

Technical Data Sheet

ENGINEERING
TOMORROW



Compressor model **GL90ANb**
Voltage **200-220/220-230V 50/60Hz ~1**
Refrigerant **R134a**

APPLICATION

COMPRESSOR

MOTOR

Application	Low Back Pressure	Displacement	9,09 cm ³	Nominal Power	1/4 hp
Refrigerant	R134a	Diameter	24,29 mm	Voltage/Frequency	200-220V 50Hz
Evaporating Temp.	-35,0 °C to -10,0 °C	Stroke	19,62 mm	Voltage range	170-242 V
Expansion	Capillar/Valve	Net Weight	10,48 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	440 cm ³	Locked Rotor Amps (LRA)	19,30 A
Compatible refriger.	R1234yf			Max. Cont. Current (MCC)	3,20 A
				Main W. resist. at 25°C	7,40 Ω
				Start W. resist. at 25°C	8,50 Ω

NOMINAL PERFORMANCE

APPROVALS

	ASHRAE	CECOMAF
Cooling Capacity	191 kCal/h	163 W
COP	1,10 W/W	0,84 W/W
EER	0,95 kCal/Wh	0,73 kCal/Wh
Input Power	202 W	193 W
Current	1,88 A	1,86 A

TEST CYCLE CONDITIONS

	ASHRAE LBP (B)	CECOMAF LBP (A)
Evaporating temp. (T _e)	-23,3 °C	-25,0 °C
Condensing temp. (T _c)	55,0 °C	55,0 °C
Liquid temp. (T _{liq.})	32,0 °C	55,0 °C
Ambient temp. (T _{amb.})	32,0 °C	32,0 °C
Suction temp. (T _{suction})	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	Option 2		
Reference	2014 138.	QLZ-6.1A		
Pick-Up	6,10 A	6.10 A		
Drop-Out	5,20 A	5.20 A		
Protector	Option 1			
Reference	T0170			
Current	11,00 A			
Time check	7,5-14 seg			
Disc temp. (Open/Close)	120,00 / 69,00 °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	115	149	1,78	0,90	0,77
40	-30	150	168	1,81	1,04	0,90
40	-25	198	188	1,85	1,23	1,05
40	-23,3	217	195	1,87	1,29	1,11
40	-20	259	210	1,90	1,43	1,23
40	-15	331	234	1,95	1,65	1,42
40	-10	416	259	2,02	1,87	1,61

45	-35	107	147	1,78	0,84	0,73
45	-30	142	168	1,81	0,99	0,85
45	-25	190	190	1,85	1,16	1,00
45	-23,3	209	198	1,87	1,23	1,06
45	-20	250	213	1,91	1,36	1,17
45	-15	322	239	1,97	1,57	1,35
45	-10	407	266	2,04	1,78	1,53

50	-35	98	145	1,77	0,79	0,68
50	-30	133	167	1,81	0,93	0,80
50	-25	181	191	1,86	1,10	0,95
50	-23,3	200	200	1,88	1,16	1,00
50	-20	241	217	1,91	1,29	1,11
50	-15	313	244	1,98	1,49	1,28
50	-10	397	273	2,06	1,69	1,46

55	-35	90	143	1,77	0,73	0,63
55	-30	125	167	1,81	0,87	0,75
55	-25	172	193	1,86	1,04	0,89
55	-23,3	191	202	1,88	1,10	0,95
55	-20	232	220	1,92	1,22	1,05
55	-15	304	249	1,99	1,42	1,22
55	-10	388	280	2,08	1,61	1,39

60	-35	82	141	1,77	0,67	0,58
60	-30	116	167	1,81	0,81	0,70
60	-25	163	194	1,86	0,98	0,84
60	-23,3	182	204	1,88	1,04	0,89
60	-20	223	224	1,93	1,16	1,00
60	-15	295	255	2,01	1,35	1,16
60	-10	379	287	2,10	1,53	1,32

65	-35	73	139	1,76	0,61	0,53
65	-30	108	167	1,81	0,75	0,65
65	-25	155	196	1,87	0,92	0,79
65	-23,3	173	206	1,89	0,98	0,84
65	-20	214	227	1,94	1,10	0,94
65	-15	285	260	2,02	1,28	1,10
65	-10	369	294	2,12	1,46	1,26

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	125	149	1,78	0,84	0,73
40	-30	168	168	1,81	1,00	0,86
40	-25	222	188	1,85	1,18	1,02
40	-23,3	243	195	1,87	1,24	1,07
40	-20	287	210	1,90	1,37	1,18
40	-15	364	234	1,95	1,56	1,35
40	-10	453	259	2,02	1,75	1,51

45	-35	112	147	1,78	0,76	0,66
45	-30	151	168	1,81	0,90	0,78
45	-25	202	190	1,85	1,06	0,92
45	-23,3	222	198	1,87	1,12	0,97
45	-20	264	213	1,91	1,24	1,07
45	-15	338	239	1,97	1,42	1,22
45	-10	424	266	2,04	1,59	1,38

50	-35	98	145	1,77	0,68	0,59
50	-30	135	167	1,81	0,80	0,70
50	-25	182	191	1,86	0,95	0,82
50	-23,3	201	200	1,88	1,01	0,87
50	-20	242	217	1,91	1,11	0,96
50	-15	312	244	1,98	1,28	1,11
50	-10	395	273	2,06	1,45	1,25

55	-35	85	143	1,77	0,60	0,51
55	-30	118	167	1,81	0,71	0,61
55	-25	163	193	1,86	0,84	0,73
55	-23,3	180	202	1,88	0,89	0,77
55	-20	219	220	1,92	0,99	0,86
55	-15	286	249	1,99	1,15	0,99
55	-10	366	280	2,08	1,31	1,13

60	-35	72	141	1,77	0,51	0,44
60	-30	102	167	1,81	0,61	0,53
60	-25	143	194	1,86	0,74	0,64
60	-23,3	160	204	1,88	0,78	0,68
60	-20	196	224	1,93	0,88	0,76
60	-15	261	255	2,01	1,02	0,88
60	-10	337	287	2,10	1,17	1,01

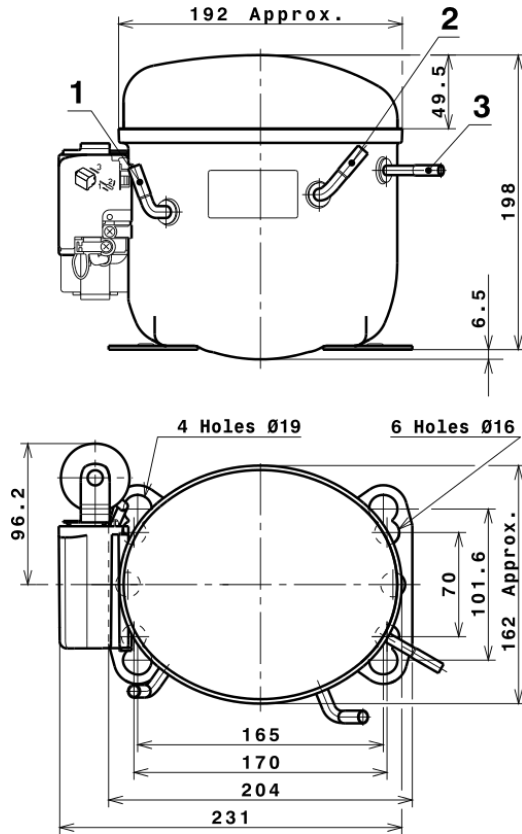
65	-35	58	139	1,76	0,42	0,36
65	-30	85	167	1,81	0,51	0,44
65	-25	123	196	1,87	0,63	0,54
65	-23,3	139	206	1,89	0,67	0,58
65	-20	173	227	1,94	0,76	0,66
65	-15	235	260	2,02	0,90	0,78
65	-10	308	294	2,12	1,05	0,90

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	944,0907671894	235,6604006611	1,9767262178	16,794927556725
2	28,3114468968	3,1263272078	0,0130858980	0,57133540753089
3	-7,2548946503	2,1702769860	0,0061276867	-0,046728151064662
4	0,2263279835	0,0345379772	0,0002389153	0,0060864166909699
5	-0,1305926327	0,0736822322	0,0001940567	-0,00021973043258327

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

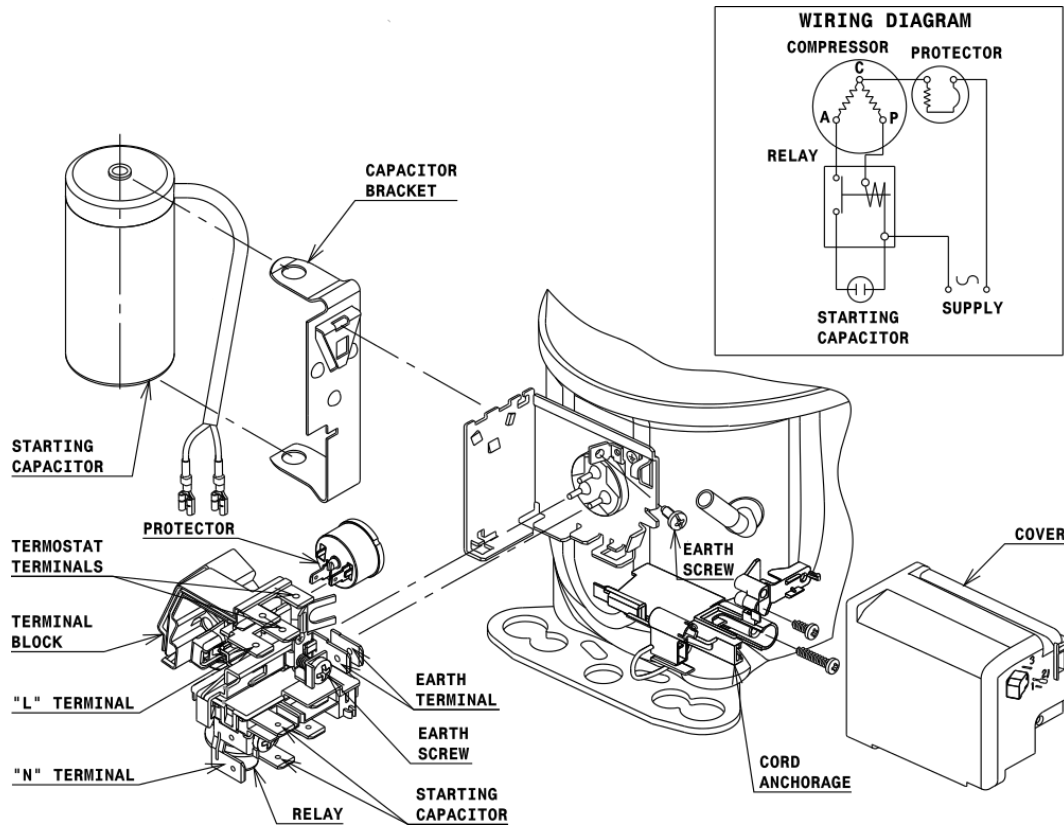


DESIGNATION INTERNAL DIAM.

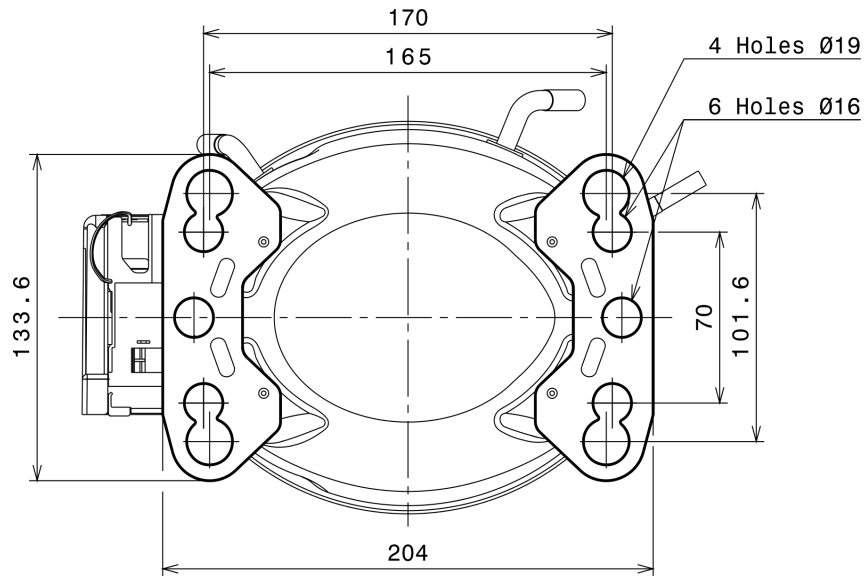
DESIGNATION	INTERNAL DIAM.
1 Suction	6,5 mm
2 Service	6,5 mm
3 Discharge	4,9 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSIR CONNECTION (L, P ranges)



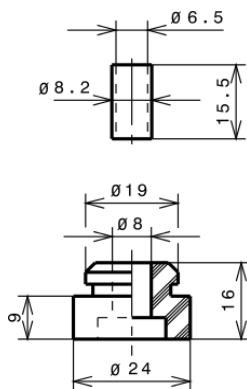
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

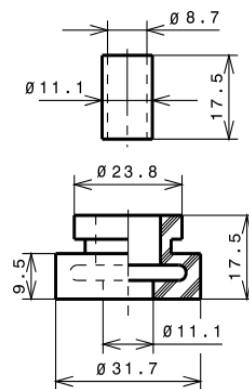
STANDARD

$\varnothing 16$ holes (170x70 net)



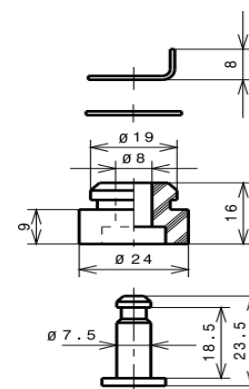
AMERICAN FEET

$\varnothing 19$ holes (165x101.6 net)



SNAP-ON

$\varnothing 16$ holes (170x70 net)



SOA

SOA R134a LBP

