Technical Data Sheet

ENGINEERING TOMORROW

Compressor model **GP14YB**

Voltage **220-240V 50Hz ~1**

Refrigerant **R134a**

APPLICATION

Application	
Refrigerant	R134a
Evaporating Temp.	0,0 ºC to 25,0 ºC
Expansion	Capillar
Comp. Cooling	Static
Max. ambient temp.	43,0 ºC
Compatible refriger.	R1234yf

COMPRESSOR

Displacement	14,17 cm³
Diameter	31,19 mm
Stroke	18,54 mm
Net Weight	12,68 Kg
Oil type	ISO VG 32 ESTER
Oil charge	320 cm³

MOTOR

Nominal Power	3/8 hp
Voltage/Frequency	220-240V 50Hz
Voltage range	187-264 V
Type	RSCR
Phase number	1 PH
Locked Rotor Amps (LRA)	22,50 A
Max. Cont. Current (MCC)	5,00 A
Main W. resist. at 25ºC	3,55 Ω
Start W. resist. at 25ºC	7,00 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	1.597 kCal/h	1.934 W
COP	2,40 W/W	5,58 W/W
EER	2,06 kCal/Wh	4,82 kCal/Wh
Input Power	774 W	347 W
Current	3,75 A	1,88 A

APPROVALS

TEST CYCLE CONDITIONS

	ASHRAE	CECOMAF
Evaporating temp. (T_e)	0,0 ºC	0,0 ºC
Condensing temp. (T_c)	0,0 ºC	0,0 ºC
Liquid temp. ($T_{liq.}$)	0,0 ºC	0,0 ºC
Ambient temp. ($T_{amb.}$)	0,0 ºC	0,0 ºC
Suction temp. ($T_{suction}$)	0,0 ºC	0,0 ºC
Voltage/Frequency	220 V 50 Hz	220 V 50 Hz

ELECTRICAL COMPONENTS

Run capacitor	16 µF 420 V			
Relay	Option 1			
Reference	PTC K100			
Voltage	200-240 V			
Resistance	14.00 Ω			
Protector	Option 1	Option 2		
Reference	4TM774RFBYY	T0315		
Current	19,70 A	22,00 A		
Time check	5-15 seg	7,5-14 seg		
Disc temp. (Open/Close)	130,00 / 61,00 ºC	125,00 / 62,00 ºC		

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ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	0	959	446	2,29	2,50	2,15
40	5	1.220	474	2,41	2,99	2,57
40	10	1.508	499	2,51	3,51	3,02
40	15	1.821	521	2,61	4,07	3,50
40	20	2.161	539	2,68	4,66	4,01
40	25	2.527	554	2,75	5,31	4,56
45	0	894	459	2,34	2,27	1,95
45	5	1.138	492	2,48	2,69	2,31
45	10	1.407	522	2,61	3,14	2,70
45	15	1.703	548	2,72	3,61	3,11
45	20	2.024	571	2,82	4,12	3,54
45	25	2.372	591	2,91	4,67	4,02
50	0	830	471	2,39	2,05	1,76
50	5	1.055	509	2,56	2,41	2,07
50	10	1.306	544	2,71	2,79	2,40
50	15	1.584	575	2,84	3,20	2,75
50	20	1.887	603	2,97	3,64	3,13
50	25	2.217	627	3,07	4,11	3,53
55	0	765	484	2,45	1,84	1,58
55	5	972	527	2,63	2,15	1,85
55	10	1.205	566	2,80	2,48	2,13
55	15	1.465	602	2,96	2,83	2,43
55	20	1.750	635	3,11	3,21	2,76
55	25	2.062	664	3,24	3,61	3,11
60	0	700	497	2,50	1,64	1,41
60	5	889	544	2,71	1,90	1,63
60	10	1.105	588	2,90	2,18	1,88
60	15	1.346	629	3,08	2,49	2,14
60	20	1.613	667	3,25	2,81	2,42
60	25	1.907	701	3,41	3,17	2,72
65	0	636	509	2,56	1,45	1,25
65	5	807	562	2,78	1,67	1,44
65	10	1.004	611	3,00	1,91	1,64
65	15	1.227	656	3,21	2,17	1,87
65	20	1.476	699	3,40	2,46	2,11
65	25	1.752	737	3,58	2,76	2,38
70	0	571	522	2,61	1,27	1,09
70	5	724	579	2,86	1,45	1,25
70	10	903	633	3,10	1,66	1,43
70	15	1.108	683	3,33	1,89	1,62
70	20	1.340	730	3,55	2,13	1,83
70	25	1.597	774	3,75	2,40	2,06
75	0	506	535	2,66	1,10	0,95
75	5	641	597	2,94	1,25	1,07
75	10	802	655	3,20	1,42	1,22
75	15	989	710	3,45	1,62	1,39
75	20	1.203	762	3,69	1,83	1,58
75	25	1.442	811	3,92	2,07	1,78

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	0	1.115	449	2,30	2,49	2,15
40	5	1.442	477	2,42	3,02	2,61
40	10	1.790	503	2,53	3,56	3,08
40	15	2.159	525	2,62	4,12	3,56
40	20	2.550	543	2,70	4,69	4,06
40	25	2.962	559	2,77	5,30	4,58
45	0	1.013	461	2,35	2,20	1,90
45	5	1.307	495	2,49	2,64	2,28
45	10	1.623	525	2,62	3,09	2,67
45	15	1.960	552	2,74	3,55	3,07
45	20	2.319	575	2,84	4,03	3,48
45	25	2.699	596	2,93	4,53	3,92
50	0	911	474	2,40	1,92	1,66
50	5	1.173	512	2,57	2,29	1,98
50	10	1.457	547	2,72	2,66	2,30
50	15	1.762	579	2,86	3,04	2,63
50	20	2.088	608	2,99	3,44	2,97
50	25	2.436	633	3,10	3,85	3,33
55	0	808	487	2,46	1,66	1,43
55	5	1.038	530	2,64	1,96	1,69
55	10	1.290	570	2,82	2,26	1,96
55	15	1.563	606	2,98	2,58	2,23
55	20	1.857	640	3,13	2,90	2,51
55	25	2.173	670	3,27	3,25	2,80
60	0	706	500	2,51	1,41	1,22
60	5	904	548	2,72	1,65	1,43
60	10	1.123	592	2,92	1,90	1,64
60	15	1.364	634	3,10	2,15	1,86
60	20	1.626	672	3,28	2,42	2,09
60	25	1.909	707	3,44	2,70	2,34
65	0	604	512	2,57	1,18	1,02
65	5	769	565	2,80	1,36	1,18
65	10	956	615	3,02	1,56	1,34
65	15	1.165	661	3,23	1,76	1,52
65	20	1.395	704	3,42	1,98	1,71
65	25	1.646	743	3,61	2,21	1,91
70	0	502	525	2,62	0,95	0,83
70	5	635	583	2,88	1,09	0,94
70	10	790	637	3,12	1,24	1,07
70	15	966	688	3,35	1,40	1,21
70	20	1.164	736	3,57	1,58	1,37
70	25	1.383	780	3,78	1,77	1,53
75	0	399	538	2,68	0,74	0,64
75	5	500	600	2,95	0,83	0,72
75	10	623	660	3,22	0,94	0,82
75	15	767	716	3,48	1,07	0,93
75	20	933	768	3,72	1,21	1,05
75	25	1.120	817	3,96	1,37	1,18

Technical Data Sheet

ENGINEERING TOMORROW

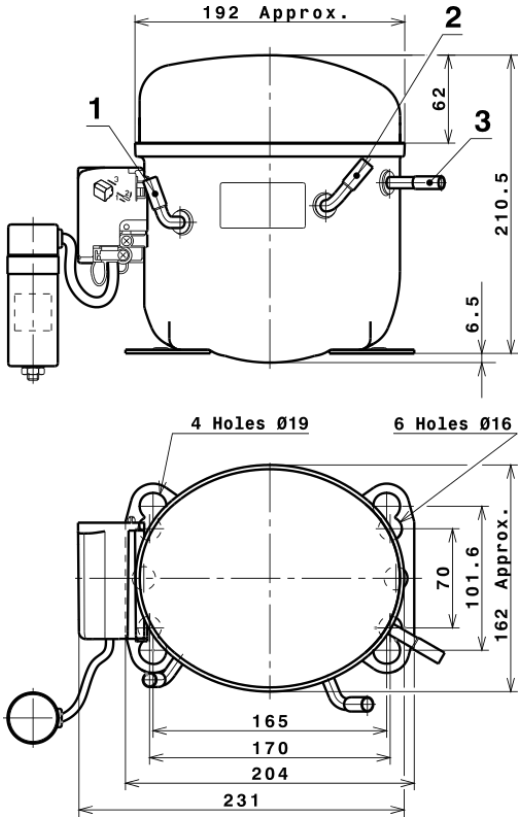
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.914,7070959300	355,7563101105	1,8914669490	40,069887599419
2	1,6709830396	20,5920554037	0,0935901057	1,0112527291424
3	-20,4756738374	2,6148432851	0,0113063870	-0,35158630305088
4	-3,1303706751	-1,1843589790	-0,0051801753	-0,10456192932477
5	0,8190269535	0,0420729353	0,0001455788	0,014063452122035

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

Technical Data Sheet

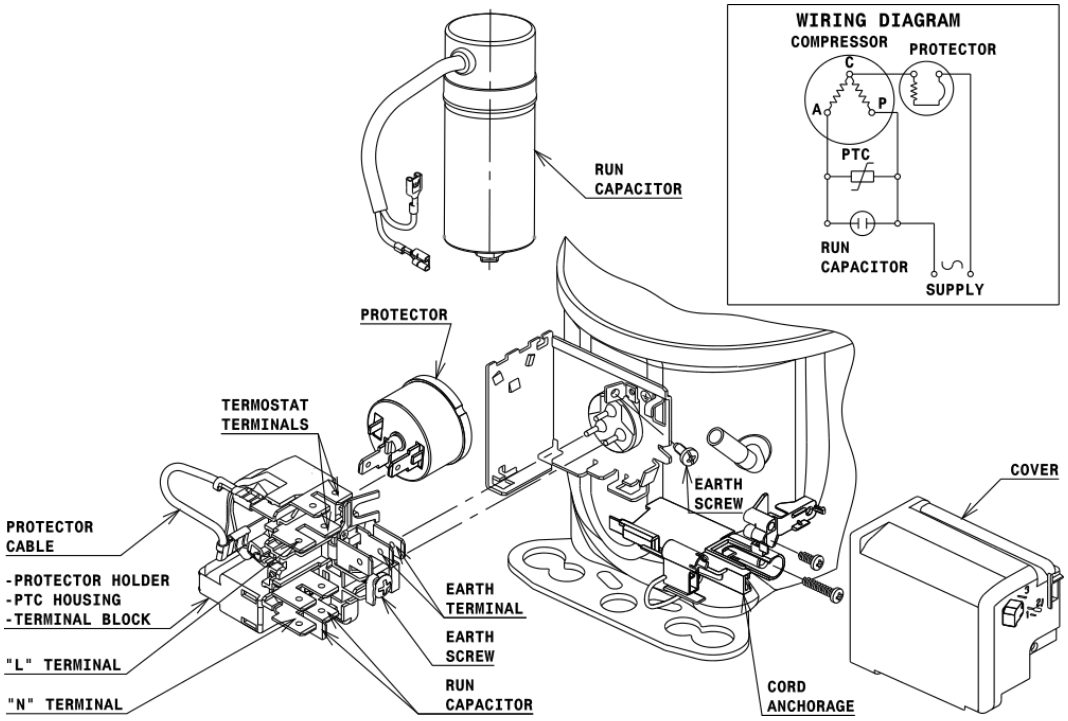
COMPRESSOR DIMENSIONS



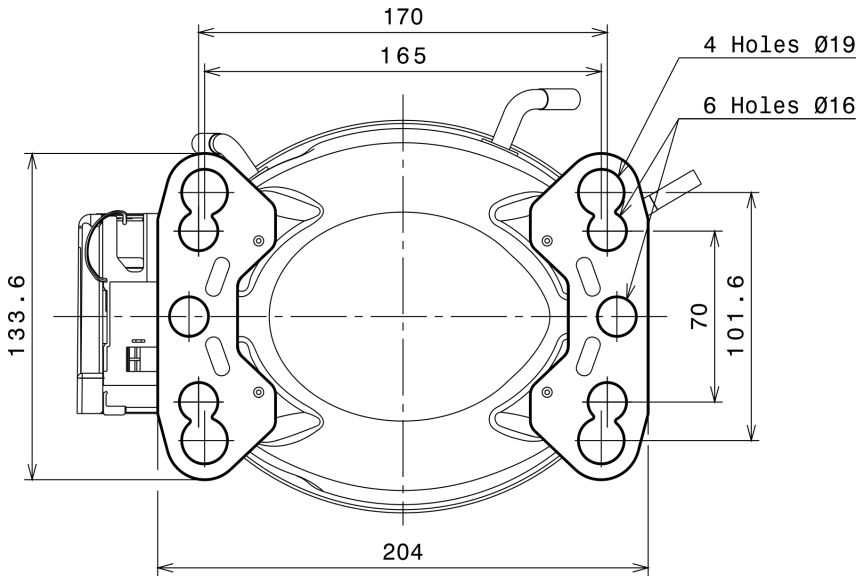
	DESIGNATION	INTERNAL DIAM.
1	Suction/Service	8,1 mm
2	Service/Suction	8,1 mm
3	Discharge	6,5 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

RSCR CONNECTION (L, P ranges)



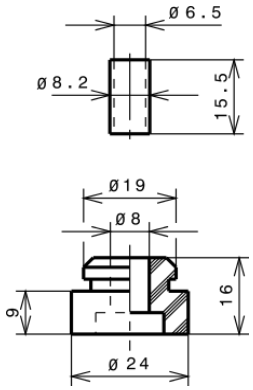
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

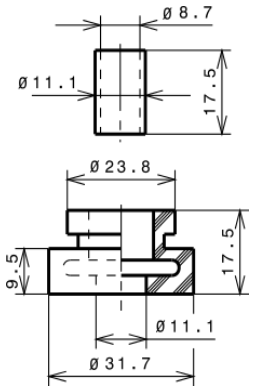
STANDARD

Ø16 holes (170x70 net)



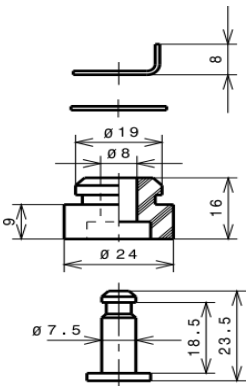
AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R134a VHBP