

Greenwich Electronics, Inc.

AR7 Series

- Miniature heavy duty relay
- 25A/1 hr at 25°C
- High temperature design
- Low noise version
- Applications: automotive controls, alarms, light duty motor controls, general purpose



COIL DATA

Nominal Voltage (DC)	Nominal Coil Current (mA)		Coil Resistance (Ω)	
	($\pm 10\%$ at 20°C)		($\pm 10\%$ at 20°C)	
	Type 8	Type 6	Type 8	Type 6
6	133	100	45	60
9	90	67	100	135
12	67	50	180	240
24	14.4	14.4	720	960

Pick-up Voltage	$\leq 60\%$ nominal @20°C ($\leq 75\%$ @85°C)
Drop-out Voltage	$\geq 8\%$ nominal @20°C ($\geq 10\%$ @85°C)
Max. Coil Voltage	130% nominal
Coil Consumption	Type 8: Approx. 0.8W, Type 6: Approx. 0.6W

Contact

Configuration	A: 1 form A (SPST-NO), C: 1 form C (SPDT)
Material	Silver (Ag) alloy
Rated Load	NO: 20A@14VDC (25A/1 hr@25°C), 10A@120VAC, 5A@250VAC NC: 15A@14VDC, 10A@120VAC, 5A@250VAC
Initial Voltage Drop	SPST: 250mV@25A
Max. Carry Current	NO: 25A
Max. Switching Voltage	75VDC
Max. Switching Current	NO: 20A
Max. Switching Power	280W, 1200VA

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CHARACTERISTICS

Contact Resistance	Max. 50mΩ (0.1A, 6VDC)
Operate Time	≤10ms
Release Time	≤5ms
Insulation Resistance	Min. 100MΩ (@500VDC)
Dielectric Strength:	
• Between coil and contacts	500VAC - 50Hz / one minute
• Between open contacts	500VAC - 50Hz / one minute
Vibration Resistance	10-55Hz, 1.5mm double amplitude
Shock Resistance	Approx. 10g
Ambient Temperature:	
• Storage	-40 ⁰ C to 100 ⁰ C
• Operate	-40 ⁰ C to 85 ⁰ C
Relative Humidity	20% - 85%
Life Expectancy:	
• Mechanical	1 x 10 ⁷
• Electrical	1 x 10 ⁵ (at rated load)
Weight	Standard: approx. 6 grams, Quiet: approx. 10 grams

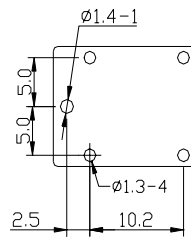
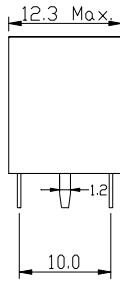
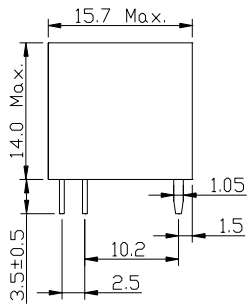
ORDERING INFORMATION

<u>AR7</u>	-	<u>024</u>	-	<u>C</u>	<u>Q</u>	<u>8</u>	<u>S</u>
I		II		III	IV	V	VI
I.	Series			AR7			
II.	Coil Voltage (VDC)			006, 009, 012, 024			
III.	Contact configuration			A - 1 form A (SPST-NO), C - 1 form C (SPDT)			
IV.	Relay noise			nil - Standard (~70dB), Q - Quiet (<60dB)			
V.	Coil consumption			6 - 0.6W, 8 - 0.8W			
VI.	Package Type			nil - dust cover, S - Sealed			

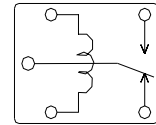
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AR7 Series Dimensions and Schematics (in mm)

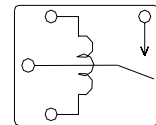
AR7 – standard type



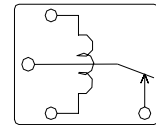
Terminal arrangement and wiring diagram



SPDT - 1 form C



SPST-NO - 1 form A



SPST-NC - 1 form B

AR7 – Q style (quiet)

