

Technical Data Sheet

Compressor model **GUY80RAa**
Voltage **220-240V 50Hz ~1**
Refrigerant **R134a**

APPLICATION

Application High-Medium Back Pressure
Refrigerant R134a
Evaporating Temp. -25,0 °C to 10,0 °C
Expansion Capillar/Valve
Comp. Cooling Fan cooled
Max. ambient temp. 43,0 °C
Compatible refriger. R1234yf

COMPRESSOR

Displacement 8,10 cm³
Diameter 24,30 mm
Stroke 17,50 mm
Net Weight 9,70 Kg
Oil type ISO VG 32 ESTER
Oil charge 200 cm³

MOTOR

Nominal Power 1/4 hp
Voltage/Frequency 220-240V 50Hz
Voltage range 187-255 V
Type CSIR
Phase number 1 PH
Locked Rotor Amps (LRA) 13,00 A
Max. Cont. Current (MCC) 3,20 A
Main W. resist. at 25°C 8,32 Ω
Start W. resist. at 25°C 34,30 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	738 kCal/h	720 W
COP	2,56 W/W	2,22 W/W
EER	2,20 kCal/Wh	1,92 kCal/Wh
Input Power	335 W	324 W
Current	1,93 A	1,88 A

APPROVALS



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 / 50 µF 330 V			
Relay	Option 1	Option 2		
Reference	2014 127.	QLZ-4.8A		
Pick-Up	4,80 A	4,8 A		
Drop-Out	4,10 A	4,1 A		
Protector	Option 1	Option 2		
Reference	T0289	B90-105		
Current	9,50 A	9,40 A		
Time check	7,5-14 seg	7,5-16 seg		
Disc temp. (Open/Close)	110,00 / 52,00 °C	110,00 / 62,00 °C		

ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	215	151	1,30	1,66	1,42
40	-20	283	170	1,35	1,93	1,66
40	-15	364	191	1,41	2,22	1,91
40	-10	457	212	1,47	2,51	2,16
40	-5	564	234	1,54	2,80	2,41
40	0	683	258	1,63	3,08	2,65
40	5	816	282	1,71	3,36	2,89
40	7,2	878	293	1,76	3,49	3,00
40	10	961	307	1,81	3,64	3,13

45	-25	198	154	1,31	1,50	1,29
45	-20	261	175	1,36	1,74	1,49
45	-15	338	197	1,43	1,99	1,71
45	-10	427	220	1,50	2,25	1,94
45	-5	529	244	1,58	2,52	2,16
45	0	643	269	1,67	2,78	2,39
45	5	771	295	1,77	3,04	2,61
45	7,2	831	307	1,81	3,15	2,71
45	10	912	322	1,88	3,29	2,83

50	-25	181	156	1,31	1,35	1,16
50	-20	240	179	1,37	1,56	1,34
50	-15	311	203	1,44	1,78	1,53
50	-10	396	228	1,52	2,02	1,74
50	-5	493	254	1,61	2,26	1,94
50	0	603	281	1,71	2,50	2,15
50	5	726	308	1,82	2,74	2,35
50	7,2	785	321	1,87	2,84	2,44
50	10	862	337	1,94	2,97	2,56

55	-25	164	159	1,32	1,20	1,03
55	-20	218	184	1,39	1,38	1,19
55	-15	285	209	1,46	1,58	1,36
55	-10	365	236	1,55	1,80	1,55
55	-5	458	264	1,65	2,02	1,74
55	0	563	292	1,75	2,24	1,93
55	5	682	322	1,87	2,46	2,12
55	7,2	738	335	1,93	2,56	2,20
55	10	813	352	2,01	2,69	2,31

60	-25	147	162	1,33	1,06	0,91
60	-20	197	188	1,40	1,21	1,04
60	-15	259	216	1,48	1,40	1,20
60	-10	334	244	1,58	1,59	1,37
60	-5	422	273	1,68	1,80	1,55
60	0	523	304	1,80	2,00	1,72
60	5	637	335	1,93	2,21	1,90
60	7,2	691	349	1,99	2,30	1,98
60	10	764	367	2,07	2,42	2,08

65	-25	130	164	1,33	0,92	0,79
65	-20	175	193	1,41	1,06	0,91
65	-15	233	222	1,50	1,22	1,05
65	-10	303	252	1,60	1,40	1,20
65	-5	387	283	1,72	1,59	1,37
65	0	483	315	1,85	1,78	1,53
65	5	593	348	1,99	1,98	1,70
65	7,2	645	363	2,05	2,07	1,78
65	10	715	382	2,14	2,17	1,87

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	232	152	1,30	1,53	1,32
40	-20	306	171	1,35	1,78	1,54
40	-15	393	192	1,41	2,05	1,77
40	-10	494	213	1,48	2,32	2,00
40	-5	609	236	1,55	2,58	2,23
40	0	737	259	1,63	2,84	2,45
40	5	878	284	1,72	3,09	2,67
40	7,2	945	295	1,76	3,20	2,77
40	10	1.033	309	1,82	3,34	2,89

45	-25	212	154	1,31	1,37	1,19
45	-20	281	176	1,37	1,60	1,38
45	-15	363	198	1,43	1,83	1,58
45	-10	458	221	1,50	2,07	1,79
45	-5	567	246	1,58	2,31	1,99
45	0	690	271	1,67	2,55	2,20
45	5	826	297	1,77	2,78	2,40
45	7,2	890	309	1,82	2,88	2,49
45	10	975	324	1,88	3,01	2,60

50	-25	193	157	1,32	1,23	1,06
50	-20	256	180	1,38	1,42	1,23
50	-15	332	204	1,45	1,63	1,40
50	-10	422	229	1,53	1,84	1,59
50	-5	525	255	1,62	2,06	1,78
50	0	642	282	1,72	2,27	1,97
50	5	773	310	1,83	2,49	2,15
50	7,2	835	323	1,88	2,58	2,23
50	10	917	339	1,95	2,70	2,33

55	-25	174	160	1,32	1,09	0,94
55	-20	231	185	1,39	1,25	1,08
55	-15	302	211	1,47	1,43	1,24
55	-10	386	237	1,55	1,63	1,41
55	-5	484	265	1,65	1,82	1,58
55	0	595	294	1,76	2,03	1,75
55	5	720	324	1,88	2,22	1,92
55	7,2	779	337	1,94	2,31	2,00
55	10	859	355	2,02	2,42	2,09

60	-25	154	163	1,33	0,95	0,82
60	-20	206	189	1,40	1,09	0,94
60	-15	271	217	1,49	1,25	1,08
60	-10	350	245	1,58	1,43	1,23
60	-5	442	275	1,69	1,61	1,39
60	0	548	305	1,81	1,79	1,55
60	5	667	337	1,94	1,98	1,71
60	7,2	724	351	2,00	2,06	1,78
60	10	800	370	2,09	2,17	1,87

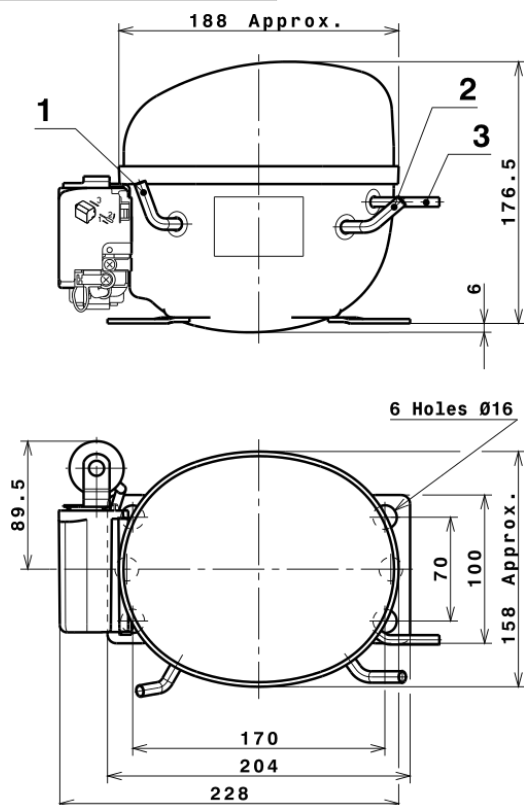
65	-25	135	165	1,34	0,82	0,71
65	-20	181	194	1,42	0,94	0,81
65	-15	241	223	1,51	1,08	0,93
65	-10	314	253	1,61	1,24	1,07
65	-5	401	285	1,72	1,41	1,22
65	0	501	317	1,85	1,58	1,37
65	5	615	350	2,00	1,75	1,52
65	7,2	669	365	2,07	1,83	1,58
65	10	742	385	2,16	1,93	1,67

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.117,8036494525	171,2092743410	1,2540359043	18,584620019083
2	36,0012784915	2,0720059031	0,0058823882	0,66504758953447
3	-9,7646752875	2,3718518964	0,0098115673	-0,059432678487552
4	0,2661415982	0,0221566342	0,0002331623	0,0077787542344912
5	-0,2341104473	0,0729500412	0,0003350796	-0,00056069777079554

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

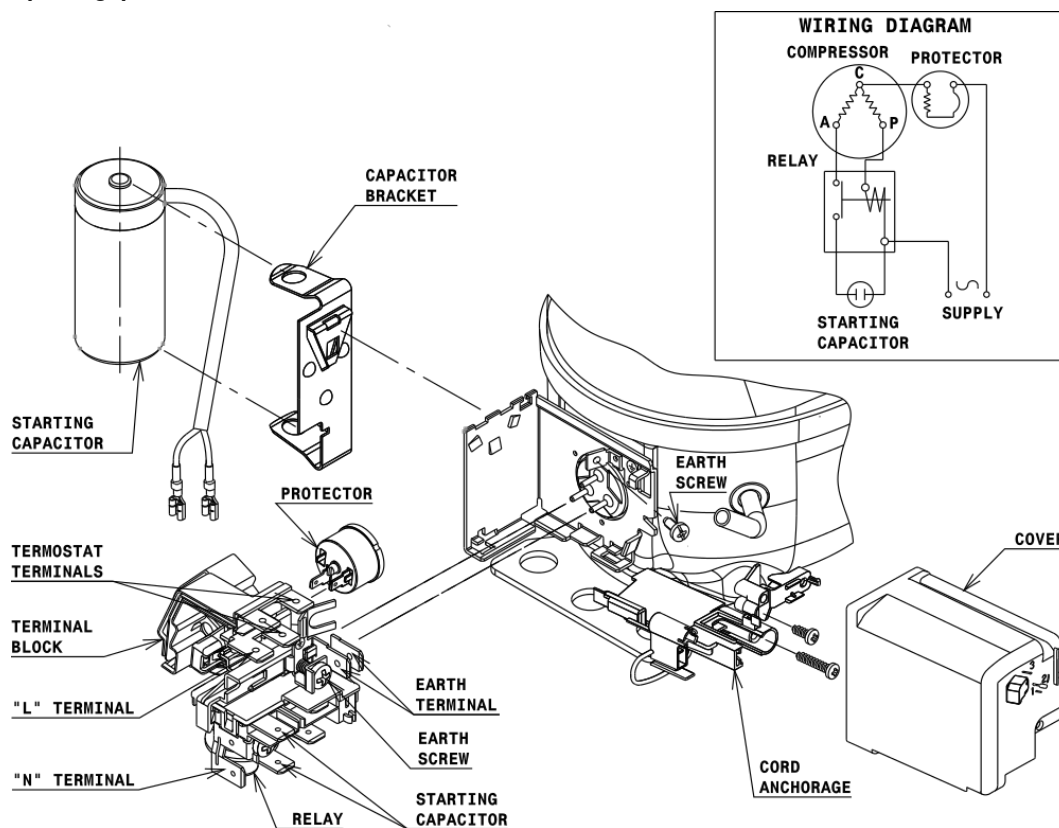


DESIGNATION INTERNAL DIAM.

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

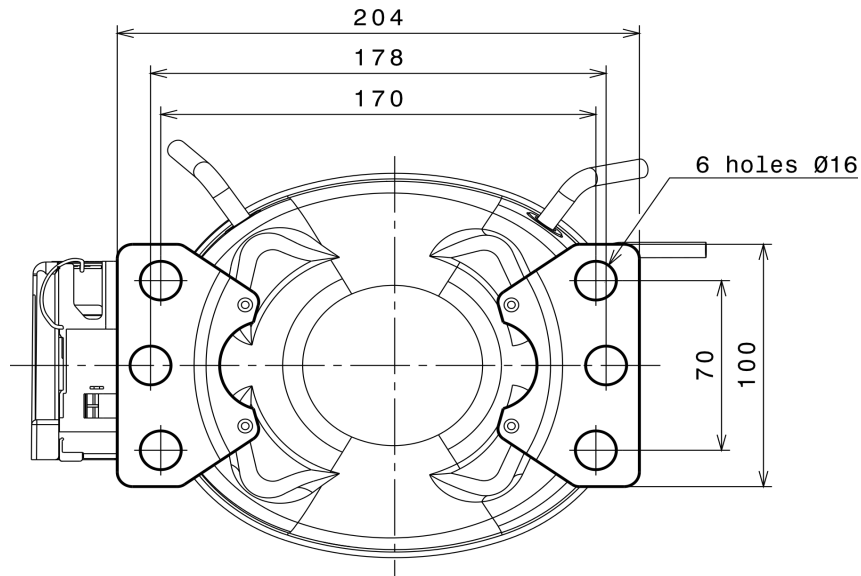
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSIR CONNECTION (U range)



Technical Data Sheet

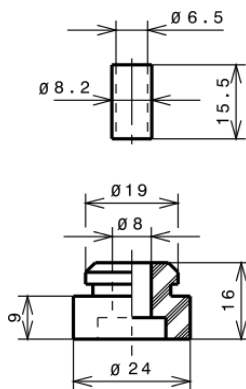
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

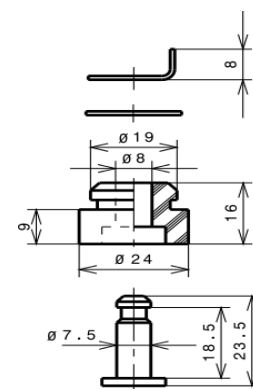
STANDARD

Ø16 holes (170x70 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R134a HMBP

