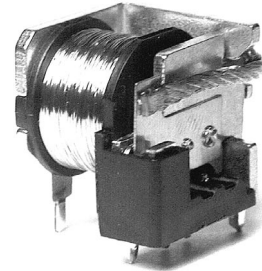


# Greenwich Electronics, Inc.

## AR5 Series

- High capacity PCB in a small, low cost package
- US and European footprint
- 100A switching capacity
- High temperature design
- Open frame or sealed
- Applications: automotive, industrial machinery, flashers, motor controls



### COIL DATA

Nominal Voltage (DC)	Nominal Coil Current (mA) (± 10% at 23°C)	Coil Resistance (Ω) (± 10% at 23°C)
6	316	19
12	133	90
24	66	362

Pick-up Voltage	≤75% nominal
Drop-out Voltage	≥6.67% nominal
Max. Coil Voltage:	
• Initial	200% nominal
• Constant	137% nominal
Coil Consumption	Approx. 1.5W

### Contact

Configuration	<b>A:</b> 1 form A (SPST-NO), <b>B:</b> 1 form B (SPST-NC), <b>C:</b> 1 form C (SPDT)
Material	Silver (Ag) alloy
Rated Load	<b>NO:</b> 40A@14VDC, 12A@60VAC (resistive)
Initial Voltage Drop	SPST: 100mV@10A
Max. Carry Current	<b>NO:</b> 45A, <b>NC:</b> 30A
Max. Switching Voltage	70VDC
Max. Switching Current	<b>NO:</b> 100A, <b>NC:</b> 30A
Max. Switching Power	560W, 720VA

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## CHARACTERISTICS

Contact Resistance	Max. 50mΩ
Operate Time	≤10ms
Release Time	≤5ms
Insulation Resistance	Min. 100MΩ (@500VDC)
Dielectric Strength:	
• Between coil and contacts	500VAC / one minute
• Between open contacts	500VAC / one minute
Vibration Resistance	10-55Hz, 1.5mm double amplitude
Shock Resistance	Approx. 15g, 11msec
Ambient Temperature	
• Storage	-40°C to 125°C
• Operate	-40°C to 155°C
Relative Humidity	95%@ 40°C
Life Expectancy:	
• Mechanical	1 x 10 <sup>7</sup>
• Electrical	1 x 10 <sup>5</sup> Operations (at rated load)
Weight	Open frame: Approx. 22g, Sealed: Approx. 26g

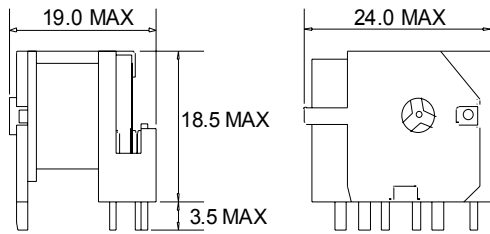
## ORDERING INFORMATION

<u>AR5</u>	-	<u>012</u>	-	<u>B</u>	<u>E</u>	<u>H</u>	<u>O</u>
I		II		III	IV	V	VI
I.	Series			<b>AR5</b>			
II.	Coil Voltage (VDC)			<b>006, 012, 024</b>			
III.	Contact configuration			<b>A</b> - 1 form A (SPST-NO), <b>B</b> - 1 form B (SPST-NC), <b>C</b> - 1 form C (SPDT)			
IV.	Footprint			<b>U</b> - US footprint, <b>E</b> - European footprint			
V.	Contact Capacity			<b>nil</b> - Standard rating, <b>H</b> - Heavy duty rating			
VI.	Package Type			<b>O</b> - Open frame, <b>S</b> - Sealed			

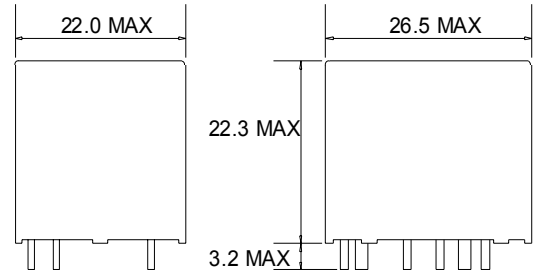
# Greenwich Electronics, Inc.

## AR5 Series Dimensions and Schematics (in mm)

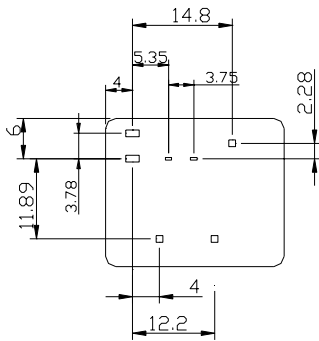
O type – Open frame



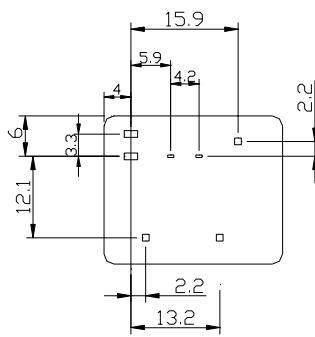
S type – Sealed package



U type –  
US footprint

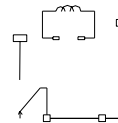


E type –  
European footprint



Terminal arrangement and  
wiring diagram

SPST-NO – 1 form A



SPDT – 1 form C

