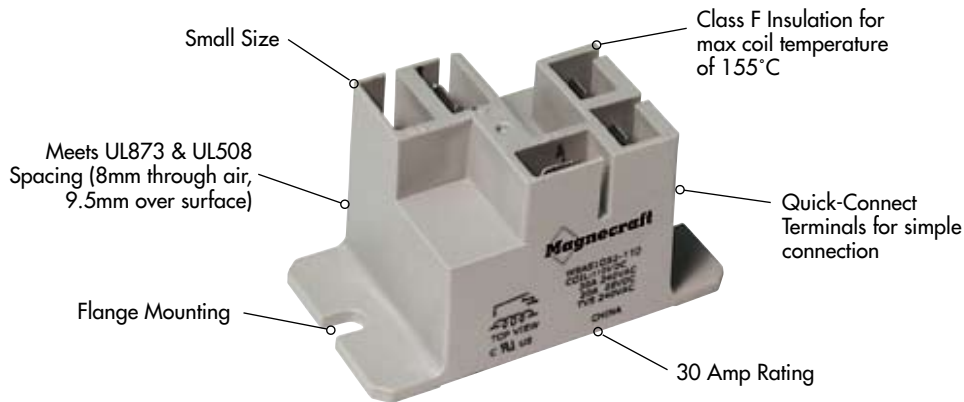


## W9A Miniature Power Relays/SPST and SPDT 30 Amp Rating (DC and AC)

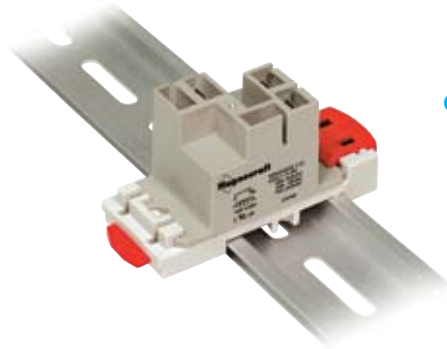


### General Specifications

(UL 508)

SPST

Contact Characteristics		Units	W9A51	
Number and type of Contacts			SPST-NO	
Contact materials			Silver Alloy	
Thermal (Carrying) Current		A	30	
Maximum Switching Voltage		V	300V	
Switching Current @ Voltage	~	Resistive	30A @ 240V 50/60Hz	
	≡	Resistive	30A @ 28V	
		HP	2 @ 240V 50/60Hz	
		HP	1 @ 125V 50/60Hz	
		Pilot Duty	470 VA	
Minimum Switching Requirement	Minimum	mA	100 @ 5 VDC, 12 VAC	
Coil Characteristics				
Voltage Range	~	V	12...277	
	% of Nominal	V	5...110	
Operating Range	~		85% to 120%	
	≡		75% to 120%	
Average consumption	~	VA	2.8	
Drop-out voltage threshold	≡	W	1	
	~		10%	
			10%	
Performance Characteristics				
Electrical Life (UL 508)	Operations @ Rated Current	(Resistive)	100,000	
Mechanical Life	Unpowered		10,000,000	
Operating time (response time)		ms	15	
Dielectric	Between coil and contact	~	V	2500
	Between contacts	~	V	1500
Environment				
Product certifications	Standard version		UL	
Ambient air temperature around the device	Storage	°C	-40...+85	
	Operation	°C	-40...+55	
Vibration resistance	Operational	g-n	3, 10-55Hz	
Shock resistance		g-n	10	
Weight		grams	33	

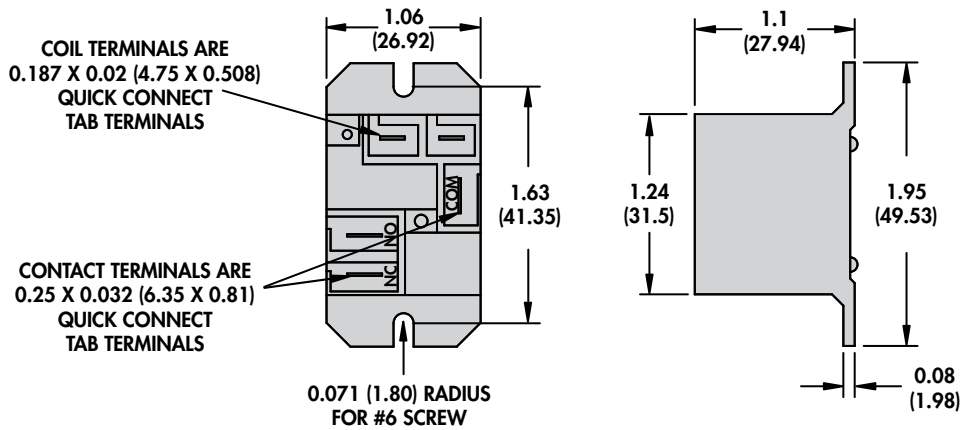
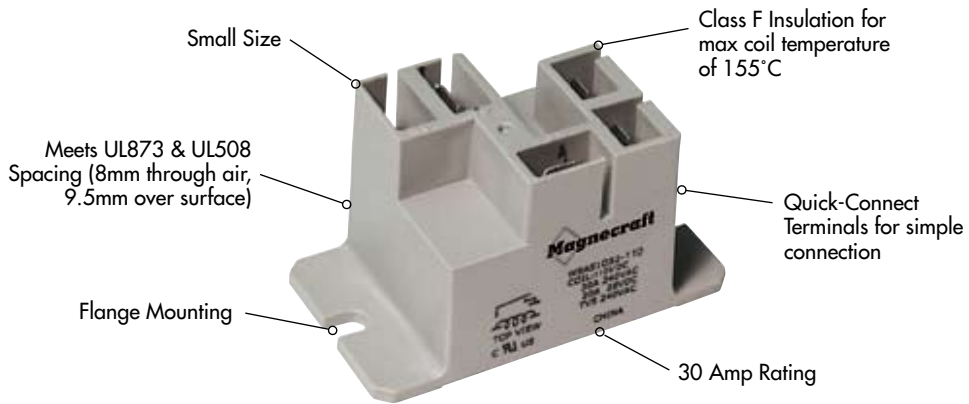


Optional DIN Rail Adapter  
(16-9ADIN-1)  
See Section 3 p.17

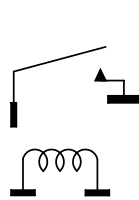
**SPDT**

Normally Open Contact	Normally Closed Contact
Silver Alloy	Silver Alloy
30	15
300V	300V
30A @ 240V 50/60Hz	15A @ 240 50/60Hz Max
30A @ 28V	10A @ 28V
2 @ 240V 50/60Hz	1/2 @ 240 V 50/60Hz
1 @ 125V 50/60Hz	1/4 @ 125 V 50/60Hz
470 VA	275 VA
100 @ 5 VDC, 12 VAC	100 @ 5 VDC, 12 VAC
	12....277
	5...110
	85% to 120%
	75% to 120%
	2.8
	1
	10%
	10%
	100,000
	10,000,000
	15
	2500
	1500
	UL
	-40...+85
	-40...+55
	3, 10-55Hz
	10
	33

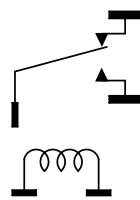
# W9A Miniature Power Relays/SPST and SPDT 30 Amp Rating (DC and AC) *continued*



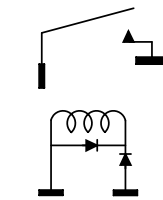
## WIRING DIAGRAMS



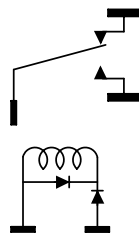
1 FORM A  
DC OPERATED  
(TOP VIEW)  
Fig. A



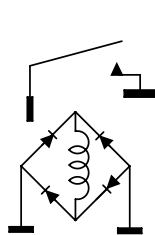
1 FORM C  
DC OPERATED  
(TOP VIEW)  
Fig. B



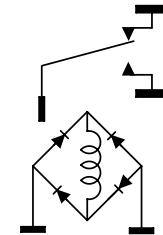
1 FORM A  
AC OPERATED  
1/2 WAVE RECTIFIED  
(TOP VIEW)  
Fig. C



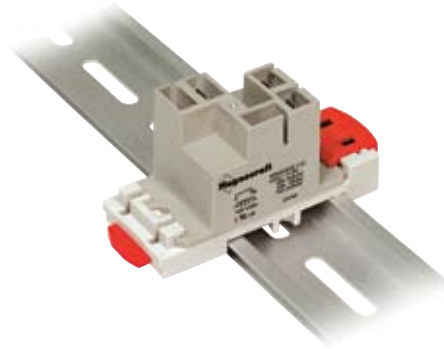
1 FORM C  
AC OPERATED  
1/2 WAVE RECTIFIED  
(TOP VIEW)  
Fig. D



1 FORM A  
AC OPERATED  
FULL WAVE RECTIFIED  
(TOP VIEW)  
Fig. E



1 FORM C  
AC OPERATED  
FULL WAVE RECTIFIED  
(TOP VIEW)  
Fig. F



Optional DIN Rail Adapter  
(16-9ADIN-1)  
See Section 3 p.17

**Standard Part Numbers**

**BOLD-FACED PART NUMBERS ARE NORMALLY STOCKED**

Nominal Input Voltage	Coil Resistance (OHMS)	Part Number	Figure	Contact Configuration
<b>SPST DC Relays</b>				
5 VDC	25 Ω	<b>W9AS1D52-5</b>	A	SPST-NO
12 VDC	144 Ω	<b>W9AS1D52-12</b>	A	SPST-NO
24 VDC	576 Ω	<b>W9AS1D52-24</b>	A	SPST-NO
110/125 VDC	12100 Ω	W9AS1D52-110	A	SPST-NO
<b>SPDT DC Relays</b>				
5 VDC	25 Ω	<b>W9AS5D52-5</b>	B	SPDT
12 VDC	144 Ω	<b>W9AS5D52-12</b>	B	SPDT
24 VDC	576 Ω	<b>W9AS5D52-24</b>	B	SPDT
110/125 VDC	12100 Ω	W9AS5D52-110	B	SPDT
<b>SPST AC Relays</b>				
24 VAC 50/60 Hz	500 Ω	<b>W9AS1A52-24</b>	E	SPST-NO
120 VAC 50/60 Hz	3000 Ω	<b>W9AS1A52-120</b>	C	SPST-NO
240 VAC 50/60 Hz	12100 Ω	W9AS1A52-240	C	SPST-NO
<b>SPDT AC Relays</b>				
24 VAC 50/60 Hz	500 Ω	<b>W9AS5A52-24</b>	F	SPDT
120 VAC 50/60 Hz	3000 Ω	<b>W9AS5A52-120</b>	D	SPDT
240 VAC 50/60 Hz	12100 Ω	<b>W9AS5A52-240</b>	D	SPDT

**Part Number Builder**

W9A	S	5	A	5	2	-24
Series	Cover	Configuration	Current Type	Mount	Contact Material	Voltage
W9A	P = Enclosed dust cover S = Sealed dust cover	1 = SPST-NO 5 = SPDT	A = AC D = DC	5 = Panel Mount Flanged Cover	2 = Silver Alloy	Coil Voltage