
65	-15	526	624	4,53	0,84	0,73
65	-10	706	718	4,88	0,98	0,85
65	-5	921	812	5,24	1,13	0,98
65	0	1.172	909	5,63	1,29	1,11
65	5	1.460	1.007	6,04	1,45	1,25
65	7,2	1.598	1.050	6,23	1,52	1,31
65	10	1.784	1.106	6,47	1,61	1,39

## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	2.738,4634550676	445,2914692114	3,7306579321	45,860752315079
2	92,5369166424	0,6411023956	0,0010373492	1,7223260740785
3	-24,7434752896	7,4976506030	0,0307858985	-0,17314079725378
4	0,7096321571	0,0366708889	0,0003764945	0,020552546497028
5	-0,6187960593	0,2999060241	0,0012314359	-0,0022156660758304

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

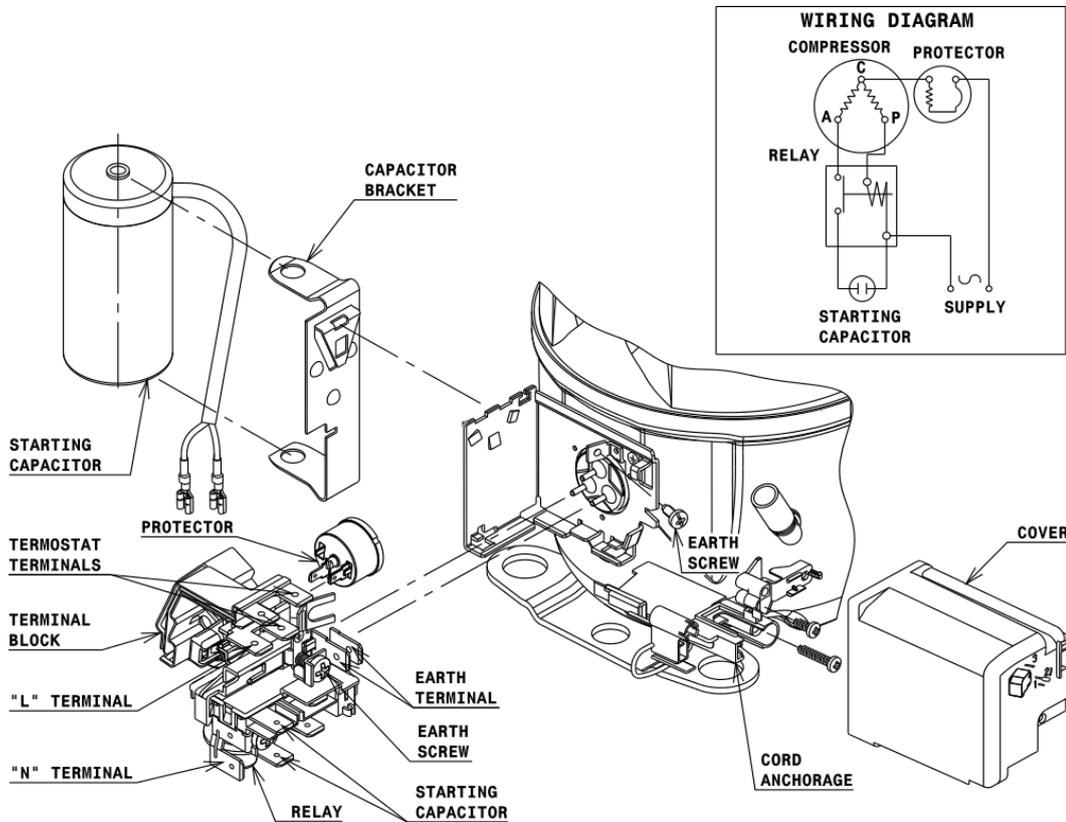


## DESIGNATION INTERNAL DIAM.

DESIGNATION	INTERNAL DIAM.
1 Service	9,7 mm
2 Suction	9,7 mm
3 Discharge	6,5 mm

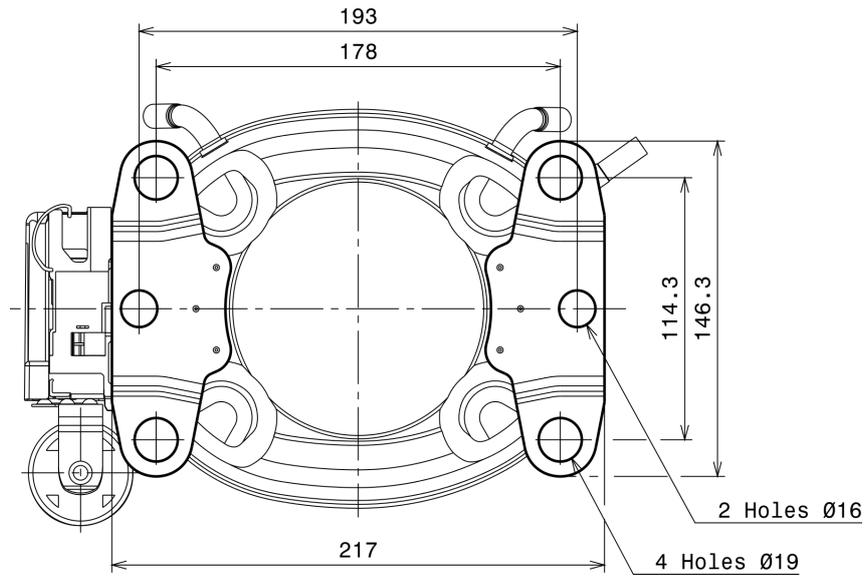
## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### CSIR CONNECTION (X range)



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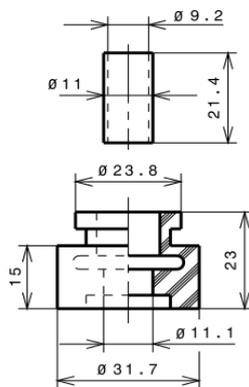
## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

### STANDARD

Ø19 holes (178x114.3 net)



## SOA

SOA R134a HMBP

