

# Technical Data Sheet

Compressor model **GU45TG**  
 Voltage **200-230/220-240V 50/60Hz ~1**  
 Refrigerant **R134a**

## APPLICATION

## COMPRESSOR

## MOTOR

Application	High-Medium Back Pressure	Displacement	4,50 cm <sup>3</sup>	Nominal Power	1/6 hp
Refrigerant	R134a	Diameter	22,00 mm	Voltage/Frequency	200-230V 50Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	11,88 mm	Voltage range	170-253 V
Expansion	Capillar/Valve	Net Weight	8,60 Kg	Type	CSIR
Comp. Cooling	Fan cooled	Oil type	ISO VG 22 ESTER	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	220 cm <sup>3</sup>	Locked Rotor Amps (LRA)	8,90 A
Compatible refriger.	R1234yf			Main W. resist. at 25°C	17,00 Ω
				Start W. resist. at 25°C	40,30 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	404 kCal/h	393 W
COP	2,40 W/W	2,07 W/W
EER	2,06 kCal/Wh	1,79 kCal/Wh
Input Power	196 W	190 W
Current	1,29 A	1,26 A

## APPROVALS



## TEST CYCLE CONDITIONS

	ASHRAE HMBP (D)	CECOMAF HMBP (C)
Evaporating temp. (T <sub>e</sub> )	7,2 °C	5,0 °C
Condensing temp. (T <sub>c</sub> )	55,0 °C	55,0 °C
Liquid temp. (T <sub>liq.</sub> )	46,0 °C	55,0 °C
Ambient temp. (T <sub>amb.</sub> )	35,0 °C	32,0 °C
Suction temp. (T <sub>suction</sub> )	35,0 °C	32,0 °C
Voltage/Frequency	200 V 50 Hz	200 V 50 Hz

## ELECTRICAL COMPONENTS

Starting capacitor	50 µF 330 V			
Relay	Option 1			
Reference	QLZ-4.0A			
Pick-Up	4.00 V			
Drop-Out	3.40 V			
Protector	Option 1			
Reference	B85-130			
Current	9,00 A			
Time check	7,5-16 seg			
Disc temp. (Open/Close)	130,00 / 62,00 °C			

## ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	114	92	0,88	1,44	1,24
40	-20	152	103	0,92	1,72	1,48
40	-15	197	114	0,95	2,02	1,74
40	-10	250	124	0,99	2,34	2,01
40	-5	311	135	1,03	2,67	2,30
40	0	379	146	1,07	3,01	2,59
40	5	454	157	1,12	3,36	2,89
40	7,2	490	162	1,14	3,52	3,02
40	10	537	168	1,16	3,72	3,20

45	-25	105	94	0,89	1,30	1,12
45	-20	140	106	0,93	1,54	1,32
45	-15	182	118	0,97	1,79	1,54
45	-10	232	131	1,01	2,07	1,78
45	-5	290	143	1,06	2,36	2,03
45	0	355	155	1,11	2,65	2,28
45	5	427	168	1,16	2,96	2,54
45	7,2	461	173	1,19	3,10	2,66
45	10	507	180	1,22	3,27	2,81

50	-25	96	95	0,89	1,17	1,01
50	-20	128	109	0,94	1,36	1,17
50	-15	167	123	0,99	1,58	1,36
50	-10	214	137	1,04	1,82	1,57
50	-5	269	151	1,09	2,07	1,78
50	0	330	165	1,15	2,33	2,01
50	5	400	179	1,21	2,60	2,24
50	7,2	433	185	1,24	2,72	2,34
50	10	477	192	1,27	2,88	2,48

55	-25	87	97	0,90	1,04	0,90
55	-20	116	112	0,95	1,20	1,03
55	-15	152	128	1,00	1,39	1,19
55	-10	196	143	1,06	1,59	1,37
55	-5	247	158	1,12	1,82	1,56
55	0	306	174	1,19	2,05	1,76
55	5	372	189	1,26	2,29	1,97
55	7,2	404	196	1,29	2,40	2,06
55	10	446	205	1,33	2,54	2,18

60	-25	78	99	0,91	0,92	0,79
60	-20	104	115	0,96	1,05	0,90
60	-15	137	132	1,02	1,20	1,04
60	-10	178	149	1,08	1,39	1,19
60	-5	226	166	1,15	1,58	1,36
60	0	282	183	1,23	1,79	1,54
60	5	345	200	1,31	2,01	1,73
60	7,2	375	207	1,35	2,11	1,81
60	10	416	217	1,39	2,23	1,92

65	-25	69	100	0,91	0,80	0,69
65	-20	92	119	0,97	0,90	0,77
65	-15	122	137	1,04	1,04	0,89
65	-10	160	155	1,11	1,20	1,03
65	-5	205	174	1,19	1,37	1,18
65	0	258	192	1,27	1,56	1,34
65	5	318	211	1,36	1,76	1,51
65	7,2	347	219	1,40	1,84	1,59
65	10	386	229	1,46	1,96	1,68

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	123	92	0,89	1,33	1,15
40	-20	164	103	0,92	1,59	1,37
40	-15	213	114	0,96	1,87	1,61
40	-10	271	125	0,99	2,16	1,87
40	-5	336	136	1,03	2,46	2,13
40	0	408	147	1,08	2,78	2,40
40	5	489	158	1,12	3,09	2,67
40	7,2	527	163	1,14	3,23	2,79
40	10	578	169	1,17	3,41	2,95

45	-25	113	94	0,89	1,20	1,03
45	-20	150	107	0,93	1,41	1,22
45	-15	196	119	0,97	1,65	1,42
45	-10	249	131	1,02	1,90	1,64
45	-5	311	144	1,06	2,16	1,87
45	0	380	156	1,11	2,43	2,10
45	5	457	169	1,17	2,71	2,34
45	7,2	494	174	1,19	2,83	2,45
45	10	542	181	1,22	2,99	2,58

50	-25	102	96	0,90	1,07	0,92
50	-20	136	110	0,94	1,24	1,07
50	-15	178	124	0,99	1,44	1,25
50	-10	228	138	1,04	1,66	1,43
50	-5	286	152	1,09	1,89	1,63
50	0	352	166	1,15	2,12	1,84
50	5	425	180	1,21	2,37	2,05
50	7,2	460	186	1,24	2,48	2,14
50	10	507	194	1,28	2,62	2,26

55	-25	92	98	0,90	0,94	0,82
55	-20	123	113	0,95	1,09	0,94
55	-15	161	128	1,01	1,25	1,08
55	-10	207	144	1,06	1,44	1,25
55	-5	261	159	1,13	1,64	1,42
55	0	323	175	1,19	1,85	1,60
55	5	393	190	1,26	2,07	1,79
55	7,2	427	197	1,30	2,16	1,87
55	10	471	206	1,34	2,29	1,98

60	-25	82	99	0,91	0,82	0,71
60	-20	109	116	0,96	0,94	0,81
60	-15	144	133	1,02	1,08	0,93
60	-10	186	150	1,09	1,24	1,07
60	-5	237	167	1,16	1,42	1,22
60	0	295	184	1,23	1,60	1,39
60	5	361	201	1,31	1,80	1,55
60	7,2	393	209	1,35	1,88	1,63
60	10	436	218	1,40	2,00	1,72

65	-25	72	101	0,91	0,71	0,61
65	-20	95	119	0,97	0,80	0,69
65	-15	126	138	1,04	0,92	0,79
65	-10	165	156	1,11	1,06	0,91
65	-5	212	175	1,19	1,21	1,05
65	0	267	193	1,28	1,38	1,19
65	5	330	212	1,37	1,56	1,34
65	7,2	360	220	1,41	1,63	1,41
65	10	400	231	1,47	1,74	1,50

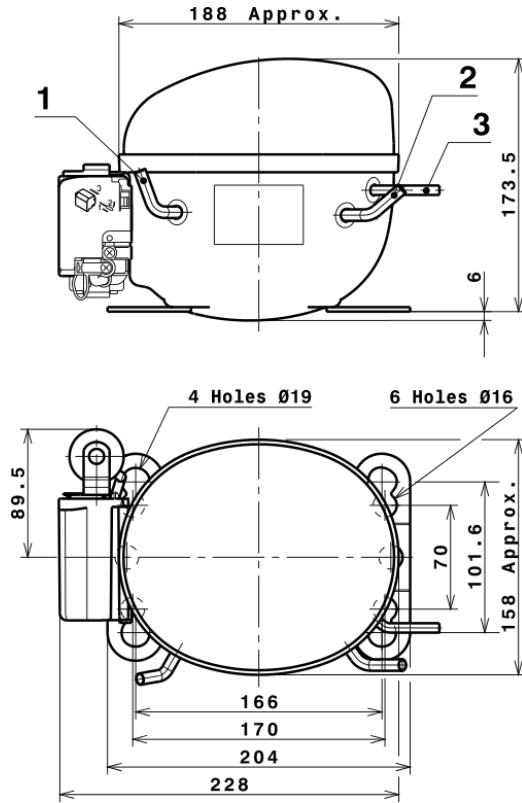
## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	637,0493678920	75,0621117544	0,7380336870	10,747631556125
2	21,2145135383	-0,1870778302	-0,0020851680	0,39790437153113
3	-5,8444836193	1,8974559508	0,0086354414	-0,044063074890168
4	0,1549859146	0,0017693125	0,0000962170	0,0045012834969043
5	-0,1509253763	0,0621957164	0,0003032130	-0,00080223958022812

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

# Technical Data Sheet

## COMPRESSOR DIMENSIONS

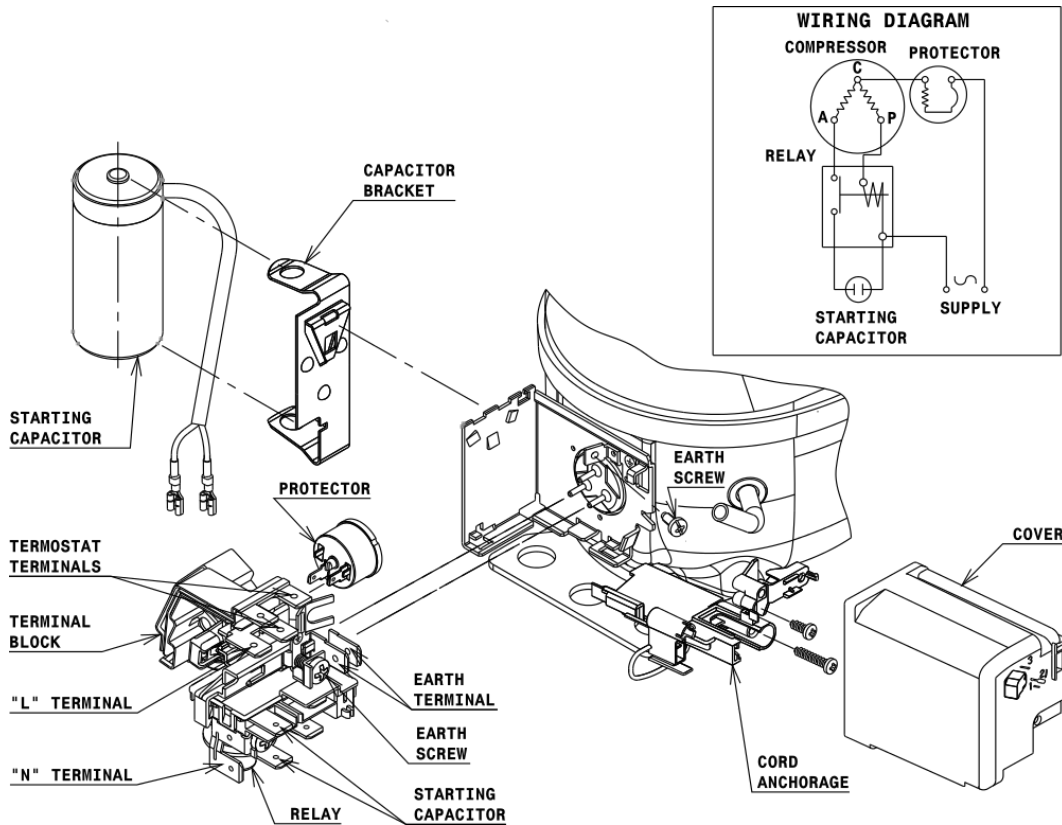


## DESIGNATION INTERNAL DIAM.

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

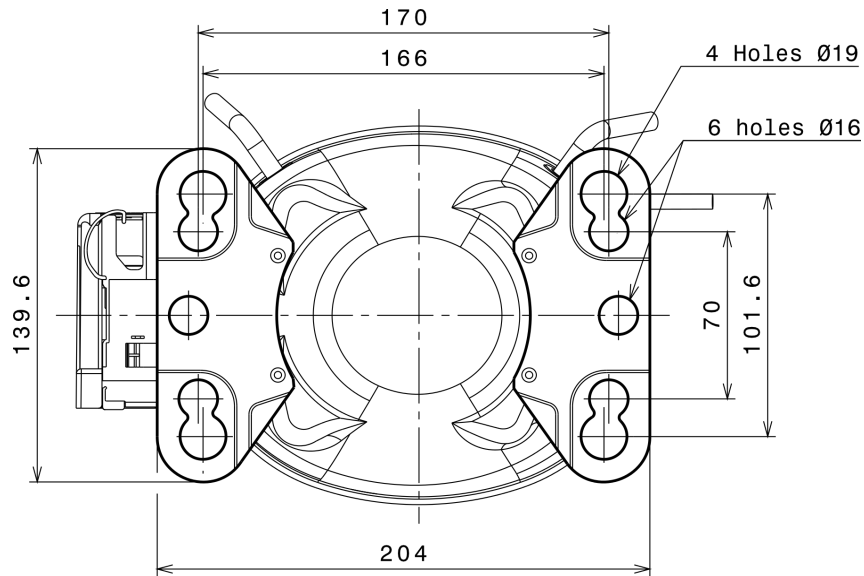
## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### CSIR CONNECTION (U range)



# Technical Data Sheet

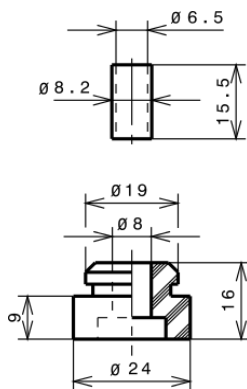
## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

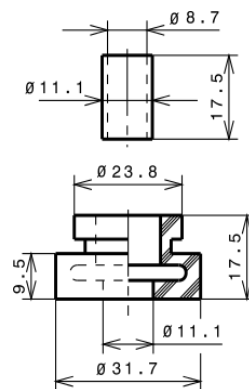
### STANDARD

$\varnothing 16$  holes (170x70 net)



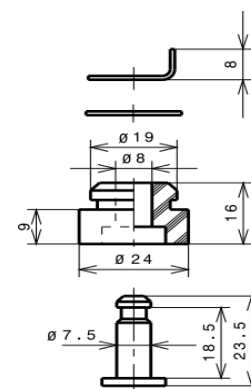
### AMERICAN FEET

$\varnothing 19$  holes (166x101.6 net)



### SNAP-ON

$\varnothing 16$  holes (170x70 net)



## SOA

SOA R134a HMBP

