Technical Data Sheet

ENGINEERING TOMORROW

Compressor model **GUY80NRb**

Voltage **115-127V 60Hz ~1**

Refrigerant **R134a**

APPLICATION

Application	Low-Medium Back Pressure
Refrigerant	R134a
Evaporating Temp.	-35,0 ºC to -5,0 ºC
Expansion	Capillar/Valve
Comp. Cooling	Fan cooled
Max. ambient temp.	43,0 ºC
Compatible refriger.	R1234yf

COMPRESSOR

Displacement	8,10 cm³
Diameter	24,29 mm
Stroke	17,50 mm
Net Weight	9,40 Kg
Oil type	ISO VG 10 ESTER
Oil charge	220 cm³

MOTOR

Nominal Power	1/4 hp
Voltage/Frequency	115-127V 60Hz
Voltage range	98-140 V
Type	CSIR
Phase number	1 PH
Locked Rotor Amps (LRA)	24,70 A
Max. Cont. Current (MCC)	5,00 A
Main W. resist. at 25ºC	2,15 Ω
Start W. resist. at 25ºC	12,30 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	228 kCal/h	193 W
COP	1,45 W/W	1,11 W/W
EER	1,25 kCal/Wh	0,96 kCal/Wh
Input Power	183 W	173 W
Current	2,53 A	2,48 A

APPROVALS

TEST CYCLE CONDITIONS

	ASHRAE	**CECOMAF**
	LMBP (B)	**LMBP (A)**
Evaporating temp. (T_e)	-23,3 ºC	-25,0 ºC
Condensing temp. (T_c)	55,0 ºC	55,0 ºC
Liquid temp. ($T_{liq.}$)	32,0 ºC	55,0 ºC
Ambient temp. ($T_{amb.}$)	32,0 ºC	32,0 ºC
Suction temp. ($T_{suction}$)	32,0 ºC	32,0 ºC
Voltage/Frequency	115 V 60 Hz	115 V 60 Hz

ELECTRICAL COMPONENTS

Starting capacitor	150 µF 160 V			
Relay	Option 1			
Reference	2014 166.			
Pick-Up	11,00 A			
Drop-Out	9,35 A			
Protector	Option 1			
Reference	T0267			
Current	11,00 A			
Time check	7,5-14 seg			
Disc temp. (Open/Close)	105,00 / 52,00 ºC			

Technical Data Sheet

ENGINEERING TOMORROW

ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	120	121	2,21	1,15	0,99
40	-30	167	138	2,29	1,41	1,22
40	-25	230	157	2,39	1,70	1,46
40	-23,3	255	165	2,43	1,80	1,55
40	-20	308	180	2,51	1,99	1,71
40	-15	402	206	2,67	2,27	1,95
40	-10	511	234	2,85	2,53	2,18
40	-5	635	266	3,07	2,78	2,39
45	-35	114	122	2,21	1,09	0,94
45	-30	160	141	2,30	1,32	1,14
45	-25	222	163	2,42	1,58	1,36
45	-23,3	246	171	2,46	1,68	1,44
45	-20	298	188	2,56	1,85	1,59
45	-15	391	215	2,73	2,11	1,81
45	-10	498	246	2,93	2,35	2,02
45	-5	621	280	3,17	2,58	2,22
50	-35	109	123	2,22	1,03	0,88
50	-30	153	144	2,32	1,24	1,06
50	-25	213	168	2,45	1,48	1,27
50	-23,3	237	177	2,50	1,56	1,34
50	-20	288	195	2,60	1,72	1,48
50	-15	379	225	2,79	1,96	1,68
50	-10	485	258	3,01	2,19	1,88
50	-5	606	294	3,28	2,40	2,06
55	-35	103	124	2,22	0,97	0,83
55	-30	146	147	2,33	1,15	0,99
55	-25	205	173	2,48	1,37	1,18
55	-23,3	228	183	2,53	1,45	1,25
55	-20	278	203	2,65	1,60	1,37
55	-15	368	235	2,85	1,82	1,57
55	-10	472	270	3,10	2,03	1,75
55	-5	592	308	3,39	2,24	1,92
60	-35	97	125	2,22	0,91	0,78
60	-30	139	150	2,35	1,08	0,92
60	-25	196	179	2,51	1,28	1,10
60	-23,3	219	189	2,57	1,35	1,16
60	-20	268	210	2,69	1,49	1,28
60	-15	356	244	2,92	1,69	1,46
60	-10	459	282	3,19	1,90	1,63
60	-5	578	322	3,50	2,09	1,79
65	-35	92	126	2,23	0,85	0,73
65	-30	132	154	2,37	1,00	0,86
65	-25	188	184	2,54	1,18	1,02
65	-23,3	210	195	2,60	1,25	1,08
65	-20	258	218	2,74	1,38	1,19
65	-15	345	254	2,99	1,58	1,36
65	-10	446	294	3,28	1,77	1,52
65	-5	563	336	3,62	1,95	1,68

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	131	121	2,21	1,08	0,93
40	-30	188	138	2,29	1,37	1,18
40	-25	260	157	2,39	1,65	1,43
40	-23,3	288	165	2,43	1,75	1,51
40	-20	346	180	2,51	1,92	1,66
40	-15	447	206	2,67	2,17	1,88
40	-10	562	234	2,85	2,40	2,07
40	-5	691	266	3,07	2,60	2,24
45	-35	120	122	2,21	0,98	0,85
45	-30	172	141	2,30	1,22	1,05
45	-25	238	163	2,42	1,46	1,26
45	-23,3	264	171	2,46	1,54	1,33
45	-20	318	188	2,56	1,70	1,47
45	-15	413	215	2,73	1,92	1,66
45	-10	523	246	2,93	2,12	1,83
45	-5	647	280	3,17	2,31	1,99
50	-35	109	123	2,22	0,88	0,76
50	-30	155	144	2,32	1,08	0,93
50	-25	216	168	2,45	1,28	1,11
50	-23,3	239	177	2,50	1,35	1,17
50	-20	291	195	2,60	1,49	1,29
50	-15	380	225	2,79	1,69	1,46
50	-10	484	258	3,01	1,88	1,62
50	-5	602	294	3,28	2,05	1,77
55	-35	97	124	2,22	0,79	0,68
55	-30	138	147	2,33	0,94	0,81
55	-25	193	173	2,48	1,11	0,96
55	-23,3	215	183	2,53	1,18	1,02
55	-20	263	203	2,65	1,30	1,12
55	-15	347	235	2,85	1,48	1,28
55	-10	445	270	3,10	1,65	1,42
55	-5	558	308	3,39	1,81	1,56
60	-35	86	125	2,22	0,69	0,60
60	-30	122	150	2,35	0,81	0,70
60	-25	171	179	2,51	0,96	0,83
60	-23,3	191	189	2,57	1,01	0,87
60	-20	235	210	2,69	1,12	0,97
60	-15	313	244	2,92	1,28	1,11
60	-10	406	282	3,19	1,44	1,25
60	-5	513	322	3,50	1,59	1,38
65	-35	75	126	2,23	0,60	0,52
65	-30	105	154	2,37	0,68	0,59
65	-25	149	184	2,54	0,81	0,70
65	-23,3	167	195	2,60	0,86	0,74
65	-20	207	218	2,74	0,95	0,82
65	-15	280	254	2,99	1,10	0,95
65	-10	367	294	3,28	1,25	1,08
65	-5	469	336	3,62	1,39	1,21

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ENGINEERING TOMORROW

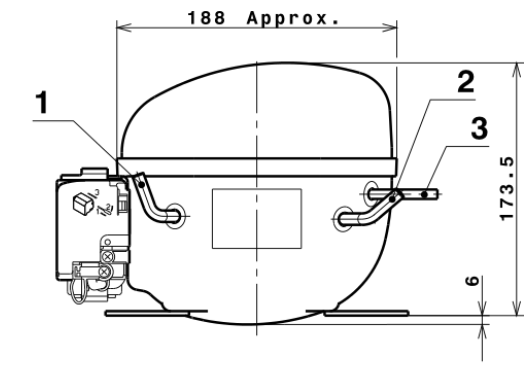
EN12900

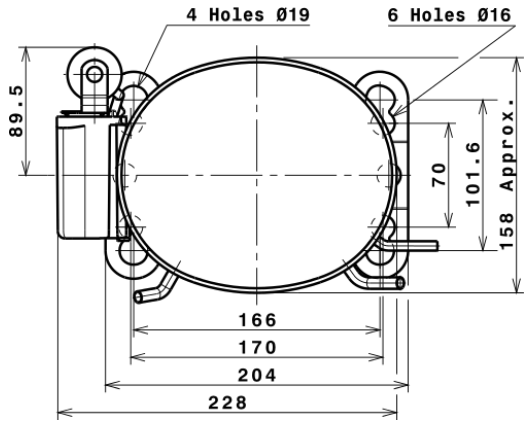
X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.232,9258173997	175,7270571371	2,3646360743	21,648120922452
2	38,8211275052	3,8929116736	0,0305096302	0,77465629274897
3	-10,2813176270	3,3134897809	0,0257445050	-0,075825234057585
4	0,2807981969	0,0620038152	0,0007203890	0,0076216868174524
5	-0,2296539189	0,0888339774	0,0007078134	-0,001407789160263

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

Technical Data Sheet

COMPRESSOR DIMENSIONS

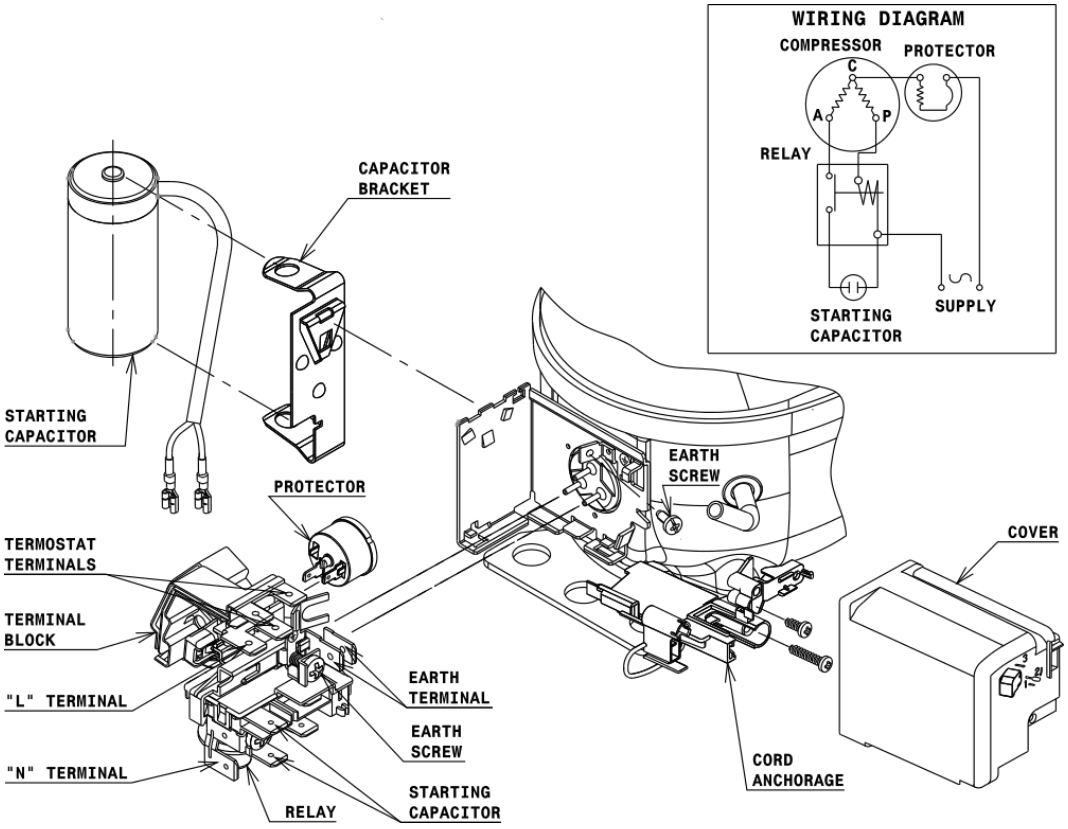




	DESIGNATION	INTERNAL DIAM.
1	Service	6,2 mm
2	Suction	6,2 mm
3	Discharge	4,9 mm

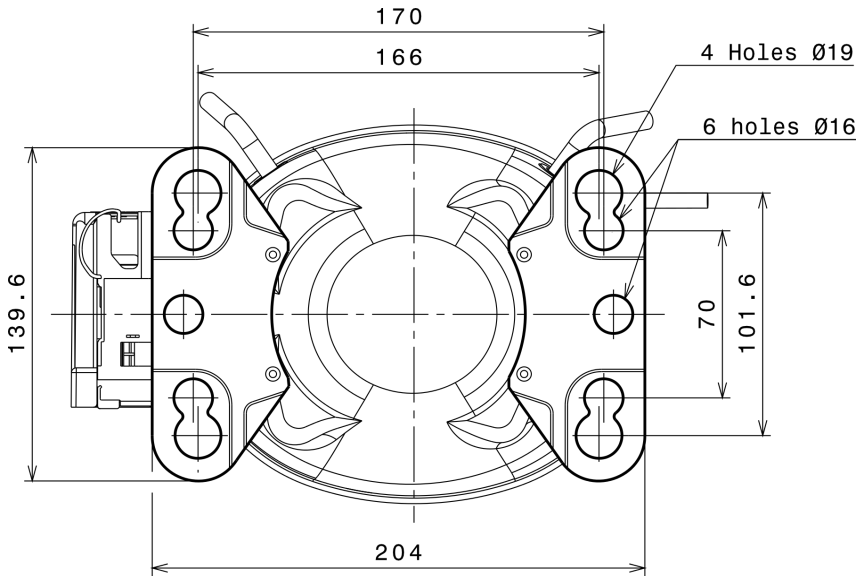
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSIR CONNECTION (U range)



Technical Data Sheet

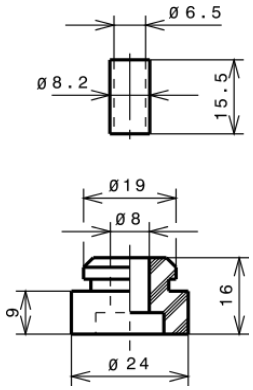
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

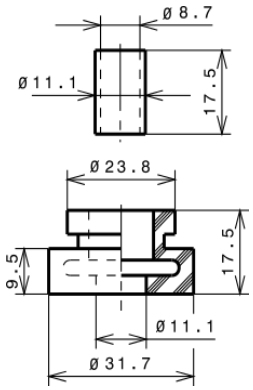
STANDARD

Ø16 holes (170x70 net)



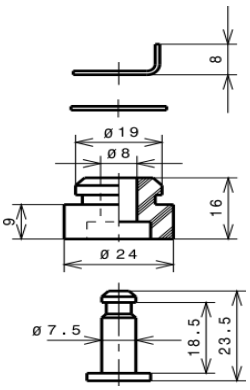
AMERICAN FEET

Ø19 holes (166x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R134a LMBP