Technical Data Sheet

Compressor model **GL45TG**

Voltage **200-240/220-230V 50/60Hz ~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	4,56 cm³
Diameter	19,09 mm
Stroke	15,93 mm
Net Weight	8,78 Kg
Oil type	ISO VG 32 ESTER
Oil charge	300 cm³

MOTOR

Nominal Power	1/6 hp
Voltage/Frequency	200-240V 50Hz
Voltage range	170-255 V
Type	CSIR
Phase number	1 PH
Locked Rotor Amps (LRA)	9,80 A
Max. Cont. Current (MCC)	2,00 A
Main W. resist. at 25ºC	14,33 Ω
Start W. resist. at 25ºC	38,66 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	352 kCal/h	341 W
COP	1,95 W/W	1,67 W/W
EER	1,68 kCal/Wh	1,44 kCal/Wh
Input Power	210 W	204 W
Current	1,40 A	1,38 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	200 V 50 Hz	200 V 50 Hz

ELECTRICAL COMPONENTS

Starting capacitor	47- 56 µF 330 V			
Relay	Option 1			
Reference	2014 127.			
Pick-Up	4,80 A			
Drop-Out	4,10 A			
Protector	Option 1	Option 2		
Reference	T0078	AE26FHY		
Current	7,10 A	7,10 A		
Time check	7,5-14 seg	7,5-14 seg		
Disc temp. (Open/Close)	110,00 / 62,00 ºC	105,00 / 62,00 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	96	105	1,00	1,06	0,91
40	-20	130	117	1,05	1,29	1,11
40	-15	172	129	1,10	1,55	1,33
40	-10	221	141	1,15	1,82	1,57
40	-5	277	153	1,19	2,11	1,82
40	0	341	164	1,23	2,42	2,08
40	5	412	175	1,28	2,73	2,35
40	7,2	445	180	1,29	2,88	2,47
40	10	490	186	1,32	3,06	2,63
45	-25	88	105	1,00	0,97	0,84
45	-20	119	119	1,06	1,16	1,00
45	-15	157	132	1,11	1,38	1,19
45	-10	202	146	1,16	1,62	1,39
45	-5	255	159	1,21	1,87	1,61
45	0	315	172	1,26	2,13	1,83
45	5	382	184	1,31	2,41	2,07
45	7,2	414	190	1,33	2,53	2,18
45	10	457	197	1,35	2,70	2,32
50	-25	80	105	1,00	0,89	0,76
50	-20	107	120	1,06	1,04	0,89
50	-15	142	135	1,12	1,22	1,05
50	-10	184	150	1,18	1,42	1,22
50	-5	233	165	1,24	1,64	1,41
50	0	289	180	1,29	1,87	1,61
50	5	353	194	1,34	2,12	1,82
50	7,2	383	200	1,37	2,23	1,92
50	10	424	208	1,39	2,37	2,04
55	-25	72	105	1,00	0,80	0,69
55	-20	96	122	1,07	0,91	0,79
55	-15	127	139	1,14	1,06	0,91
55	-10	165	155	1,20	1,24	1,06
55	-5	211	171	1,26	1,43	1,23
55	0	263	187	1,32	1,63	1,41
55	5	323	203	1,38	1,85	1,59
55	7,2	352	210	1,40	1,95	1,68
55	10	391	219	1,43	2,08	1,79
60	-25	64	105	1,00	0,71	0,61
60	-20	84	123	1,08	0,79	0,68
60	-15	112	142	1,15	0,92	0,79
60	-10	146	160	1,22	1,07	0,92
60	-5	188	177	1,28	1,23	1,06
60	0	237	195	1,35	1,42	1,22
60	5	294	212	1,41	1,61	1,38
60	7,2	321	220	1,43	1,70	1,46
60	10	358	230	1,47	1,81	1,56
65	-25	56	105	1,00	0,62	0,53
65	-20	73	125	1,08	0,68	0,58
65	-15	96	145	1,16	0,78	0,67
65	-10	128	164	1,24	0,90	0,78
65	-5	166	184	1,31	1,05	0,90
65	0	212	203	1,38	1,21	1,04
65	5	264	222	1,44	1,39	1,19
65	7,2	290	230	1,47	1,47	1,26
65	10	325	240	1,50	1,57	1,35

CECOMAF

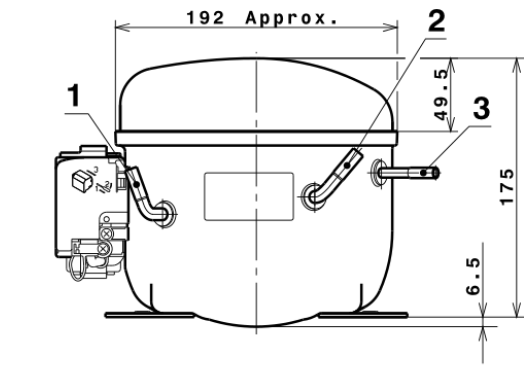
Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	103	106	1,00	0,98	0,85
40	-20	141	118	1,05	1,20	1,03
40	-15	186	130	1,10	1,43	1,24
40	-10	239	142	1,15	1,68	1,46
40	-5	299	153	1,19	1,95	1,69
40	0	367	165	1,24	2,23	1,92
40	5	443	176	1,28	2,51	2,17
40	7,2	479	181	1,30	2,64	2,28
40	10	527	187	1,32	2,81	2,43
45	-25	94	106	1,00	0,89	0,77
45	-20	128	119	1,06	1,07	0,92
45	-15	169	133	1,11	1,27	1,10
45	-10	217	146	1,17	1,48	1,28
45	-5	274	160	1,22	1,71	1,48
45	0	338	173	1,27	1,95	1,69
45	5	409	186	1,31	2,20	1,90
45	7,2	443	191	1,33	2,32	2,00
45	10	488	198	1,36	2,46	2,13
50	-25	85	106	1,00	0,81	0,70
50	-20	115	121	1,07	0,95	0,82
50	-15	151	136	1,13	1,11	0,96
50	-10	196	151	1,19	1,30	1,12
50	-5	248	166	1,24	1,49	1,29
50	0	308	181	1,30	1,71	1,47
50	5	375	195	1,35	1,92	1,66
50	7,2	407	201	1,37	2,02	1,75
50	10	450	209	1,40	2,15	1,86
55	-25	76	106	1,00	0,72	0,62
55	-20	101	123	1,07	0,83	0,71
55	-15	134	139	1,14	0,96	0,83
55	-10	174	156	1,20	1,12	0,97
55	-5	223	172	1,26	1,29	1,12
55	0	278	188	1,32	1,48	1,28
55	5	341	204	1,38	1,67	1,44
55	7,2	372	211	1,40	1,76	1,52
55	10	412	220	1,43	1,87	1,62
60	-25	67	106	1,00	0,64	0,55
60	-20	88	124	1,08	0,71	0,61
60	-15	117	142	1,15	0,82	0,71
60	-10	153	161	1,22	0,95	0,82
60	-5	197	178	1,29	1,10	0,95
60	0	248	196	1,35	1,27	1,09
60	5	308	214	1,41	1,44	1,24
60	7,2	336	221	1,44	1,52	1,31
60	10	374	231	1,47	1,62	1,40
65	-25	58	106	1,00	0,55	0,48
65	-20	75	126	1,08	0,60	0,52
65	-15	99	146	1,16	0,68	0,59
65	-10	132	165	1,24	0,80	0,69
65	-5	171	185	1,31	0,93	0,80
65	0	219	204	1,38	1,07	0,93
65	5	274	223	1,44	1,23	1,06
65	7,2	300	231	1,47	1,30	1,12
65	10	336	242	1,51	1,39	1,20

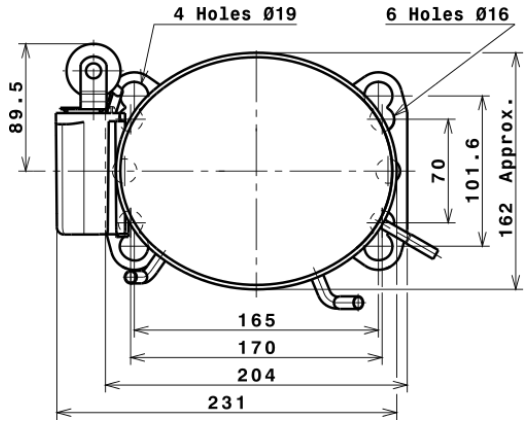
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	606,4606541133	104,9917342809	1,0322764254	10,534537052034
2	21,0126531696	-0,1904319208	-0,0004723060	0,40392313008291
3	-6,0917432950	1,6066394149	0,0056279755	-0,061353765979711
4	0,1499819005	-0,0029522787	-0,0000511688	0,0043121878449157
5	-0,1704277782	0,0642655766	0,0002251190	-0,0015567142576566

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

COMPRESSOR DIMENSIONS

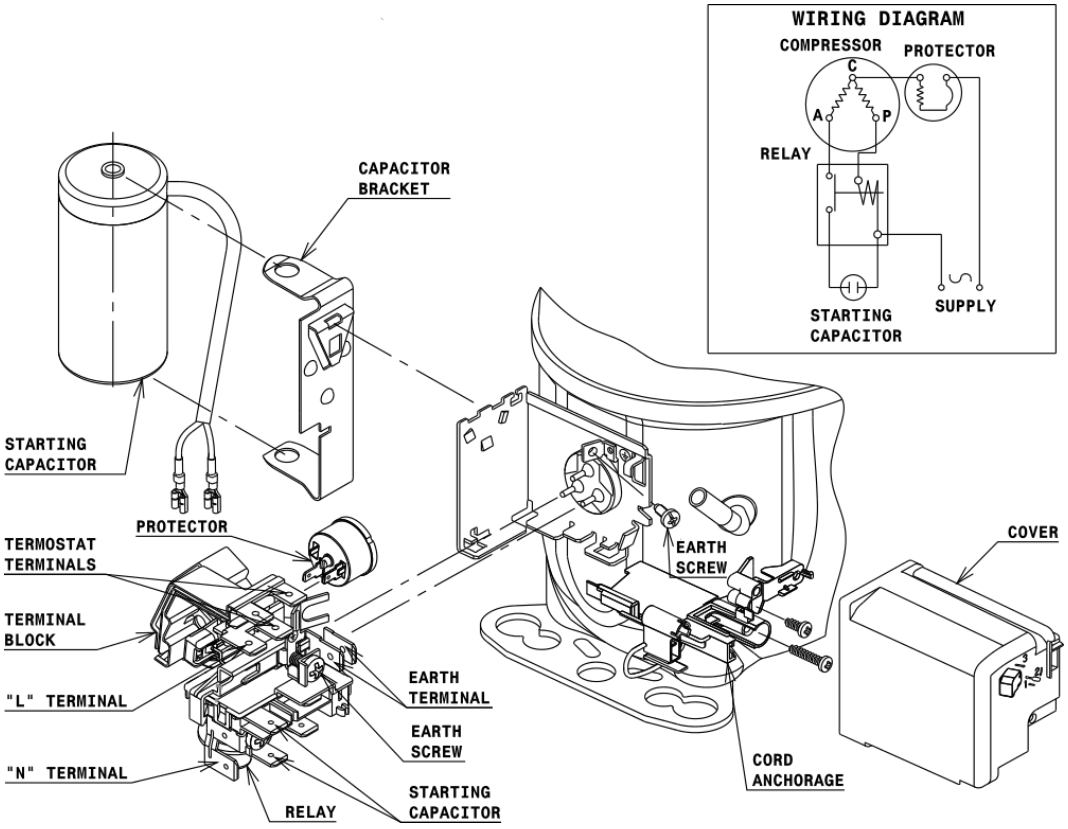




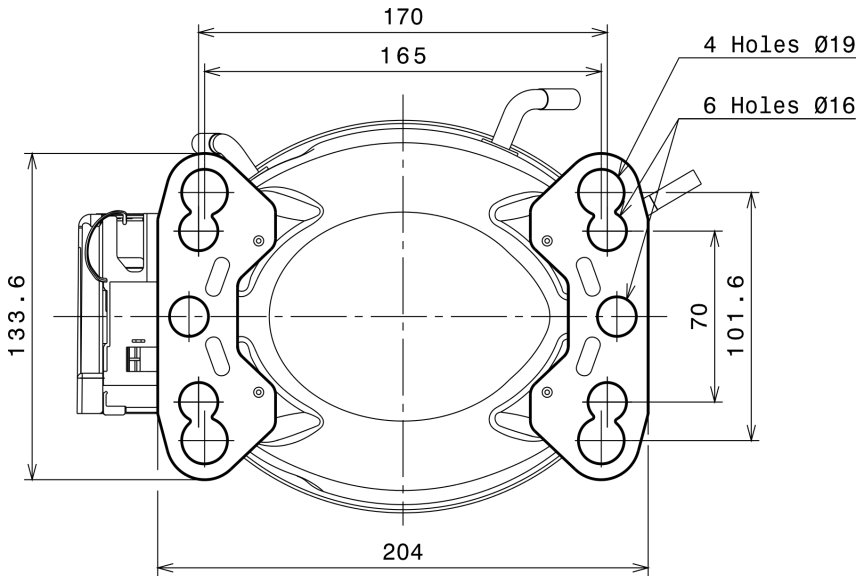
	DESIGNATION	INTERNAL DIAM.
1	Suction	6,5 mm
2	Service	6,5 mm
3	Discharge	4,9 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSIR CONNECTION (L, P ranges)



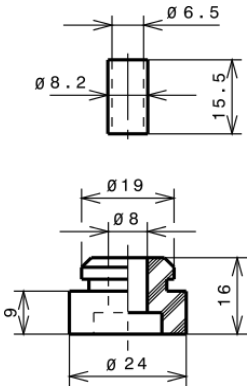
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

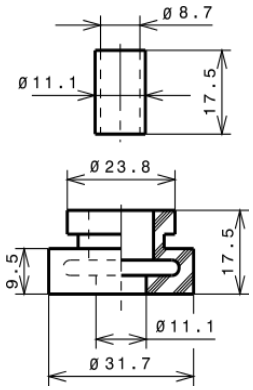
STANDARD

Ø16 holes (170x70 net)



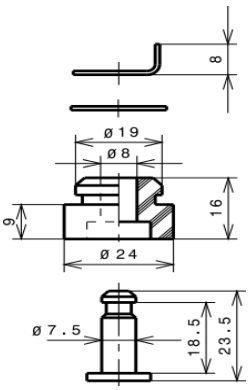
AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R134a HMBP