

# Technical Data Sheet

Compressor model **GX21FB**  
 Voltage **220-240V 50Hz ~1**  
 Refrigerant **R134a**

## APPLICATION

Application Low Back Pressure  
 Refrigerant R134a  
 Evaporating Temp. -35,0 °C to -10,0 °C  
 Expansion Capillar/Valve  
 Comp. Cooling Fan cooled  
 Max. ambient temp. 43,0 °C  
 Compatible refriger. R1234yf

## COMPRESSOR

Displacement 20,72 cm<sup>3</sup>  
 Diameter 34,93 mm  
 Stroke 21,62 mm  
 Net Weight 15,75 Kg  
 Oil type ISO VG 32 ESTER  
 Oil charge 500 cm<sup>3</sup>

## MOTOR

Nominal Power 2/3 hp  
 Voltage/Frequency 220-240V 50Hz  
 Voltage range 187-264 V  
 Type CSIR  
 Phase number 1 PH  
 Locked Rotor Amps (LRA) 17,50 A  
 Max. Cont. Current (MCC) 4,60 A  
 Main W. resist. at 25°C 3,45 Ω  
 Start W. resist. at 25°C 19,90 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	415 kCal/h	351 W
COP	1,20 W/W	0,93 W/W
EER	1,03 kCal/Wh	0,80 kCal/Wh
Input Power	402 W	379 W
Current	2,90 A	2,82 A

## APPROVALS



## TEST CYCLE CONDITIONS

	ASHRAE LBP (B)	CECOMAF LBP (A)
Evaporating temp. (T <sub>e</sub> )	-23,3 °C	-25,0 °C
Condensing temp. (T <sub>c</sub> )	55,0 °C	55,0 °C
Liquid temp. (T <sub>liq.</sub> )	32,0 °C	55,0 °C
Ambient temp. (T <sub>amb.</sub> )	32,0 °C	32,0 °C
Suction temp. (T <sub>suction</sub> )	32,0 °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 158.			
Pick-Up	9,05 A			
Drop-Out	7,70 A			
Protector	Option 1	Option 2		
Reference	MRA38133	T0267		
Current	11,50 A	11,00 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	-35	210	268	2,47	0,91	0,78
40	-30	318	324	2,63	1,14	0,98
40	-25	444	380	2,82	1,36	1,17
40	-23,3	491	399	2,89	1,43	1,23
40	-20	588	437	3,03	1,57	1,35
40	-15	750	494	3,27	1,77	1,52
40	-10	930	552	3,53	1,96	1,68

45	-35	193	259	2,45	0,87	0,75
45	-30	298	319	2,62	1,08	0,93
45	-25	420	379	2,82	1,29	1,11
45	-23,3	465	400	2,89	1,35	1,16
45	-20	560	440	3,05	1,48	1,27
45	-15	719	502	3,30	1,67	1,43
45	-10	895	564	3,58	1,85	1,59

50	-35	177	251	2,42	0,82	0,70
50	-30	277	314	2,60	1,03	0,88
50	-25	396	379	2,82	1,21	1,04
50	-23,3	440	401	2,90	1,28	1,10
50	-20	532	444	3,06	1,39	1,20
50	-15	687	510	3,33	1,57	1,35
50	-10	860	576	3,64	1,74	1,49

55	-35	160	242	2,40	0,77	0,66
55	-30	257	310	2,59	0,96	0,83
55	-25	372	379	2,82	1,14	0,98
55	-23,3	415	402	2,90	1,20	1,03
55	-20	505	448	3,07	1,31	1,13
55	-15	656	518	3,37	1,47	1,27
55	-10	825	588	3,70	1,63	1,40

60	-35	143	233	2,38	0,71	0,61
60	-30	237	305	2,58	0,90	0,77
60	-25	348	378	2,81	1,07	0,92
60	-23,3	390	403	2,90	1,12	0,97
60	-20	477	451	3,09	1,23	1,06
60	-15	625	525	3,40	1,38	1,19
60	-10	790	600	3,76	1,53	1,32

65	-35	127	225	2,36	0,66	0,56
65	-30	216	301	2,56	0,84	0,72
65	-25	324	378	2,81	1,00	0,86
65	-23,3	365	404	2,91	1,05	0,90
65	-20	449	455	3,10	1,15	0,99
65	-15	593	533	3,44	1,29	1,11
65	-10	755	612	3,82	1,43	1,23

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	229	268	2,47	0,85	0,74
40	-30	352	324	2,63	1,09	0,94
40	-25	492	380	2,82	1,29	1,12
40	-23,3	543	399	2,89	1,36	1,18
40	-20	648	437	3,03	1,49	1,28
40	-15	822	494	3,27	1,66	1,44
40	-10	1.012	552	3,53	1,83	1,58

45	-35	203	259	2,45	0,78	0,68
45	-30	315	319	2,62	0,99	0,85
45	-25	445	379	2,82	1,17	1,01
45	-23,3	493	400	2,89	1,23	1,06
45	-20	591	440	3,05	1,34	1,16
45	-15	754	502	3,30	1,50	1,30
45	-10	934	564	3,58	1,66	1,43

50	-35	177	251	2,42	0,71	0,61
50	-30	279	314	2,60	0,89	0,77
50	-25	398	379	2,82	1,05	0,91
50	-23,3	442	401	2,90	1,10	0,95
50	-20	534	444	3,06	1,20	1,04
50	-15	686	510	3,33	1,35	1,16
50	-10	856	576	3,64	1,49	1,28

55	-35	151	242	2,40	0,63	0,54
55	-30	243	310	2,59	0,78	0,68
55	-25	351	379	2,82	0,93	0,80
55	-23,3	392	402	2,90	0,98	0,84
55	-20	477	448	3,07	1,06	0,92
55	-15	619	518	3,37	1,20	1,03
55	-10	778	588	3,70	1,32	1,14

60	-35	125	233	2,38	0,54	0,46
60	-30	207	305	2,58	0,68	0,58
60	-25	305	378	2,81	0,81	0,70
60	-23,3	342	403	2,90	0,85	0,73
60	-20	419	451	3,09	0,93	0,80
60	-15	551	525	3,40	1,05	0,91
60	-10	700	600	3,76	1,17	1,01

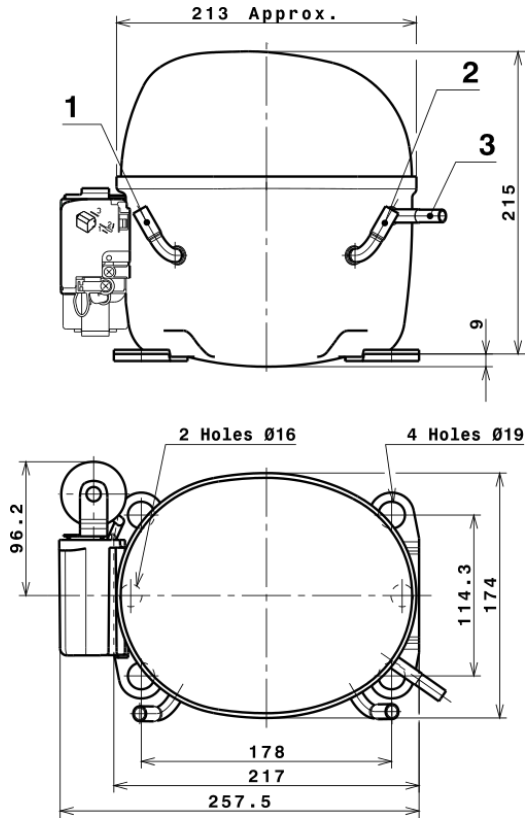
65	-35	100	225	2,36	0,44	0,38
65	-30	170	301	2,56	0,57	0,49
65	-25	258	378	2,81	0,68	0,59
65	-23,3	291	404	2,91	0,72	0,62
65	-20	362	455	3,10	0,80	0,69
65	-15	483	533	3,44	0,91	0,78
65	-10	621	612	3,82	1,02	0,88

## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	2.227,9299016321	520,9922634383	3,5383185043	40,323169998371
2	62,8806709556	5,5573236058	0,0505065663	1,2404349026781
3	-20,1873707359	4,1485331709	0,0187866434	-0,20240485618424
4	0,3300971003	0,0147763466	0,0007400262	0,0090871390219925
5	-0,4291189902	0,1691182318	0,0006736948	-0,0035523731412385

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

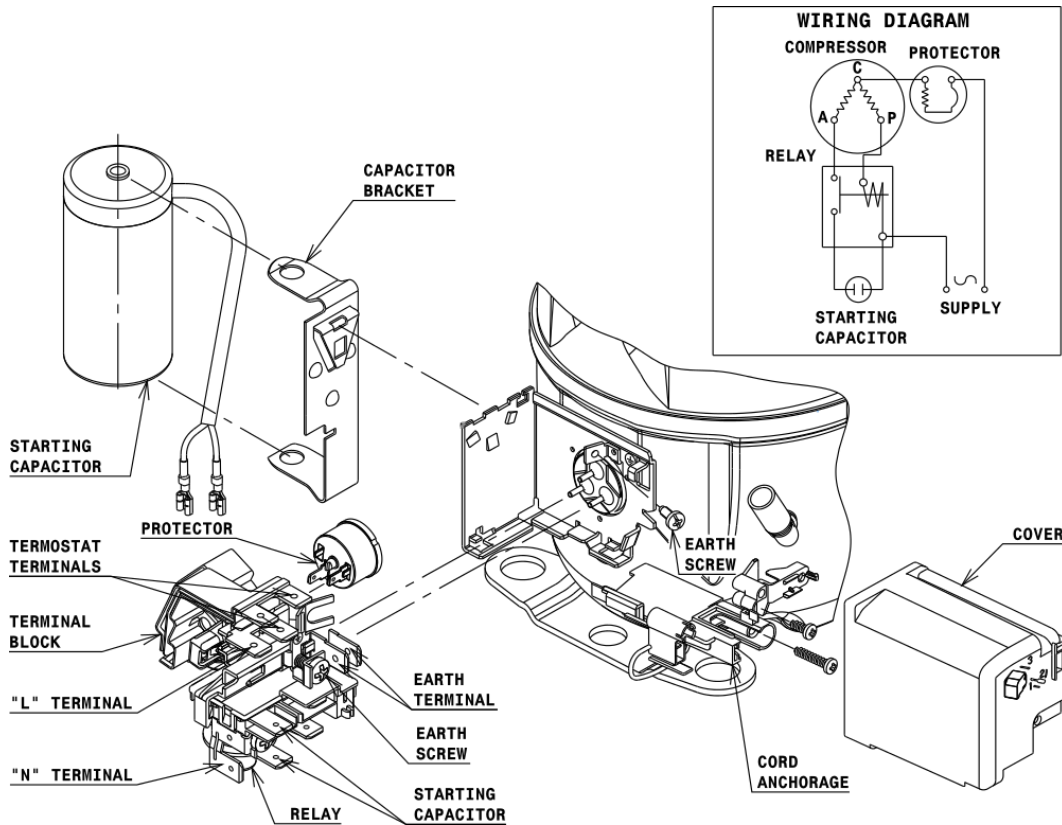


## DESIGNATION INTERNAL DIAM.

1	Service	9,7 mm
2	Suction	9,7 mm
3	Discharge	6,5 mm

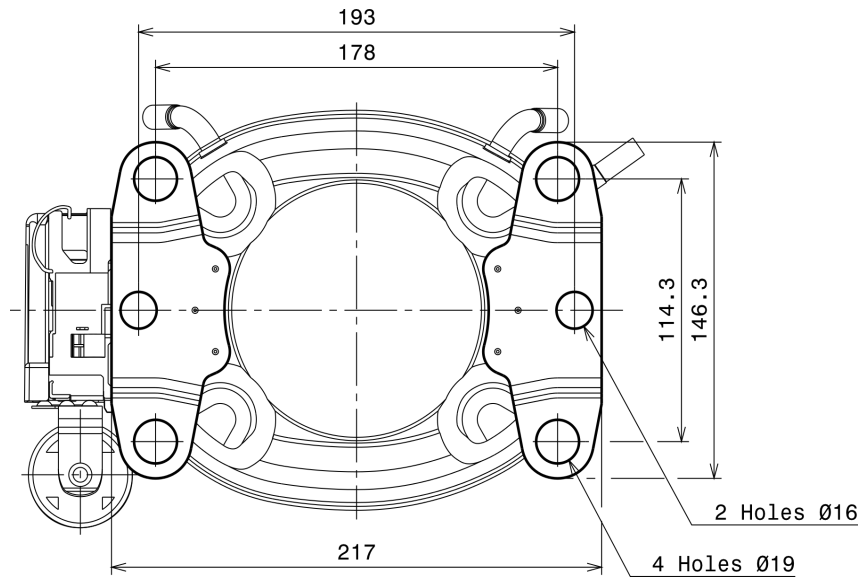
## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### CSIR CONNECTION (X range)



# Technical Data Sheet

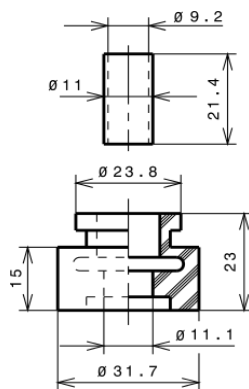
## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

### STANDARD

$\varnothing 19$  holes (178x114.3 net)



## SOA

SOA R134a LBP

