

Technical Data Sheet

Compressor model **GUY90RAb**
 Voltage **220-240V 50Hz ~1**
 Refrigerant **R134a**

APPLICATION

COMPRESSOR

MOTOR

Application	High-Medium Back Pressure	Displacement	8,80 cm ³	Nominal Power	1/4 hp
Refrigerant	R134a	Diameter	24,30 mm	Voltage/Frequency	220-240V 50Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	19,00 mm	Voltage range	187-255 V
Expansion	Capillar/Valve	Net Weight	9,80 Kg	Type	CSR
Comp. Cooling	Fan cooled	Oil type	ISO VG 32 ESTER	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	200 cm ³	Locked Rotor Amps (LRA)	14,00 A
Compatible refriger.	R1234yf			Max. Cont. Current (MCC)	3,00 A
				Main W. resist. at 25°C	6,90 Ω
				Start W. resist. at 25°C	32,95 Ω

NOMINAL PERFORMANCE

APPROVALS

	ASHRAE	CECOMAF
Cooling Capacity	804 kCal/h	783 W
COP	2,73 W/W	2,35 W/W
EER	2,34 kCal/Wh	2,03 kCal/Wh
Input Power	343 W	333 W
Current	1,81 A	1,77 A

TEST CYCLE CONDITIONS

	ASHRAE HMBP (D)	CECOMAF HMBP (C)
Evaporating temp. (T _e)	7,2 °C	5,0 °C
Condensing temp. (T _c)	55,0 °C	55,0 °C
Liquid temp. (T _{liq.})	46,0 °C	55,0 °C
Ambient temp. (T _{amb.})	35,0 °C	32,0 °C
Suction temp. (T _{suction})	35,0 °C	32,0 °C
Voltage/Frequency	220 V 50 Hz	220 V 50 Hz

ELECTRICAL COMPONENTS

Starting capacitor	47- 56 μF 330 V		
Run capacitor	5 μF 400 V		
Relay	Option 1		
Reference	2014 135. + NTC15Ω		
Pick-Up	5,80 A		
Drop-Out	4,95 A		
Protector	Option 1	Option 2	
Reference	T0137	AE39FHS	
Current	9,50 A	9,20 A	
Time check	7,5-14 seg	7,5-14 seg	
Disc temp. (Open/Close)	110,00 / 61,00 °C	105,00 / 62,00 °C	

ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	221	167	1,15	1,54	1,32
40	-20	295	186	1,21	1,85	1,59
40	-15	384	205	1,27	2,18	1,87
40	-10	487	224	1,34	2,53	2,18
40	-5	605	244	1,41	2,89	2,49
40	0	738	264	1,48	3,26	2,80
40	5	886	284	1,56	3,63	3,12
40	7,2	956	293	1,60	3,79	3,26
40	10	1.049	305	1,65	4,00	3,44

45	-25	204	170	1,16	1,40	1,20
45	-20	273	191	1,23	1,66	1,43
45	-15	356	212	1,30	1,96	1,68
45	-10	454	233	1,37	2,27	1,95
45	-5	567	255	1,45	2,59	2,22
45	0	695	277	1,54	2,92	2,51
45	5	838	300	1,63	3,25	2,80
45	7,2	905	310	1,67	3,40	2,92
45	10	995	322	1,72	3,59	3,09

50	-25	187	173	1,17	1,26	1,08
50	-20	250	196	1,24	1,49	1,28
50	-15	329	219	1,32	1,74	1,50
50	-10	422	243	1,41	2,02	1,74
50	-5	530	267	1,49	2,31	1,99
50	0	652	291	1,59	2,61	2,24
50	5	790	315	1,69	2,91	2,50
50	7,2	855	326	1,74	3,05	2,62
50	10	942	340	1,80	3,22	2,77

55	-25	170	176	1,18	1,12	0,97
55	-20	228	201	1,26	1,32	1,14
55	-15	301	226	1,35	1,55	1,33
55	-10	389	252	1,44	1,80	1,54
55	-5	492	278	1,54	2,06	1,77
55	0	609	304	1,65	2,33	2,00
55	5	741	331	1,76	2,60	2,24
55	7,2	804	343	1,81	2,73	2,34
55	10	888	358	1,88	2,88	2,48

60	-25	153	179	1,19	0,99	0,85
60	-20	206	206	1,28	1,16	1,00
60	-15	274	234	1,37	1,36	1,17
60	-10	356	261	1,48	1,59	1,36
60	-5	454	290	1,58	1,82	1,57
60	0	566	318	1,70	2,07	1,78
60	5	693	347	1,83	2,32	2,00
60	7,2	753	360	1,88	2,44	2,09
60	10	835	376	1,96	2,58	2,22

65	-25	136	182	1,20	0,87	0,75
65	-20	184	211	1,29	1,01	0,87
65	-15	246	241	1,40	1,19	1,02
65	-10	324	271	1,51	1,39	1,20
65	-5	416	301	1,63	1,61	1,38
65	0	523	332	1,76	1,83	1,58
65	5	644	363	1,90	2,07	1,78
65	7,2	703	376	1,96	2,17	1,87
65	10	781	394	2,04	2,31	1,98

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	238	168	1,15	1,42	1,23
40	-20	319	187	1,21	1,71	1,47
40	-15	415	206	1,28	2,02	1,74
40	-10	526	225	1,34	2,34	2,02
40	-5	653	245	1,41	2,67	2,30
40	0	796	265	1,49	3,00	2,59
40	5	954	286	1,57	3,34	2,89
40	7,2	1.029	295	1,61	3,49	3,01
40	10	1.128	307	1,65	3,68	3,18

45	-25	219	171	1,16	1,28	1,11
45	-20	293	192	1,23	1,53	1,32
45	-15	383	213	1,30	1,80	1,55
45	-10	488	235	1,38	2,08	1,80
45	-5	609	257	1,46	2,37	2,05
45	0	745	279	1,54	2,67	2,31
45	5	897	302	1,63	2,97	2,57
45	7,2	969	312	1,68	3,11	2,69
45	10	1.065	325	1,73	3,28	2,83

50	-25	199	174	1,17	1,15	0,99
50	-20	267	197	1,25	1,36	1,17
50	-15	351	220	1,33	1,59	1,38
50	-10	450	244	1,41	1,84	1,59
50	-5	564	268	1,50	2,10	1,82
50	0	694	293	1,60	2,37	2,05
50	5	840	317	1,70	2,65	2,29
50	7,2	909	328	1,75	2,77	2,39
50	10	1.001	343	1,81	2,92	2,53

55	-25	180	177	1,18	1,02	0,88
55	-20	242	202	1,26	1,20	1,03
55	-15	319	228	1,35	1,40	1,21
55	-10	411	253	1,45	1,62	1,40
55	-5	520	280	1,55	1,86	1,61
55	0	643	306	1,65	2,10	1,82
55	5	783	333	1,77	2,35	2,03
55	7,2	849	345	1,82	2,46	2,13
55	10	938	361	1,89	2,60	2,25

60	-25	161	180	1,19	0,89	0,77
60	-20	216	207	1,28	1,04	0,90
60	-15	287	235	1,38	1,22	1,05
60	-10	373	263	1,48	1,42	1,23
60	-5	475	291	1,59	1,63	1,41
60	0	593	320	1,71	1,85	1,60
60	5	726	349	1,84	2,08	1,80
60	7,2	789	362	1,90	2,18	1,88
60	10	874	379	1,97	2,31	2,00

65	-25	141	183	1,20	0,77	0,67
65	-20	190	212	1,30	0,90	0,77
65	-15	255	242	1,40	1,05	0,91
65	-10	335	272	1,52	1,23	1,06
65	-5	431	303	1,64	1,42	1,23
65	0	542	334	1,77	1,62	1,40
65	5	669	365	1,91	1,83	1,58
65	7,2	729	379	1,97	1,93	1,66
65	10	811	397	2,06	2,05	1,77

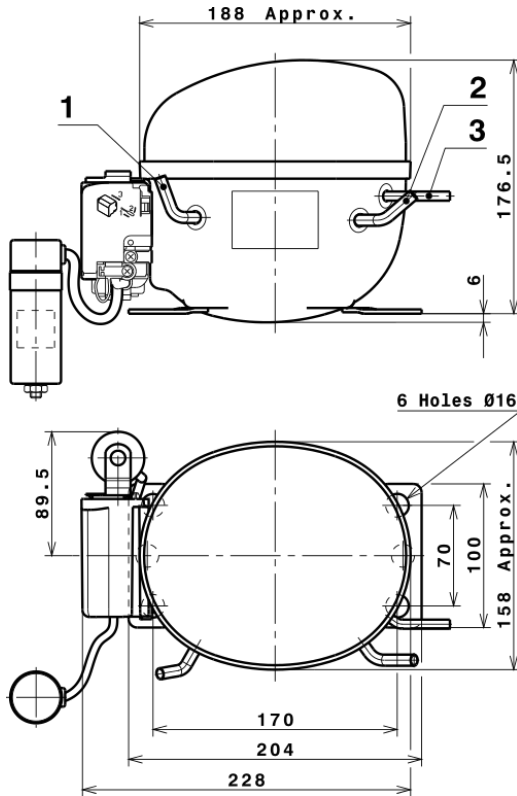
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.207,1520622399	159,4302012691	1,0286647257	20,018674360623
2	40,2986520123	0,7340620952	0,0012878473	0,7467399047006
3	-10,5336530217	2,8156086632	0,0119709577	-0,062912416178957
4	0,3059740175	0,0094094335	0,0001483710	0,0088964418546724
5	-0,2644127860	0,0879598075	0,0004016508	-0,00074921979229641

Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$
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Technical Data Sheet

COMPRESSOR DIMENSIONS

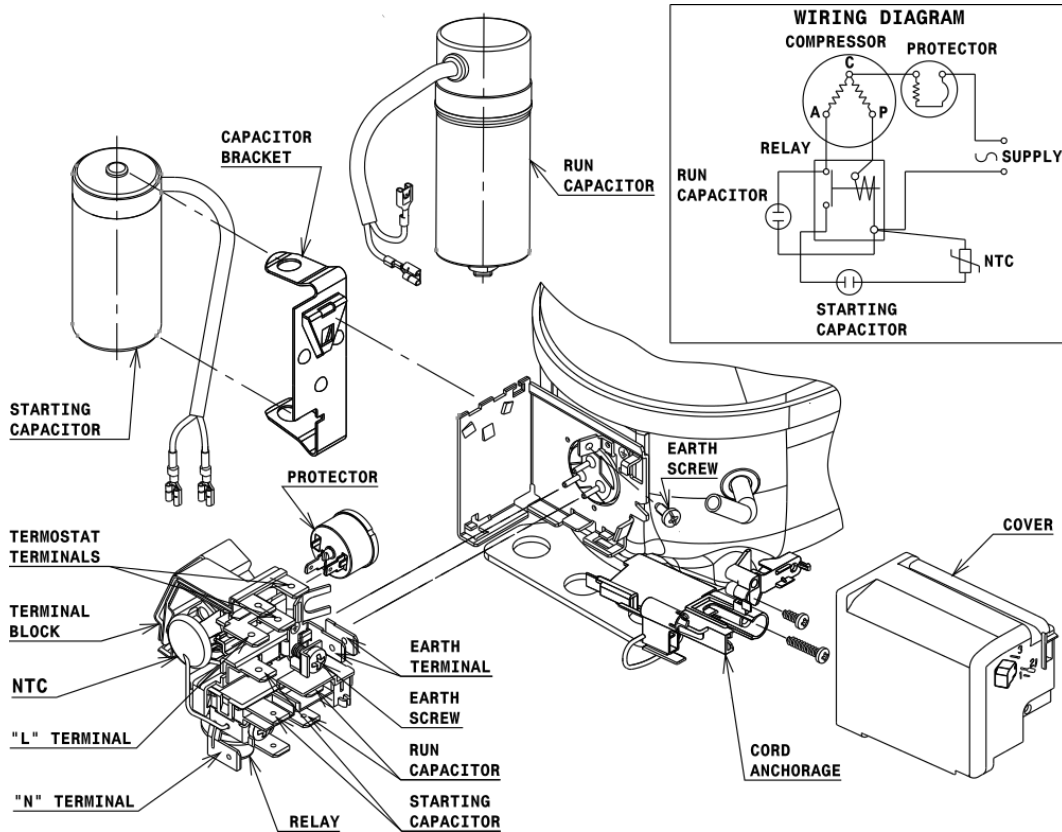


DESIGNATION INTERNAL DIAM.

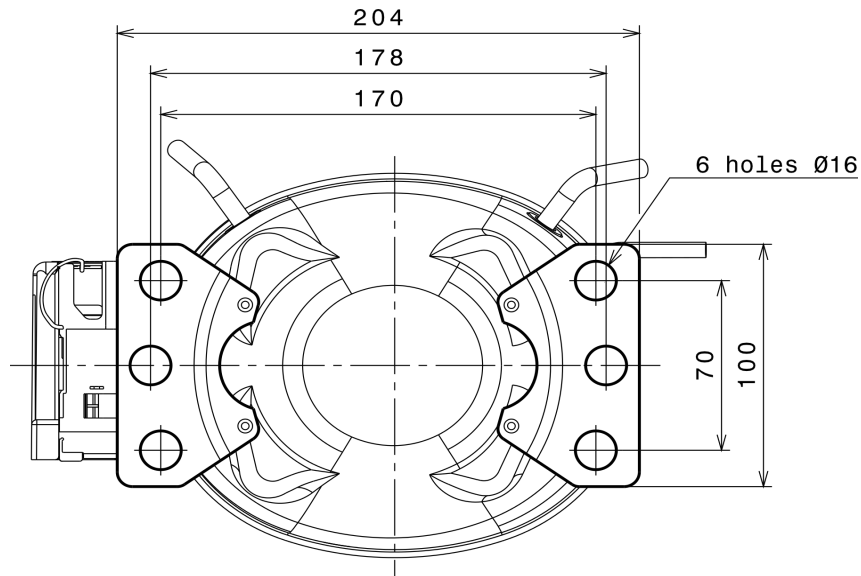
1	Service	6,2 mm
2	Suction	6,2 mm
3	Discharge	4,9 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSR CONNECTION (CURRENT RELAY + NTC) (U range)



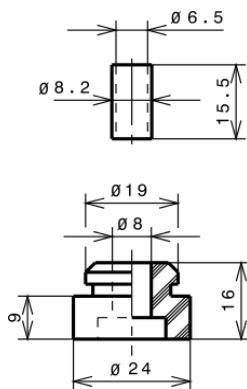
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

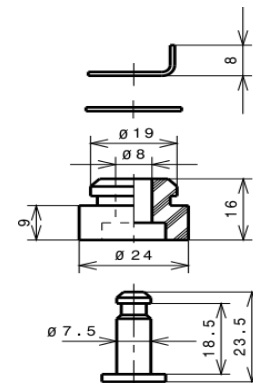
STANDARD

Ø16 holes (170x70 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R134a HMBP

