Technical Data Sheet

Compressor model **GUY80RAb**

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

Refrigerant **R134a**

APPLICATION

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

COMPRESSOR

Displacement	8,10 cm³
Diameter	24,30 mm
Stroke	17,50 mm
Net Weight	9,80 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	CSR
Phase number	1 PH
Locked Rotor Amps (LRA)	13,00 A
Max. Cont. Current (MCC)	2,80 A
Main W. resist. at 25ºC	8,32 Ω
Start W. resist. at 25ºC	34,30 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	745 kCal/h	727 W
COP	2,75 W/W	2,38 W/W
EER	2,37 kCal/Wh	2,06 kCal/Wh
Input Power	315 W	305 W
Current	1,55 A	1,50 A

APPROVALS

TEST CYCLE CONDITIONS

	ASHRAE	**CECOMAF**
	HMBP (D)	**HMBP (C)**
Evaporating temp. (T_e)	7,2 ºC	5,0 ºC
Condensing temp. (T_c)	55,0 ºC	55,0 ºC
Liquid temp. ($T_{liq.}$)	46,0 ºC	55,0 ºC
Ambient temp. ($T_{amb.}$)	35,0 ºC	32,0 ºC
Suction temp. ($T_{suction}$)	35,0 ºC	32,0 ºC
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 127. + NTC15Ω			
Pick-Up	4,80 A			
Drop-Out	4,10 A			
Protector	Option 1			
Reference	T0289			
Current	9,50 A			
Time check	7,5-14 seg			
Disc temp. (Open/Close)	110,00 / 52,00 ºC			

Technical Data Sheet

cubigel compressors

ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	203	148	0,84	1,60	1,37
40	-20	272	166	0,91	1,91	1,65
40	-15	355	184	0,99	2,25	1,93
40	-10	451	203	1,07	2,58	2,22
40	-5	561	224	1,16	2,91	2,51
40	0	684	245	1,25	3,24	2,79
40	5	821	268	1,34	3,56	3,06
40	7,2	885	278	1,39	3,70	3,18
40	10	971	291	1,45	3,88	3,33
45	-25	191	151	0,85	1,47	1,27
45	-20	255	170	0,93	1,75	1,50
45	-15	332	190	1,01	2,04	1,75
45	-10	423	211	1,10	2,34	2,01
45	-5	528	233	1,19	2,64	2,27
45	0	645	256	1,29	2,94	2,52
45	5	776	279	1,39	3,23	2,78
45	7,2	838	290	1,44	3,36	2,89
45	10	921	304	1,50	3,52	3,03
50	-25	179	153	0,86	1,36	1,17
50	-20	238	174	0,94	1,59	1,37
50	-15	310	195	1,03	1,84	1,59
50	-10	395	218	1,13	2,11	1,81
50	-5	494	241	1,23	2,38	2,05
50	0	606	266	1,33	2,65	2,28
50	5	732	291	1,45	2,92	2,51
50	7,2	792	303	1,50	3,04	2,62
50	10	871	318	1,56	3,19	2,74
55	-25	167	156	0,87	1,25	1,07
55	-20	220	178	0,96	1,44	1,24
55	-15	287	201	1,06	1,66	1,43
55	-10	367	225	1,16	1,90	1,63
55	-5	461	250	1,27	2,14	1,84
55	0	567	276	1,38	2,39	2,06
55	5	688	303	1,50	2,64	2,27
55	7,2	745	315	1,55	2,75	2,37
55	10	822	331	1,62	2,89	2,48
60	-25	155	159	0,88	1,14	0,98
60	-20	203	182	0,98	1,30	1,11
60	-15	264	207	1,08	1,49	1,28
60	-10	339	232	1,19	1,70	1,46
60	-5	427	259	1,30	1,92	1,65
60	0	529	286	1,42	2,15	1,85
60	5	643	315	1,55	2,38	2,05
60	7,2	698	327	1,60	2,48	2,13
60	10	772	344	1,68	2,61	2,24
65	-25	143	161	0,89	1,03	0,89
65	-20	185	186	1,00	1,16	1,00
65	-15	241	212	1,11	1,32	1,14
65	-10	311	239	1,22	1,51	1,30
65	-5	393	267	1,34	1,71	1,47
65	0	490	296	1,47	1,92	1,65
65	5	599	326	1,60	2,14	1,84
65	7,2	652	340	1,66	2,23	1,92
65	10	722	357	1,74	2,35	2,02

CECOMAF

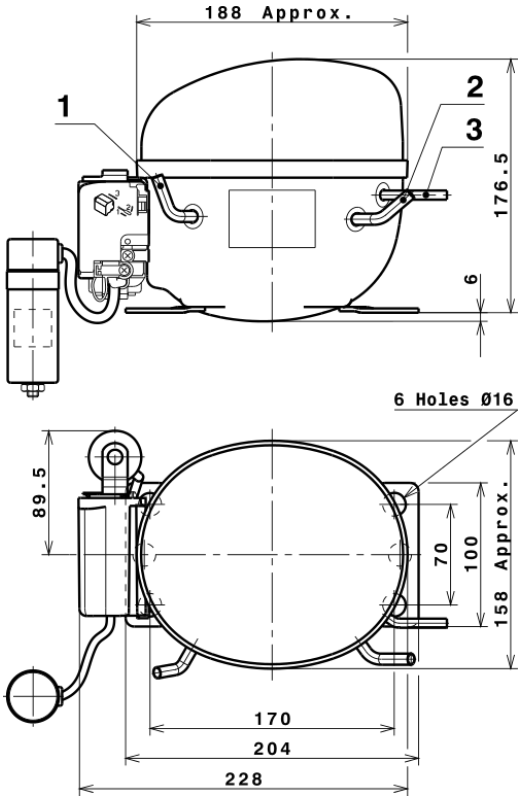
Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	219	149	0,84	1,47	1,27
40	-20	294	166	0,91	1,77	1,53
40	-15	384	185	0,99	2,07	1,79
40	-10	488	205	1,07	2,38	2,06
40	-5	606	225	1,16	2,69	2,32
40	0	738	247	1,25	2,99	2,58
40	5	884	270	1,35	3,28	2,83
40	7,2	952	280	1,40	3,40	2,94
40	10	1.044	293	1,45	3,56	3,08
45	-25	205	151	0,85	1,35	1,17
45	-20	274	171	0,93	1,61	1,39
45	-15	357	191	1,01	1,87	1,62
45	-10	454	212	1,10	2,15	1,85
45	-5	566	234	1,20	2,42	2,09
45	0	692	257	1,30	2,69	2,32
45	5	831	281	1,40	2,96	2,55
45	7,2	897	292	1,45	3,07	2,65
45	10	985	306	1,51	3,21	2,78
50	-25	191	154	0,86	1,24	1,07
50	-20	253	175	0,95	1,45	1,25
50	-15	330	196	1,04	1,68	1,45
50	-10	421	219	1,13	1,92	1,66
50	-5	526	243	1,24	2,17	1,87
50	0	646	267	1,34	2,41	2,09
50	5	779	293	1,45	2,66	2,30
50	7,2	842	305	1,50	2,76	2,39
50	10	926	320	1,57	2,90	2,50
55	-25	177	157	0,87	1,13	0,97
55	-20	233	179	0,97	1,30	1,13
55	-15	304	202	1,06	1,50	1,30
55	-10	388	226	1,17	1,72	1,48
55	-5	487	251	1,27	1,94	1,67
55	0	600	278	1,39	2,16	1,87
55	5	727	305	1,50	2,38	2,06
55	7,2	787	317	1,56	2,48	2,14
55	10	868	333	1,63	2,61	2,25
60	-25	163	160	0,88	1,02	0,88
60	-20	213	183	0,98	1,16	1,00
60	-15	277	208	1,09	1,33	1,15
60	-10	355	233	1,20	1,52	1,31
60	-5	447	260	1,31	1,72	1,49
60	0	554	288	1,43	1,92	1,66
60	5	674	317	1,56	2,13	1,84
60	7,2	732	329	1,61	2,22	1,92
60	10	809	346	1,69	2,34	2,02
65	-25	149	162	0,90	0,92	0,79
65	-20	192	187	1,00	1,03	0,89
65	-15	250	214	1,11	1,17	1,01
65	-10	322	241	1,23	1,34	1,16
65	-5	408	269	1,35	1,52	1,31
65	0	508	298	1,48	1,70	1,47
65	5	622	328	1,61	1,89	1,64
65	7,2	676	342	1,67	1,98	1,71
65	10	750	359	1,75	2,09	1,80

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.109,7100881058	169,1523010205	0,9115399742	18,337443411807
2	38,1567402633	2,1170393342	0,0088723230	0,71215357150822
3	-9,5405101141	2,1040786606	0,0092143718	-0,052895922889091
4	0,2775862659	0,0223162210	0,0001171051	0,0080827555620401
5	-0,2672658963	0,0622391118	0,0002776639	-0,001254785396072

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

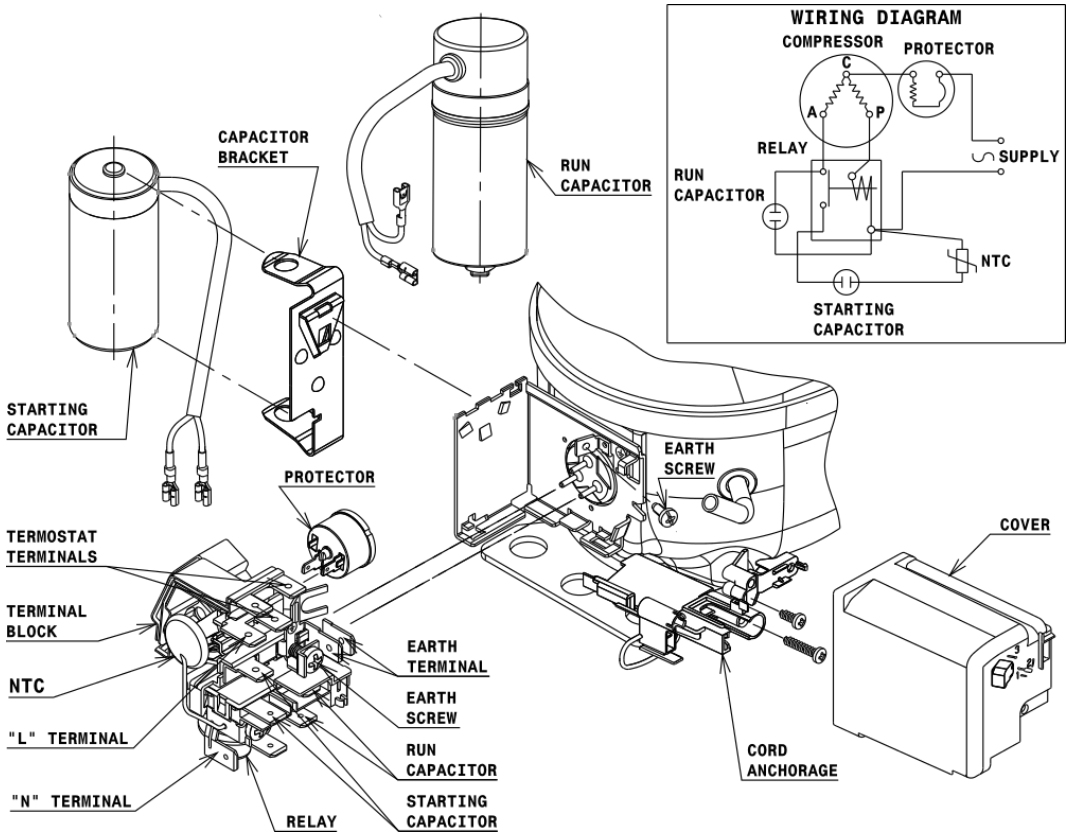
COMPRESSOR DIMENSIONS



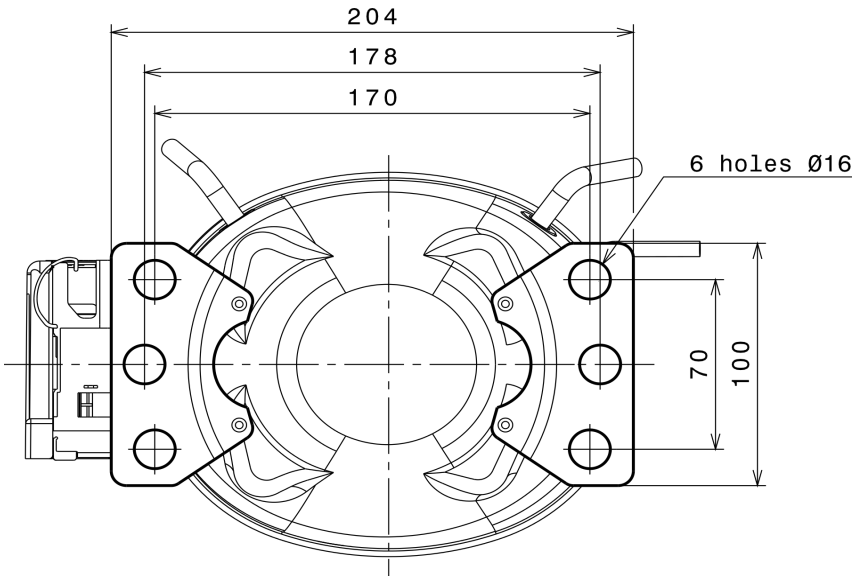
	DESIGNATION	INTERNAL DIAM.
1	Service	6,2 mm
2	Suction	6,2 mm
3	Discharge	4,9 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

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



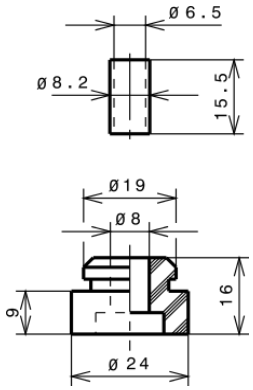
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

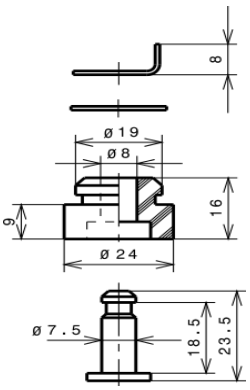
STANDARD

Ø16 holes (170x70 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R134a HMBP