

# Technical Data Sheet

ENGINEERING  
TOMORROW



Compressor model **GL90ANa**  
Voltage **200-220/220-230V 50/60Hz ~1**  
Refrigerant **R134a**

## APPLICATION

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

## COMPRESSOR

Displacement 9,09 cm<sup>3</sup>  
Diameter 24,29 mm  
Stroke 19,62 mm  
Net Weight 10,33 Kg  
Oil type ISO VG 32 ESTER  
Oil charge 440 cm<sup>3</sup>

## MOTOR

Nominal Power 1/4 hp  
Voltage/Frequency 220-230V 60Hz  
Voltage range 187-253 V  
Type RSIR  
Phase number 1 PH  
Locked Rotor Amps (LRA) 18,00 A  
Max. Cont. Current (MCC) 3,50 A  
Main W. resist. at 25°C 7,40 Ω  
Start W. resist. at 25°C 8,50 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	218 kCal/h	185 W
COP	1,20 W/W	0,93 W/W
EER	1,03 kCal/Wh	0,80 kCal/Wh
Input Power	211 W	199 W
Current	1,51 A	1,47 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 60 Hz	220 V 60 Hz

## ELECTRICAL COMPONENTS

Relay	Option 1			
Reference	PTC K100			
Voltage	200-240 V			
Resistance	14.00 Ω			
Protector	Option 1	Option 2	Option 3	Option 4
Reference	MRP43LZ	4TM757NFBYY	T0226	AE82PU
Current	11,80 A	10,40 A	13,50 A	15,00 A
Time check	7,5-14 seg	5-15 seg	7,5-14 seg	7,5-14 seg
Disc temp. (Open/Close)	120,00 / 62,00 °C	120,00 / 61,00 °C	135,00 / 62,00 °C	120,00 / 62,00 °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	147	1,33	1,00	0,86
40	-30	168	170	1,39	1,15	0,99
40	-25	225	197	1,47	1,33	1,14
40	-23,3	247	207	1,50	1,39	1,20
40	-20	296	227	1,56	1,51	1,30
40	-15	382	261	1,68	1,70	1,46
40	-10	482	298	1,81	1,88	1,62

45	-35	118	145	1,32	0,95	0,82
45	-30	159	169	1,39	1,09	0,94
45	-25	215	198	1,47	1,27	1,09
45	-23,3	237	208	1,50	1,33	1,14
45	-20	286	230	1,57	1,45	1,24
45	-15	371	265	1,69	1,63	1,40
45	-10	470	304	1,84	1,80	1,55

50	-35	110	142	1,32	0,90	0,77
50	-30	151	169	1,39	1,04	0,89
50	-25	206	199	1,47	1,20	1,04
50	-23,3	228	210	1,51	1,26	1,09
50	-20	275	232	1,58	1,38	1,19
50	-15	360	269	1,70	1,56	1,34
50	-10	459	309	1,86	1,72	1,48

55	-35	102	140	1,31	0,85	0,73
55	-30	142	168	1,38	0,98	0,84
55	-25	196	199	1,47	1,14	0,98
55	-23,3	218	211	1,51	1,20	1,03
55	-20	265	234	1,59	1,32	1,13
55	-15	349	273	1,72	1,49	1,28
55	-10	447	315	1,88	1,65	1,42

60	-35	94	138	1,30	0,79	0,68
60	-30	133	167	1,38	0,93	0,80
60	-25	187	200	1,48	1,08	0,93
60	-23,3	208	212	1,51	1,14	0,98
60	-20	255	237	1,59	1,25	1,08
60	-15	338	277	1,73	1,42	1,22
60	-10	435	321	1,90	1,58	1,36

65	-35	86	135	1,30	0,74	0,64
65	-30	124	167	1,38	0,87	0,75
65	-25	177	201	1,48	1,02	0,88
65	-23,3	199	214	1,52	1,08	0,93
65	-20	245	239	1,60	1,19	1,02
65	-15	327	281	1,75	1,35	1,16
65	-10	424	326	1,93	1,51	1,30

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	137	147	1,33	0,93	0,81
40	-30	187	170	1,39	1,10	0,95
40	-25	251	197	1,47	1,28	1,10
40	-23,3	276	207	1,50	1,33	1,15
40	-20	329	227	1,56	1,45	1,25
40	-15	420	261	1,68	1,61	1,39
40	-10	525	298	1,81	1,76	1,52

45	-35	124	145	1,32	0,85	0,74
45	-30	170	169	1,39	1,00	0,86
45	-25	229	198	1,47	1,16	1,00
45	-23,3	253	208	1,50	1,21	1,05
45	-20	303	230	1,57	1,32	1,14
45	-15	390	265	1,69	1,47	1,27
45	-10	490	304	1,84	1,61	1,39

50	-35	110	142	1,32	0,77	0,67
50	-30	152	169	1,39	0,90	0,78
50	-25	207	199	1,47	1,04	0,90
50	-23,3	229	210	1,51	1,09	0,95
50	-20	276	232	1,58	1,19	1,03
50	-15	359	269	1,70	1,34	1,15
50	-10	456	309	1,86	1,47	1,27

55	-35	96	140	1,31	0,69	0,60
55	-30	134	168	1,38	0,80	0,69
55	-25	185	199	1,47	0,93	0,80
55	-23,3	206	211	1,51	0,98	0,84
55	-20	250	234	1,59	1,07	0,92
55	-15	329	273	1,72	1,21	1,04
55	-10	421	315	1,88	1,34	1,16

60	-35	83	138	1,30	0,60	0,52
60	-30	116	167	1,38	0,70	0,60
60	-25	163	200	1,48	0,82	0,70
60	-23,3	183	212	1,51	0,86	0,74
60	-20	224	237	1,59	0,95	0,82
60	-15	299	277	1,73	1,08	0,93
60	-10	387	321	1,90	1,21	1,04

65	-35	69	135	1,30	0,51	0,44
65	-30	99	167	1,38	0,59	0,51
65	-25	141	201	1,48	0,70	0,61
65	-23,3	159	214	1,52	0,74	0,64
65	-20	198	239	1,60	0,83	0,72
65	-15	269	281	1,75	0,96	0,83
65	-10	353	326	1,93	1,08	0,93

## EN12900

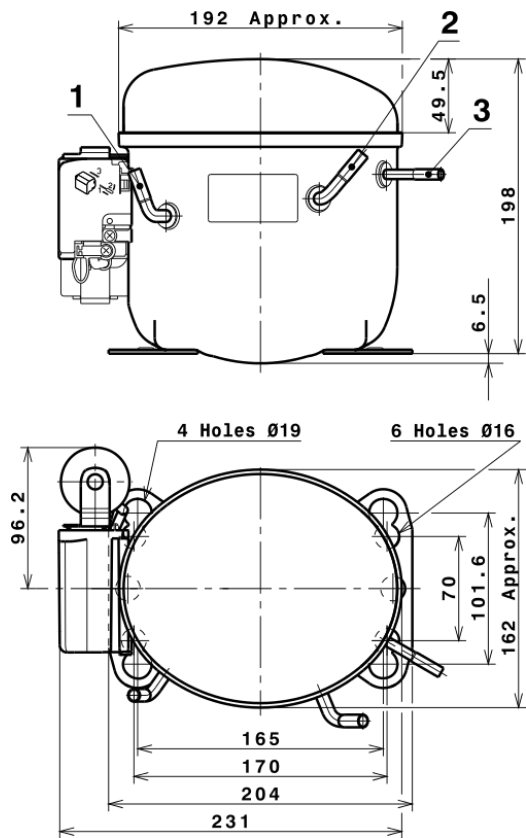
X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.113,6309125950	319,9437245865	1,9220761647	19,92583267826
2	34,2051233959	6,8510459498	0,0311399323	0,6937112824443
3	-8,7760533280	1,8152624850	0,0069692496	-0,062928244677462
4	0,2675193655	0,0727117192	0,0004513241	0,0071863690146202
5	-0,1726625645	0,0654846804	0,0002341536	-0,00072712940617869

Equation

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

# Technical Data Sheet

## COMPRESSOR DIMENSIONS

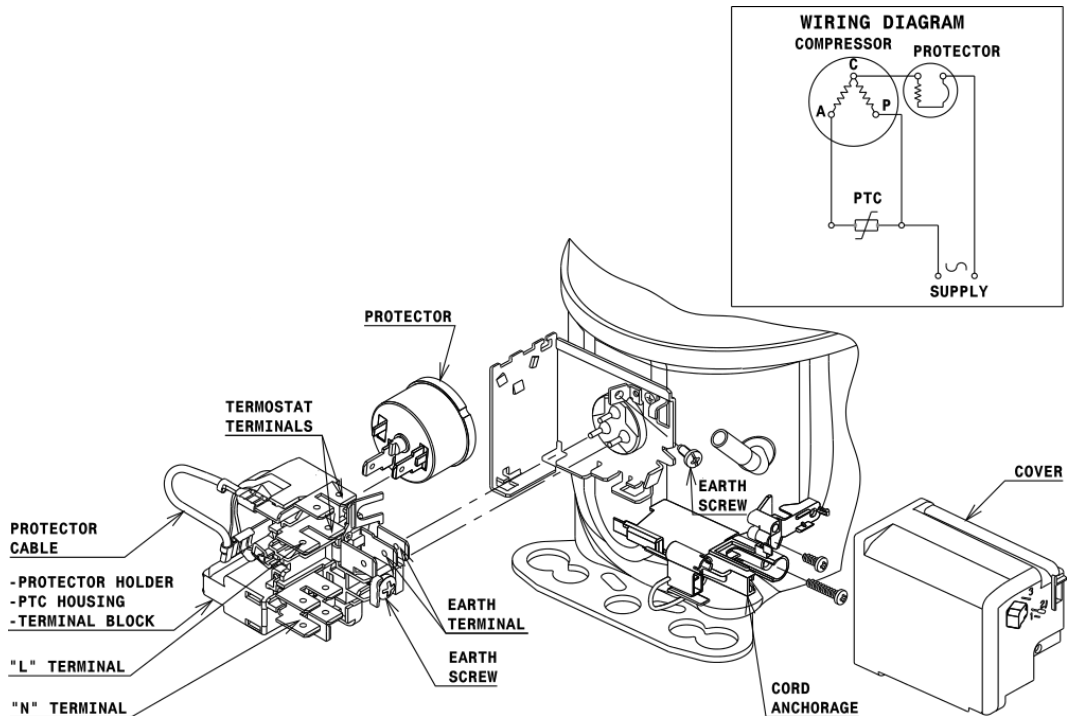


## DESIGNATION INTERNAL DIAM.

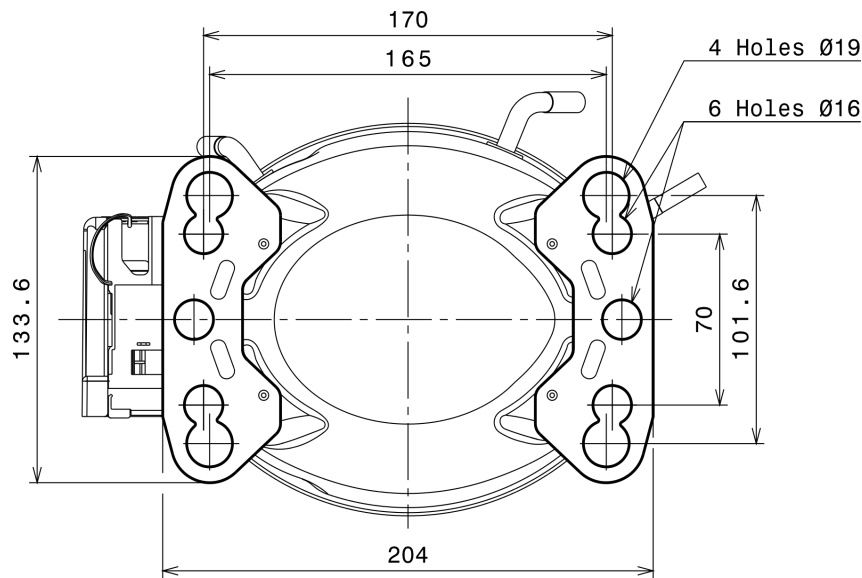
1	Suction	6,5 mm
2	Service	6,5 mm
3	Discharge	4,9 mm

## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### RSIR CONNECTION (PTC) (L, P ranges)



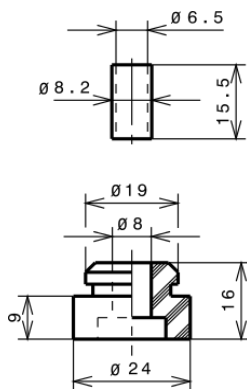
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

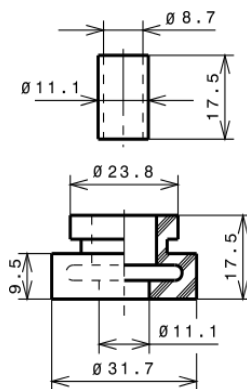
STANDARD

Ø16 holes (170x70 net)



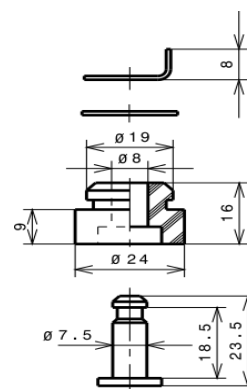
AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R134a LBP

