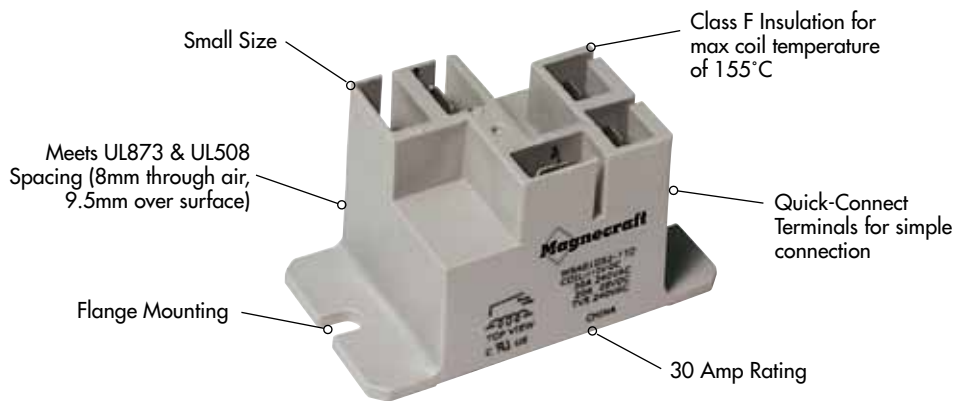


9A Miniature Power Relays/SPST and SPDT 30 Amp Rating (DC and AC)

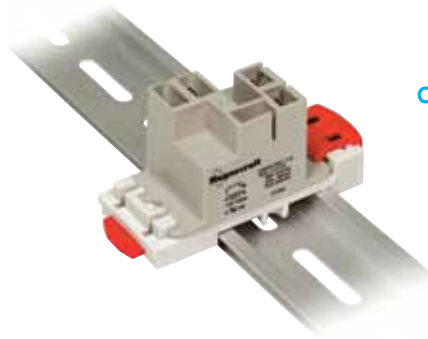


General Specifications

(UL 508)

SPST

Contact Characteristics		Units	9AS1
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
	% of Nominal	⎓	V
Operating Range		~	12...277
		⎓	5...110
		~	85% to 120%
		⎓	75% to 120%
Average consumption		~	VA
		⎓	W
Drop-out voltage threshold		~	2.8
		⎓	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
	Between contacts	~	V
			2500
			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

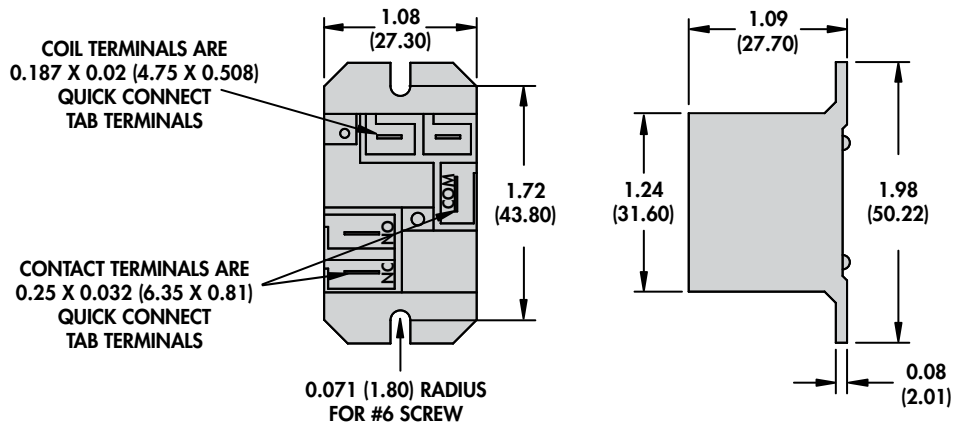
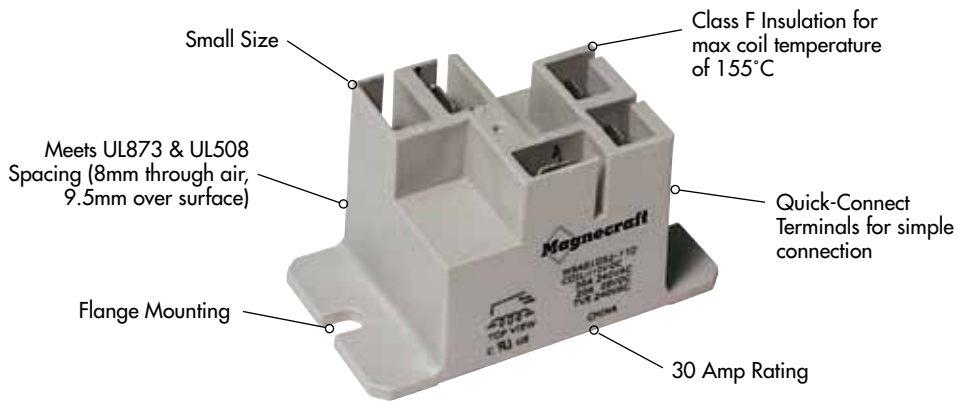


Optional DIN Rail Adapter
(16-9ADIN-1)
See Section 3 p.17

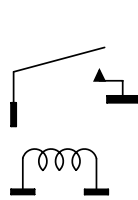
SPDT

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	

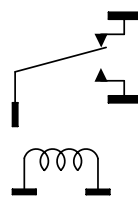
9A Miniature Power Relays/SPST and SPDT 30 Amp Rating (DC and AC) *continued*



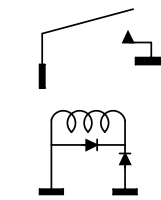
WIRING DIAGRAMS



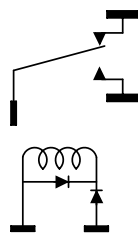
1 FORM A
DC OPERATED
(TOP VIEW)
Fig. A



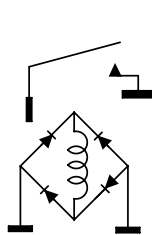
1 FORM C
DC OPERATED
(TOP VIEW)
Fig. B



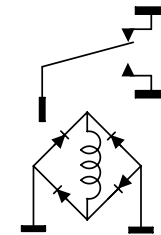
1 FORM A
AC OPERATED
1/2 WAVE RECTIFIED
(TOP VIEW)
Fig. C



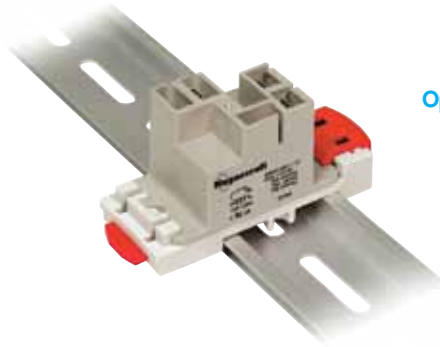
1 FORM C
AC OPERATED
1/2 WAVE RECTIFIED
(TOP VIEW)
Fig. D



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
SPST DC Relays				
5 VDC	25 Ω	9AS1D52-5	A	SPST-NO
12 VDC	144 Ω	9AS1D52-12	A	SPST-NO
24 VDC	576 Ω	9AS1D52-24	A	SPST-NO
110/125 VDC	12100 Ω	9AS1D52-110	A	SPST-NO
SPDT DC Relays				
5 VDC	25 Ω	9AS5D52-5	B	SPDT
12 VDC	144 Ω	9AS5D52-12	B	SPDT
24 VDC	576 Ω	9AS5D52-24	B	SPDT
110/125 VDC	12100 Ω	9AS5D52-110	B	SPDT
SPST AC Relays				
24 VAC 50/60 Hz	500 Ω	9AS1A52-24	E	SPST-NO
120 VAC 50/60 Hz	3000 Ω	9AS1A52-120	C	SPST-NO
240 VAC 50/60 Hz	12100 Ω	9AS1A52-240	C	SPST-NO
SPDT AC Relays				
24 VAC 50/60 Hz	500 Ω	9AS5A52-24	F	SPDT
120 VAC 50/60 Hz	3000 Ω	9AS5A52-120	D	SPDT
240 VAC 50/60 Hz	12100 Ω	9AS5A52-240	D	SPDT

Part Number Builder

Series	Cover	Configuration	Current Type	Mount	Contact Material	Voltage
9A	P = Enclosed dust cover S = Sealed dust cover	5 1 = SPST-NO 5 = SPDT	A A = AC D = DC	5 5 = Panel Mount Flanged Cover	2 2 = Silver Alloy	-24 Coil Voltage