

# Technical Data Sheet

Compressor model **GPY12RDb**  
 Voltage **115V 60Hz ~1**  
 Refrigerant **R134a**

## APPLICATION

## COMPRESSOR

## MOTOR

Application	High-Medium Back Pressure	Displacement	0,74 in <sup>3</sup>	Nominal Power	3/8 hp
Refrigerant	R134a	Diameter	1,06 in	Voltage/Frequency	115V 60Hz
Evaporating Temp.	-13,0 °F to 50,0 °F	Stroke	0,83 in	Voltage range	98-132 V
Expansion	Capillar/Valve	Net Weight	26,74 lb	Type	CSR
Comp. Cooling	Fan cooled	Oil type	ISO VG 32 ESTER	Phase number	1 PH
Max. ambient temp.	109,4 °F	Oil charge	24,41 in <sup>3</sup>	Locked Rotor Amps (LRA)	39,50 A
Compatible refriger.	R1234yf			Max. Cont. Current (MCC)	9,00 A
				Main W. resist. at 77°F	1,00 Ω
				Start W. resist. at 77°F	6,50 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	4.682 BTU/h	3.925 BTU/h
COP	2,44 W/W	2,11 W/W
EER	8,33 BTU/Wh	7,23 BTU/Wh
Input Power	562 W	545 W
Current	5,70 A	5,56 A

## APPROVALS



## TEST CYCLE CONDITIONS

	ASHRAE HMBP (D)	CECOMAF HMBP (C)
Evaporating temp. (T <sub>e</sub> )	45 °F	41 °F
Condensing temp. (T <sub>c</sub> )	131 °F	131 °F
Liquid temp. (T <sub>liq.</sub> )	115 °F	131 °F
Ambient temp. (T <sub>amb.</sub> )	95 °F	90 °F
Suction temp. (T <sub>suction</sub> )	95 °F	90 °F
Voltage/Frequency	115 V 60 Hz	115 V 60 Hz

## ELECTRICAL COMPONENTS

Starting capacitor	250 µF 160 V		
Run capacitor	15 µF 250 V		
Relay	Option 1		
Reference	2014 184. + NTC3Ω		
Pick-Up	18,70 A		
Drop-Out	15,60 A		
Protector	Option 1	Option 2	
Reference	MRA38152	T0260	
Current	27,50 A	22,00 A	
Time check	2,8-5,2 seg	7,5-14 seg	
Disc temp. (Open/Close)	221,00 / 125,60 °F	221,00 / 125,60 °F	

## ASHRAE

Tc	Te	Cooling Capacity	Consumption	Current	COP	EER
°F	°F	BTU/h	W	A	W/W	BTU/Wh
104	-13	1.309	268	3,54	1,43	4,89
104	-4	1.736	303	3,76	1,68	5,74
104	5	2.248	337	4,00	1,95	6,66
104	14	2.846	373	4,25	2,24	7,63
104	23	3.529	409	4,51	2,53	8,64
104	32	4.298	445	4,77	2,83	9,66
104	41	5.152	482	5,06	3,14	10,70
104	45	5.555	498	5,18	3,27	11,16
104	50	6.092	519	5,35	3,44	11,74

113	-13	1.223	271	3,56	1,32	4,51
113	-4	1.618	309	3,80	1,54	5,24
113	5	2.099	346	4,06	1,78	6,06
113	14	2.664	385	4,33	2,03	6,93
113	23	3.316	423	4,61	2,30	7,84
113	32	4.053	462	4,91	2,57	8,77
113	41	4.875	502	5,21	2,85	9,72
113	45	5.264	519	5,35	2,97	10,14
113	50	5.783	542	5,53	3,13	10,67

122	-13	1.137	275	3,58	1,21	4,14
122	-4	1.500	315	3,84	1,40	4,77
122	5	1.949	355	4,12	1,61	5,49
122	14	2.483	396	4,41	1,84	6,27
122	23	3.102	438	4,72	2,08	7,09
122	32	3.808	480	5,04	2,33	7,94
122	41	4.598	522	5,37	2,58	8,81
122	45	4.973	541	5,53	2,70	9,20
122	50	5.474	565	5,72	2,84	9,69

131	-13	1.052	278	3,60	1,11	3,78
131	-4	1.383	321	3,89	1,26	4,31
131	5	1.799	364	4,19	1,45	4,94
131	14	2.301	408	4,50	1,65	5,64
131	23	2.889	452	4,83	1,87	6,39
131	32	3.562	497	5,17	2,10	7,17
131	41	4.321	542	5,54	2,34	7,97
131	45	4.682	562	5,70	2,44	8,33
131	50	5.166	588	5,91	2,58	8,79

140	-13	966	281	3,62	1,01	3,43
140	-4	1.265	327	3,93	1,13	3,87
140	5	1.650	373	4,25	1,30	4,42
140	14	2.120	420	4,59	1,48	5,05
140	23	2.676	467	4,94	1,68	5,73
140	32	3.317	514	5,31	1,89	6,45
140	41	4.044	562	5,70	2,11	7,19
140	45	4.391	583	5,88	2,21	7,53
140	50	4.857	610	6,11	2,33	7,96

149	-13	880	285	3,64	0,91	3,09
149	-4	1.147	333	3,97	1,01	3,44
149	5	1.500	382	4,31	1,15	3,93
149	14	1.938	431	4,67	1,32	4,49
149	23	2.463	481	5,05	1,50	5,12
149	32	3.072	532	5,45	1,69	5,78
149	41	3.767	582	5,87	1,90	6,47
149	45	4.100	605	6,06	1,99	6,78
149	50	4.548	633	6,31	2,10	7,18

## CECOMAF

Tc	Te	Cooling Capacity	Consumption	Current	COP	EER
°F	°F	BTU/h	W	A	W/W	BTU/Wh
104	-13	1.213	269	3,54	1,32	4,52
104	-4	1.612	304	3,77	1,55	5,33
104	5	2.089	339	4,01	1,80	6,19
104	14	2.643	375	4,26	2,07	7,08
104	23	3.275	411	4,52	2,34	8,01
104	32	3.984	448	4,80	2,61	8,94
104	41	4.770	485	5,08	2,88	9,89
104	45	5.141	501	5,21	3,01	10,31
104	50	5.634	522	5,38	3,16	10,84

113	-13	1.128	273	3,57	1,21	4,15
113	-4	1.494	310	3,81	1,41	4,84
113	5	1.938	348	4,07	1,63	5,59
113	14	2.460	387	4,35	1,86	6,39
113	23	3.059	426	4,63	2,11	7,22
113	32	3.735	465	4,93	2,35	8,07
113	41	4.488	505	5,24	2,61	8,93
113	45	4.845	523	5,38	2,72	9,31
113	50	5.319	545	5,56	2,86	9,80

122	-13	1.042	276	3,59	1,11	3,79
122	-4	1.376	316	3,86	1,27	4,37
122	5	1.788	357	4,14	1,47	5,03
122	14	2.276	399	4,43	1,67	5,74
122	23	2.842	440	4,74	1,89	6,49
122	32	3.486	482	5,06	2,12	7,26
122	41	4.207	525	5,40	2,35	8,05
122	45	4.548	544	5,55	2,45	8,40
122	50	5.005	568	5,75	2,58	8,85

131	-13	957	279	3,61	1,00	3,44
131	-4	1.258	323	3,90	1,14	3,92
131	5	1.637	366	4,20	1,31	4,49
131	14	2.093	410	4,52	1,49	5,13
131	23	2.626	455	4,85	1,69	5,80
131	32	3.237	500	5,20	1,90	6,51
131	41	3.925	545	5,56	2,11	7,23
131	45	4.252	566	5,73	2,20	7,55
131	50	4.690	591	5,95	2,32	7,97

140	-13	872	283	3,63	0,90	3,10
140	-4	1.140	329	3,94	1,02	3,48
140	5	1.486	375	4,26	1,16	3,98
140	14	1.909	422	4,60	1,33	4,55
140	23	2.410	469	4,96	1,50	5,16
140	32	2.988	517	5,34	1,69	5,80
140	41	3.643	566	5,73	1,89	6,47
140	45	3.956	587	5,91	1,97	6,77
140	50	4.376	614	6,14	2,09	7,16

149	-13	786	286	3,65	0,81	2,76
149	-4	1.022	335	3,98	0,89	3,07
149	5	1.335	384	4,33	1,02	3,49
149	14	1.726	434	4,69	1,17	4,00
149	23	2.194	484	5,07	1,33	4,55
149	32	2.739	535	5,48	1,50	5,15
149	41	3.362	586	5,90	1,68	5,76
149	45	3.660	609	6,09	1,76	6,04
149	50	4.061	638	6,34	1,87	6,40

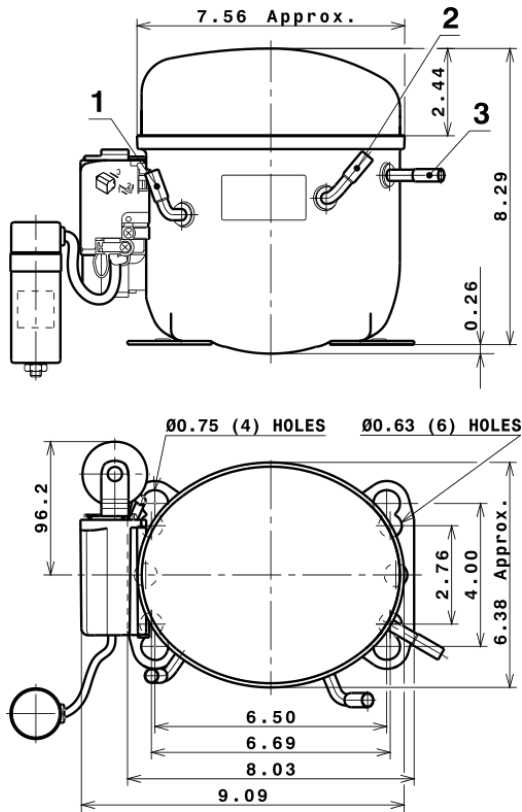
## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.758,3208123877	316,0889216786	3,7067978488	29,04946078411
2	59,3559418150	3,0453353028	0,0209580317	1,1046434818946
3	-15,1413401595	3,5806933129	0,0290393884	-0,084342610222156
4	0,4458583816	0,0128961648	0,0003537425	0,012962388434338
5	-0,4019609914	0,1158226892	0,0009823219	-0,0015186935370922

Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$
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# Technical Data Sheet

## COMPRESSOR DIMENSIONS

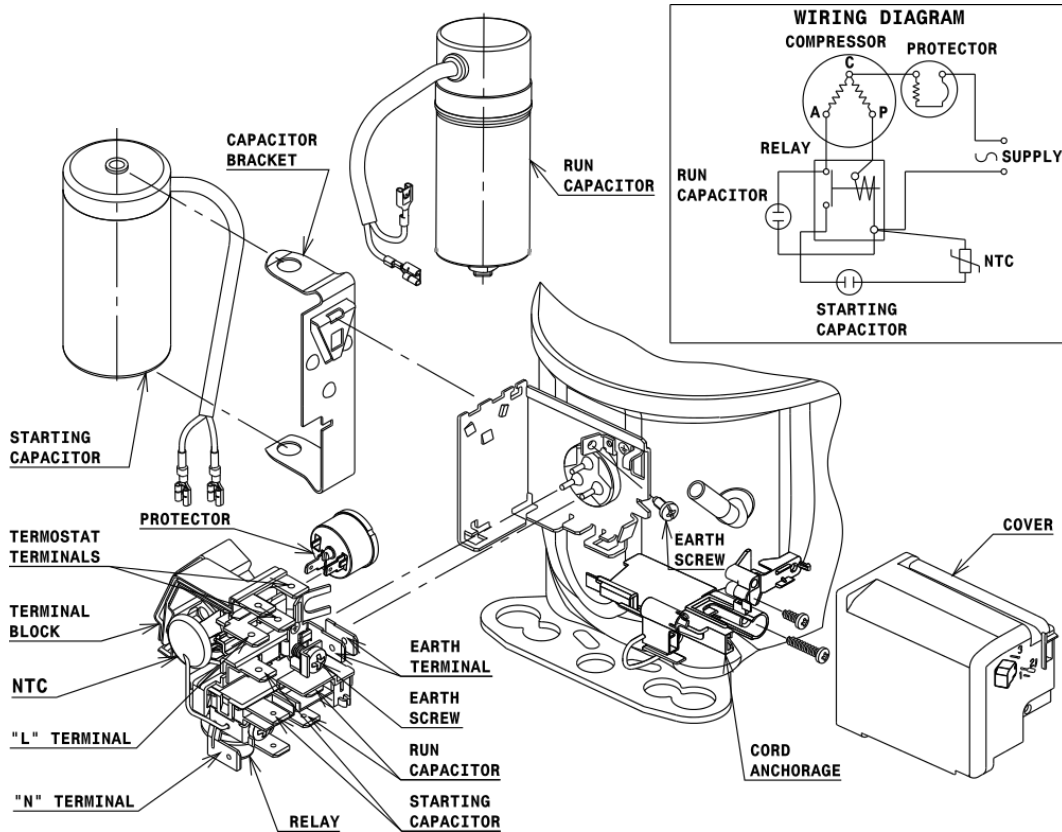


## DESIGNATION INTERNAL DIAM.

DESIGNATION	INTERNAL DIAM.
1 Suction	0,32 in
2 Service	0,32 in
3 Discharge	0,26 in

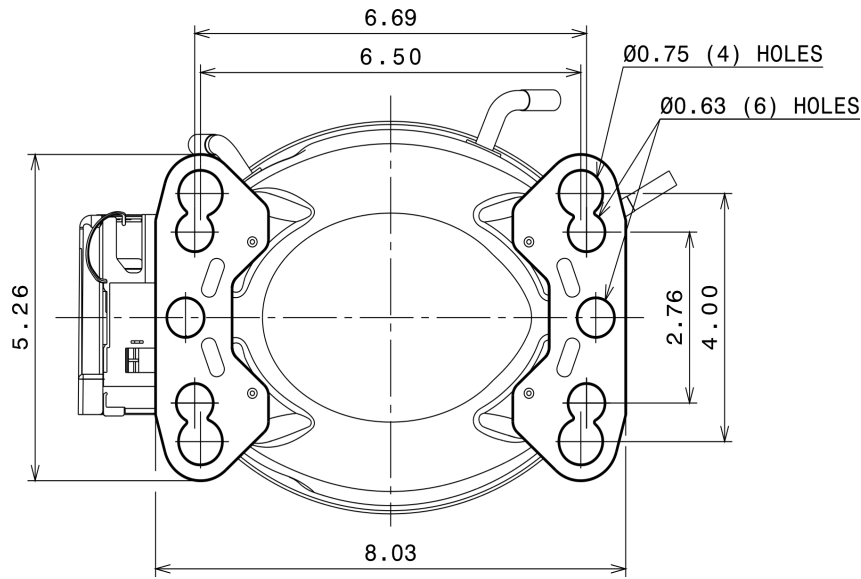
## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### CSR CONNECTION (CURRENT RELAY + NTC) (L, P ranges)



# Technical Data Sheet

## FIXINGS



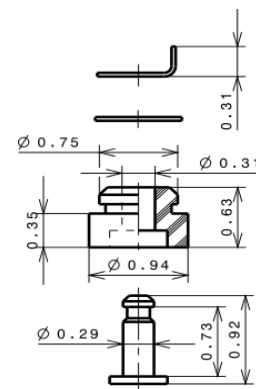
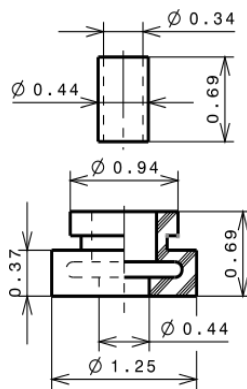
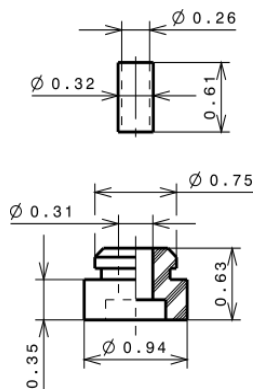
## SILENT BLOCKS (MOUNTING ACCESSORIES)

### STANDARD

$\varnothing 0.63$  holes (6.69x2.76 net)

$\varnothing 0.75$  holes (6.50x4.00 net)

$\varnothing 0.63$  holes (6.69x2.76 net)



## SOA

SOA R134a HMBP

