

# Technical Data Sheet

ENGINEERING  
TOMORROW



Compressor model **GP14FB**  
Voltage **220-240V 50Hz ~1**  
Refrigerant **R134a**

## APPLICATION

## COMPRESSOR

## MOTOR

Application	Low Back Pressure	Displacement	14,17 cm <sup>3</sup>	Nominal Power	3/8 hp
Refrigerant	R134a	Diameter	31,19 mm	Voltage/Frequency	220-240V 50Hz
Evaporating Temp.	-35,0 °C to -10,0 °C	Stroke	18,54 mm	Voltage range	187-255 V
Expansion	Capillar/Valve	Net Weight	10,36 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	470 cm <sup>3</sup>	Locked Rotor Amps (LRA)	12,50 A
Compatible refriger.	R1234yf			Max. Cont. Current (MCC)	2,50 A
				Main W. resist. at 25°C	9,93 Ω
				Start W. resist. at 25°C	15,17 Ω

## NOMINAL PERFORMANCE

## APPROVALS

	ASHRAE	CECOMAF
Cooling Capacity	269 kCal/h	228 W
COP	1,16 W/W	0,90 W/W
EER	1,00 kCal/Wh	0,77 kCal/Wh
Input Power	270 W	254 W
Current	1,80 A	1,75 A



## 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	72- 88 μF 330 V			
Relay	Option 1			
Reference	2014 135.			
Pick-Up	5,80 A			
Drop-Out	4,95 A			
Protector	Option 1			
Reference	T0057			
Current	8,50 A			
Time check	7,5-14 seg			
Disc temp. (Open/Close)	105,00 / 61,00 °C			

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## ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	126	174	1,52	0,84	0,72
40	-30	191	209	1,61	1,06	0,91
40	-25	269	247	1,73	1,26	1,09
40	-23,3	298	261	1,77	1,33	1,14
40	-20	359	288	1,86	1,45	1,25
40	-15	462	333	2,02	1,62	1,39
40	-10	578	380	2,22	1,77	1,52

45	-35	119	171	1,51	0,81	0,70
45	-30	183	209	1,61	1,02	0,88
45	-25	259	249	1,73	1,21	1,04
45	-23,3	288	264	1,78	1,27	1,09
45	-20	349	293	1,88	1,38	1,19
45	-15	451	340	2,05	1,54	1,33
45	-10	565	390	2,26	1,69	1,45

50	-35	112	168	1,51	0,78	0,67
50	-30	175	208	1,61	0,98	0,84
50	-25	250	251	1,74	1,16	0,99
50	-23,3	279	267	1,79	1,21	1,04
50	-20	338	298	1,90	1,32	1,14
50	-15	439	347	2,08	1,47	1,26
50	-10	553	400	2,31	1,61	1,38

55	-35	105	165	1,50	0,74	0,64
55	-30	167	208	1,61	0,93	0,80
55	-25	241	254	1,75	1,10	0,95
55	-23,3	269	270	1,80	1,16	1,00
55	-20	328	303	1,91	1,26	1,08
55	-15	428	355	2,11	1,40	1,21
55	-10	540	410	2,35	1,53	1,32

60	-35	98	162	1,49	0,70	0,60
60	-30	158	207	1,61	0,89	0,76
60	-25	232	256	1,75	1,05	0,91
60	-23,3	259	273	1,81	1,10	0,95
60	-20	317	307	1,93	1,20	1,03
60	-15	416	362	2,14	1,34	1,15
60	-10	527	420	2,40	1,46	1,26

65	-35	91	159	1,49	0,67	0,57
65	-30	150	207	1,61	0,84	0,73
65	-25	222	258	1,76	1,00	0,86
65	-23,3	250	276	1,82	1,05	0,90
65	-20	307	312	1,95	1,14	0,98
65	-15	404	370	2,17	1,27	1,09
65	-10	515	430	2,44	1,39	1,20

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	137	174	1,52	0,79	0,68
40	-30	212	209	1,61	1,01	0,88
40	-25	298	247	1,73	1,21	1,04
40	-23,3	330	261	1,77	1,27	1,10
40	-20	397	288	1,86	1,38	1,19
40	-15	507	333	2,02	1,52	1,32
40	-10	629	380	2,22	1,66	1,43

45	-35	125	171	1,51	0,73	0,63
45	-30	194	209	1,61	0,93	0,80
45	-25	275	249	1,73	1,10	0,95
45	-23,3	305	264	1,78	1,16	1,00
45	-20	368	293	1,88	1,25	1,08
45	-15	472	340	2,05	1,39	1,20
45	-10	589	390	2,26	1,51	1,31

50	-35	112	168	1,51	0,67	0,58
50	-30	176	208	1,61	0,84	0,73
50	-25	251	251	1,74	1,00	0,86
50	-23,3	280	267	1,79	1,05	0,90
50	-20	339	298	1,90	1,14	0,98
50	-15	438	347	2,08	1,26	1,09
50	-10	549	400	2,31	1,37	1,19

55	-35	99	165	1,50	0,60	0,52
55	-30	157	208	1,61	0,76	0,65
55	-25	228	254	1,75	0,90	0,77
55	-23,3	254	270	1,80	0,94	0,81
55	-20	310	303	1,91	1,02	0,88
55	-15	403	355	2,11	1,14	0,98
55	-10	509	410	2,35	1,24	1,07

60	-35	87	162	1,49	0,53	0,46
60	-30	139	207	1,61	0,67	0,58
60	-25	204	256	1,75	0,80	0,69
60	-23,3	229	273	1,81	0,84	0,72
60	-20	280	307	1,93	0,91	0,79
60	-15	369	362	2,14	1,02	0,88
60	-10	469	420	2,40	1,12	0,96

65	-35	74	159	1,49	0,47	0,40
65	-30	121	207	1,61	0,59	0,51
65	-25	180	258	1,76	0,70	0,60
65	-23,3	203	276	1,82	0,74	0,64
65	-20	251	312	1,95	0,80	0,70
65	-15	334	370	2,17	0,90	0,78
65	-10	429	430	2,44	1,00	0,86

## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.313,3062546886	371,8643004073	2,2400062925	23,183650977352
2	38,8948176554	7,1189994367	0,0417383174	0,76352824874081
3	-10,4748620639	3,1120700126	0,0134840162	-0,071493264201953
4	0,2325012066	0,0649455057	0,0006633742	0,0063688099718568
5	-0,2264579581	0,1064277635	0,0004284969	-0,0011056208537831

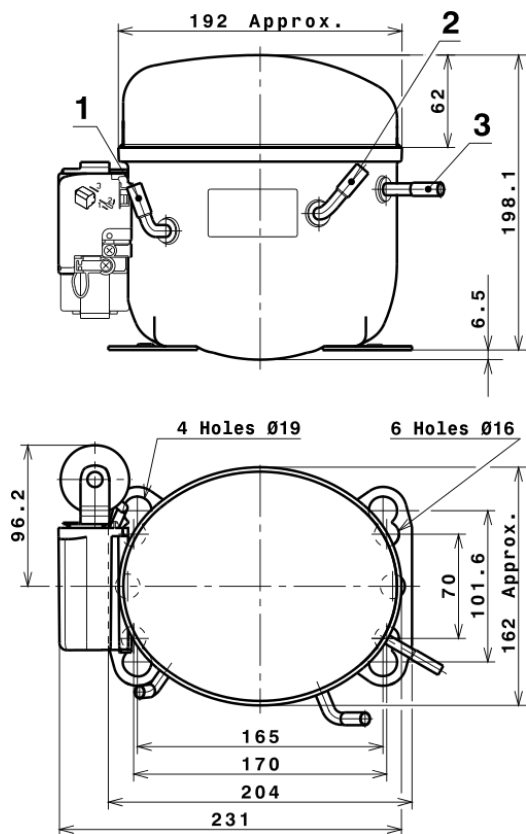
Equation

$$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$$

# Technical Data Sheet



## COMPRESSOR DIMENSIONS

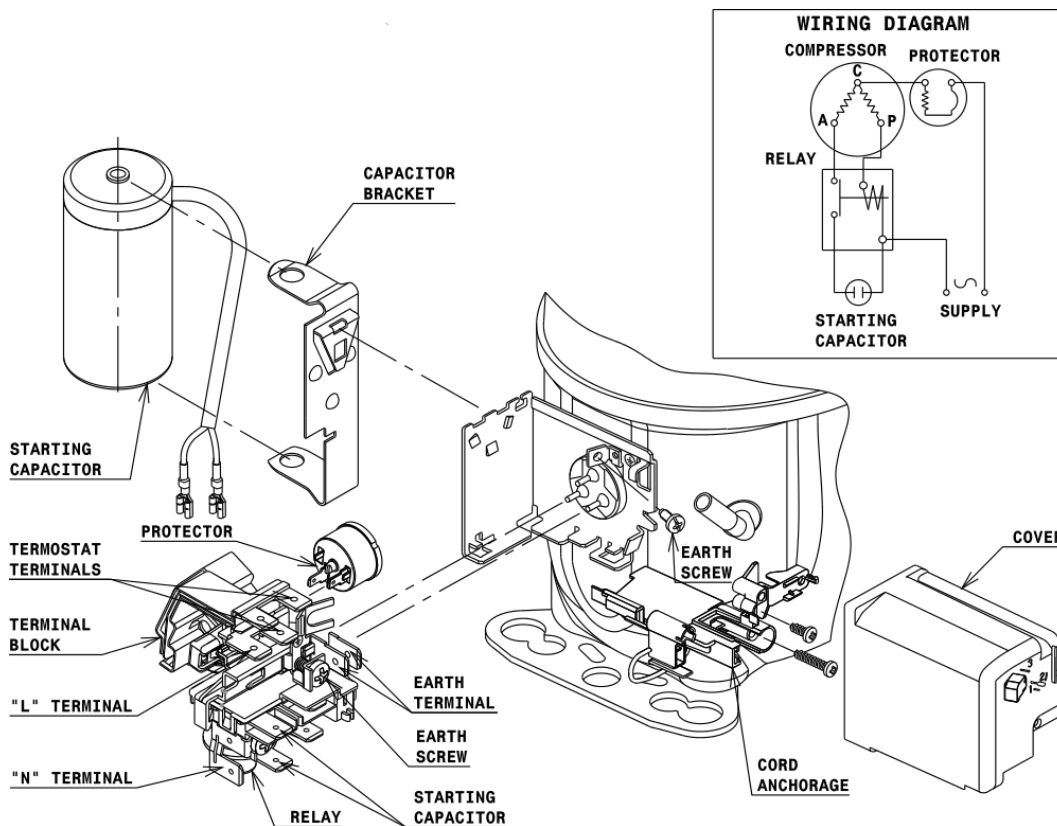


## DESIGNATION INTERNAL DIAM.

1	Suction	8,1 mm
2	Service	8,1 mm
3	Discharge	6,5 mm

## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### CSIR CONNECTION (L, P ranges)

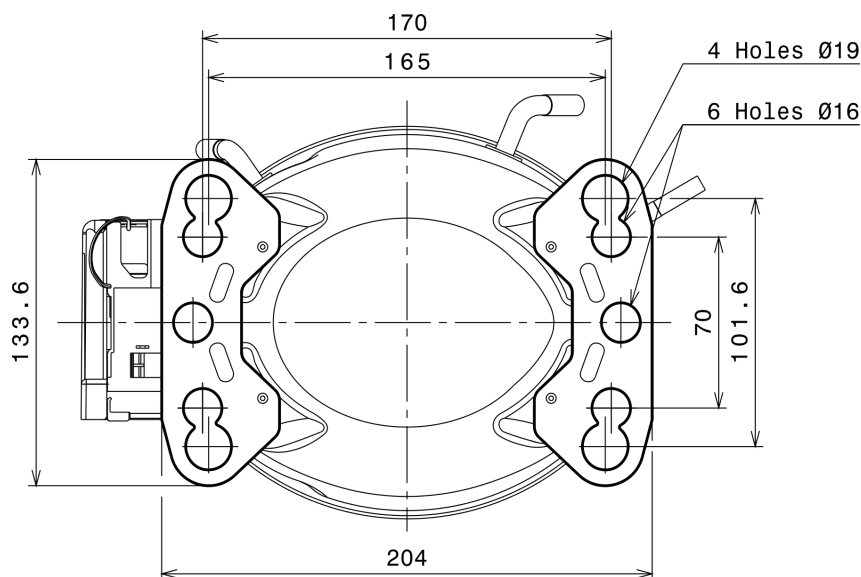


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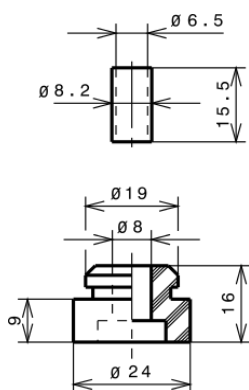
## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

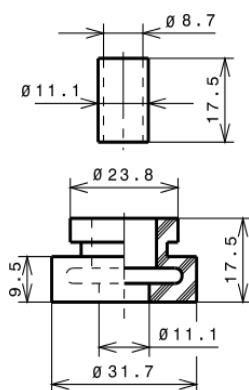
### STANDARD

Ø16 holes (170x70 net)



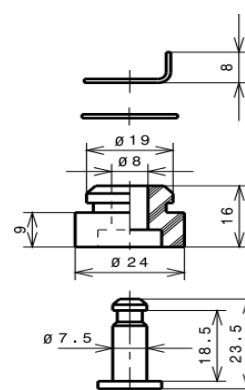
### AMERICAN FEET

Ø19 holes (165x101.6 net)



### SNAP-ON

Ø16 holes (170x70 net)



## SOA

SOA R134a LBP

