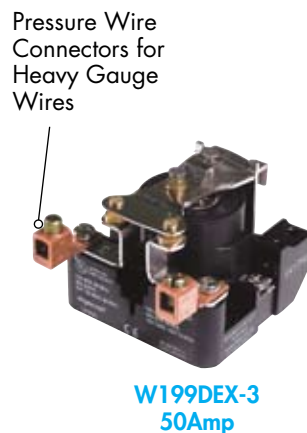
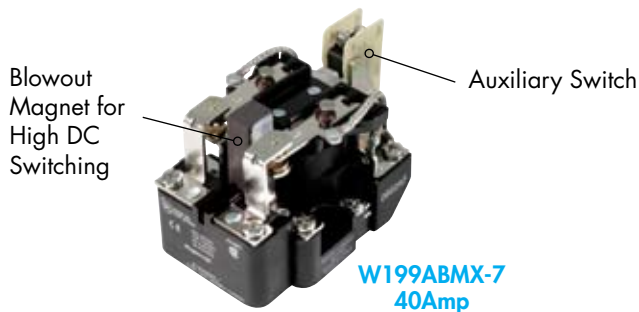
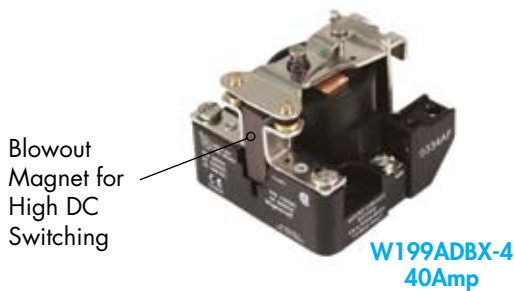
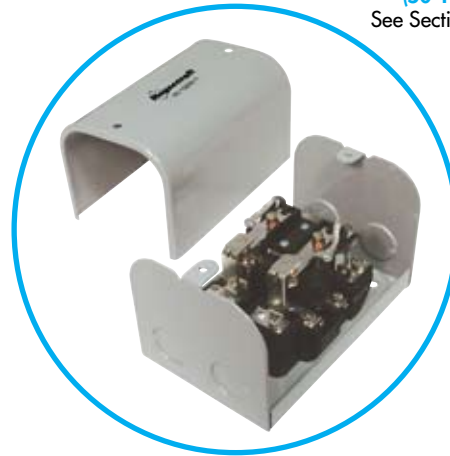


Advantages of the W199 Power Relay

The Magnecraft 199 relay is the powerhouse open relay. Standard parts can handle up to 40A and there are options to handle up to 50A. The device is available in a variety of configurations and coil voltages. Available with up to two poles, double and single throws, insulated and non-insulated double make and/or break, and several switching forms. Options include auxiliary 10A switches with quick connects or screw terminals, quick connects on the coils and/or contacts, tungsten stationary contacts, fine silver contacts, pressure wire connectors on the output terminals and blowout magnets near the contacts for high voltage DC switching.



Optional Cover
(50-1289-1)
See Section 3 p.17



- Available Blowout Magnets for High DC Switching.
- Available Auxiliary Switches.
- Can be configured with 0.25 inch Q.C. Connections.
- Up to 50A Switching.
- Available Metal Enclosure.

14 AWG for 40A, 11 AWG
for 50A Configurations
For Superior Load Handling.

Combo-Head Screws
For Simpler Hook-Up.

Wide Array of Options
& Configurations
For Specific Control Needs.

Riveted Construction
To Sustain Years of Use.

Wide Selection of Coil Voltages
To Fit Most Applications.

Auxiliary Switch

W199AX-14
40Amp

W199MX-27
40Amp

1/4 Inch Q.C. on
Auxiliary Switch for
Speedier Hook-Up

11 AWG Pigtails
for 50A Load
Switching

W199X-11
40Amp

Auxiliary Switch

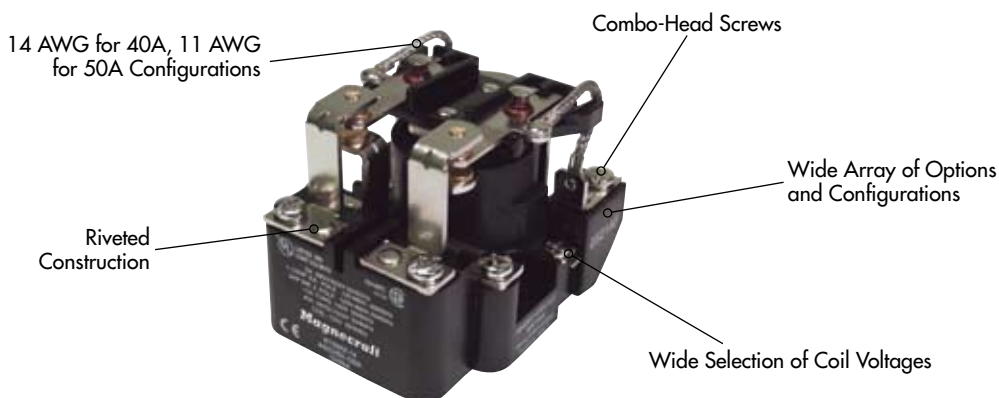
199PQMCKX-1
50Amp

1/4 Q.C. on
Coil for Simpler
Installation

W199MX-51
40Amp

W199X-3
40Amp

W199 Open Style Power Relay/Single and Two Pole 40 and 50 Amp Rating (DC and AC)



General Specifications (UL 508)

General Specifications		199, 199A		
Contact Characteristics		Units		
Number and type of Contacts			SPST, SPDT, DPST, DPDT	
Contact materials			Silver Alloy	
Thermal (Carrying) Current rating		A	40	
Maximum Switching Voltage		V	600V	
Switching Current @ Voltage	~	Resistive	40A @ 277V 50/60Hz	
	⎓	Resistive	40A @ 28VDC	
	⎓	Resistive	2A @ 325V Max w/ Blowout Magnet	
		HP	1 1/2 @ 120-600 VAC	
Minimum Switching Requirement	Minimum	Pilot Duty	A600	
		mA	1A @ 12 VAC / VDC	
Coil Characteristics				
Voltage Range	~	V	6...600	
	% of Nominal	⎓	V	6...600
Operating Range	~		85% to 110%	
	⎓		80% to 110%	
Average consumption	~	VA	10	
	⎓	W	4	
Drop-out voltage threshold	~		10%	
	⎓		10%	
Performance Characteristics				
Electrical Life (UL 508)	Operations @ Rated Current	(Resistive)	100,000	
Mechanical Life	Unpowered		1,000,000	
Operating time (response time)		ms	30	
Dielectric	Between coil and contact	~	V	2200
	Between poles	~	V	2200
	Between contacts	~	V	1500
Environment				
Product certifications	Standard version		UL, CSA, CE	
Ambient air temperature around the device	Storage	°C	-40...+85	
	Operation	°C	-40...+55	
Connection		AWG (mm2)	8 (10)	
Terminal Tightening Torque		in-lb (Nm)	7...9 (0.8...1.0)	

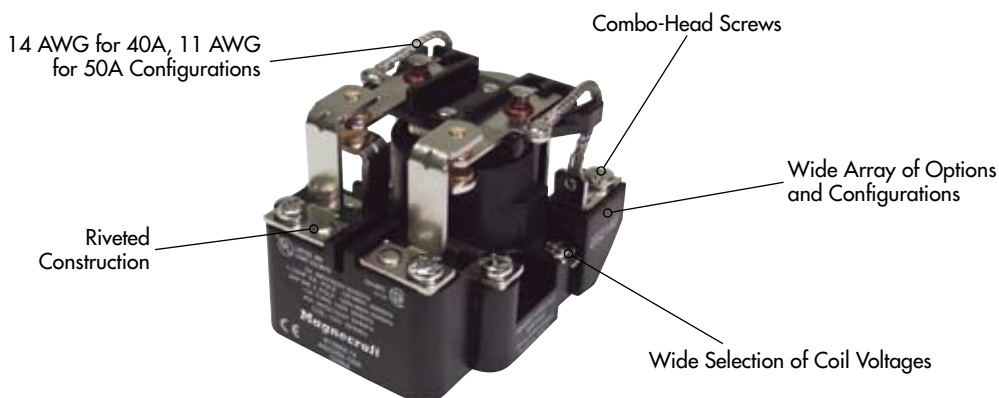


Optional Cover
(50-1289-1)
See Section 3 p.17



199D, 199DY, 199AD, 199ADY	199P, 199AP	199DE, 199DYE, 199ADE, 199ADYE
SPST-DM, SPST-DB	SPST, SPDT, DPST, DPDT	SPST-DM, SPST-DB
Silver Alloy	Silver Alloy	Silver Alloy
40	50	50
600V	600V	600V
40A @ 277V 50/60Hz	50A @ 277V 50/60Hz	50A @ 277V 50/60Hz
40A @ 28VDC	50A @ 28VDC	50A @ 28VDC
2A @ 500V Max w/ Blowout Magnet	2A @ 325V Max w/ Blowout Magnet	2A @ 500V Max w/ Blowout Magnet
2 @ 120-600 VAC	1 1/2 @ 120-600 VAC	2 @ 120-600 VAC
A600	A600	A600
1A @ 12 VAC / VDC	1A @ 12 VAC / VDC	1A @ 12 VAC / VDC
6....600	6....600	6....600
6....600	6....600	6....600
85% to 110%	85% to 110%	85% to 110%
80% to 110%	80% to 110%	80% to 110%
10	10	10
4	4	4
10%	10%	10%
10%	10%	10%
100,000	100,000	100,000
1,000,000	1,000,000	1,000,000
30	30	30
2200	2200	2200
2200	2200	2200
1500	1500	1500
UL, CSA, CE	UL, CSA, CE	UL, CSA, CE
-40...+85	-40...+85	-40...+85
-40...+55	-40...+55	-40...+55
8 (10)	8 (10)	8 (10)
7....9 (0.8....1.0)	7....9 (0.8....1.0)	7....9 (0.8....1.0)

W199 Open Style Power Relay/Single and Two Pole 40 and 50 Amp Rating (DC and AC) *continued*



Standard Part Numbers

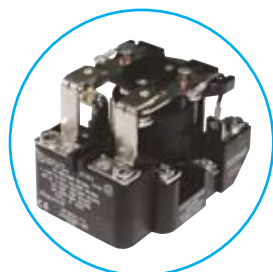
BOLD-FACED PART NUMBERS ARE NORMALLY STOCKED

Nominal Input Voltage 40A Rated Relays, AC Operated	Coil Resistance (OHMS)	Part Number	Contact Configuration	Equipped Optional Features
120 VAC 50/60 Hz	290 Ω	W199AX-4	SPDT	
24 VAC 50/60 Hz	12 Ω	W199AX-13	DPDT	
120 VAC 50/60 Hz	290 Ω	W199AX-14	DPDT	
240 VAC 50/60 Hz	1200 Ω	W199AX-15	DPDT	
24 VAC 50/60 Hz	12 Ω	W199AX-8	DPST-NO	
120 VAC 50/60 Hz	290 Ω	W199AX-9	DPST-NO	
240 VAC 50/60 Hz	1200 Ω	W199AX-10	DPST-NO	
120 VAC 50/60 Hz	290 Ω	W199ADX-4	SPST-NO-DM	
240 VAC 50/60 Hz	1200 Ω	W199ADX-5	SPST-NO-DM	
120 VAC 50/60 Hz	290 Ω	W199ADB-4	SPST-NO-DM	Magnetic Blowout
120 VAC 50/60 Hz	290 Ω	W199ABX-14	DPDT	Magnetic Blowout
120 VAC 50/60 Hz	290 Ω	W199ABMX-7	DPDT	Auxiliary Switch, Magnetic Blowout
120 VAC 50/60 Hz	290 Ω	W199AMX-64	DPDT	Auxiliary Switch
40A Rated Relays, DC Operated				
12 VDC	70 Ω	W199X-2	SPDT	
24 VDC	290 Ω	W199X-3	SPDT	
6 VDC	18 Ω	W199X-11	DPST	
12 VDC	70 Ω	W199X-12	DPST	
24 VDC	290 Ω	W199X-13	DPDT	
110 VDC	6000 Ω	W199X-14	DPDT	
12 VDC	70 Ω	W199X-7	DPST-NO	
24 VDC	290 Ω	W199X-8	DPST-NO	
12 VDC	70 Ω	W199DYX-2	SPST-NC-DB	
12 VDC	70 Ω	W199DX-2	SPST-NO-DM	
24 VDC	290 Ω	W199DX-3	SPST-NO-DM	
24 VDC	290 Ω	W199DBX-3	SPST-NO-DM	Magnetic Blowout
48 VDC	1200 Ω	W199DBX-6	SPST-NO-DM	Magnetic Blowout
24 VDC	290 Ω	W199BX-13	DPDT	Magnetic Blowout
110 VDC	6000 Ω	W199BX-14	DPDT	Magnetic Blowout
24 VDC	290 Ω	W199BMX-13	DPDT	Auxiliary Switch, Magnetic Blowout
24 VDC	290 Ω	W199MX-51	DPDT	Auxiliary Switch
50A Rated Relays				
24 VAC 50/60 Hz	8 Ω	W199APX-13	DPDT	
120 VAC 50/60 Hz	260 Ω	W199APX-14	DPDT	
240 VAC 50/60 Hz	1040 Ω	W199APX-15	DPDT	
120 VAC 50/60 Hz	290 Ω	W199ADEX-4	SPST-NO-DM	Pressure Wire Connectors
6 VDC	18 Ω	199PX-11	DPDT	
12 VDC	70 Ω	W199PX-12	DPDT	
24 VDC	260 Ω	W199PX-13	DPDT	
110 VDC	6000 Ω	199PX-14	DPDT	
24 VDC	290 Ω	W199DEX-3	SPST-NO-DM	Pressure Wire Connectors
110 VDC	6000 Ω	199PQMKKX-1	DPDT	1/4" QC Term. On Coil, Auxiliary Switch

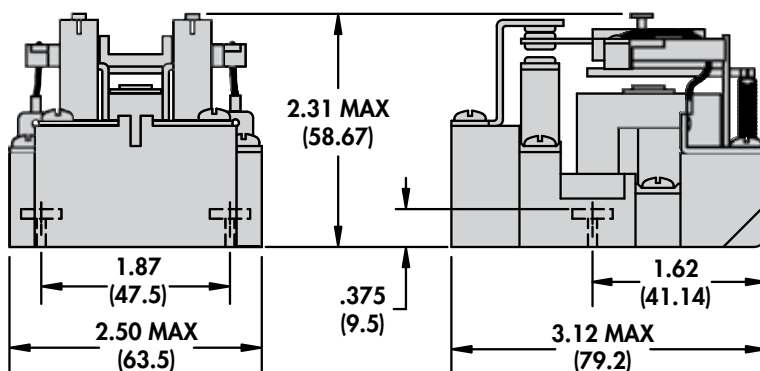
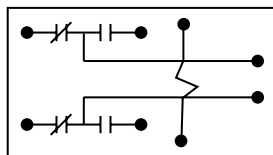
*Contact Magnecraft for more configurations to fit your applications.



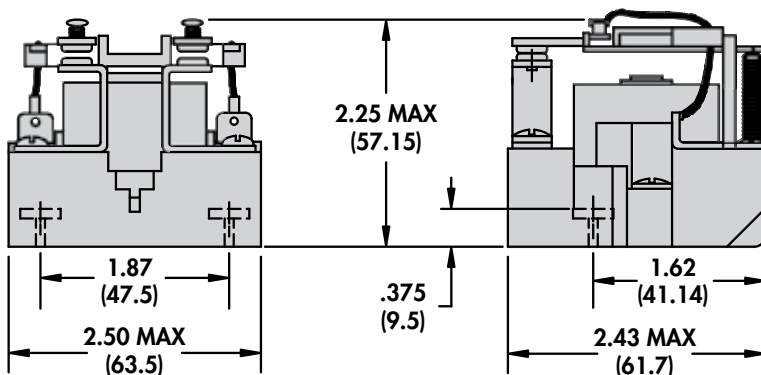
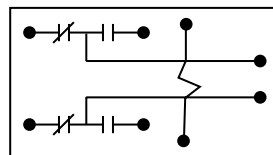
Optional Cover
(50-1289-1)
See Section 3 p.17



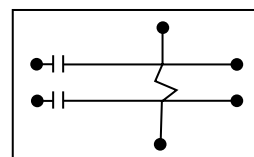
DPDT



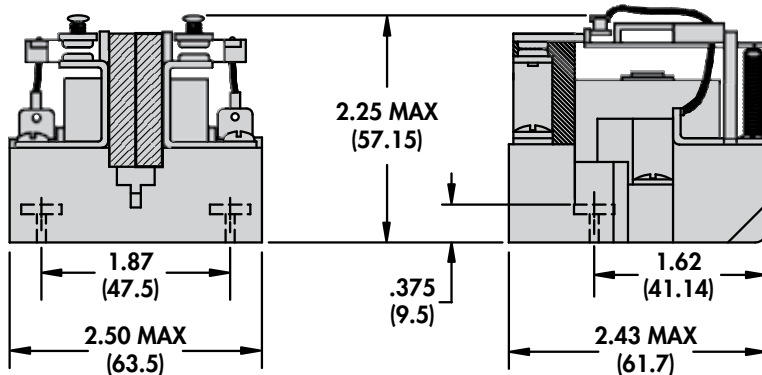
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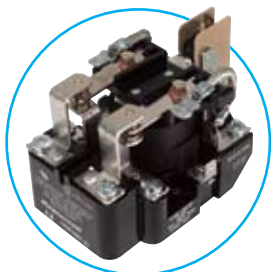
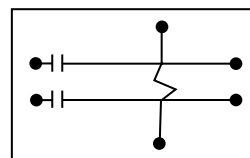
DPST-NO



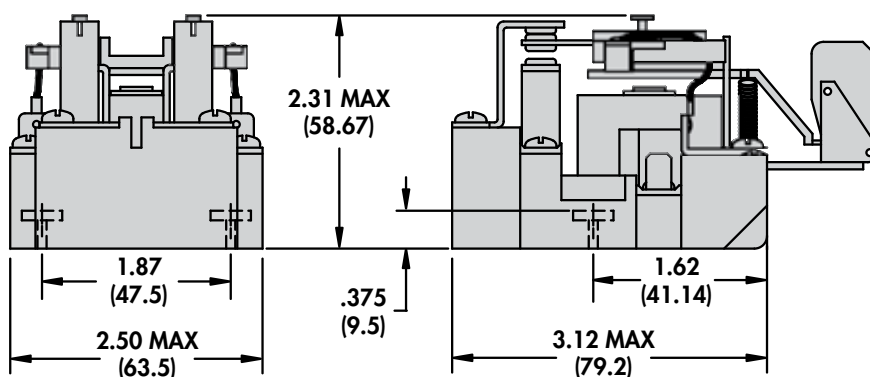
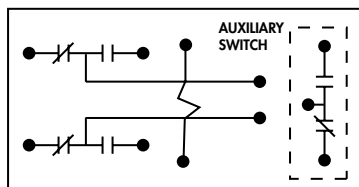
W199 Open Style Power Relay/Single and Two Pole 40 and 50 Amp Rating (DC and AC) *continued*



DPST-NO w/Blowout Magnet



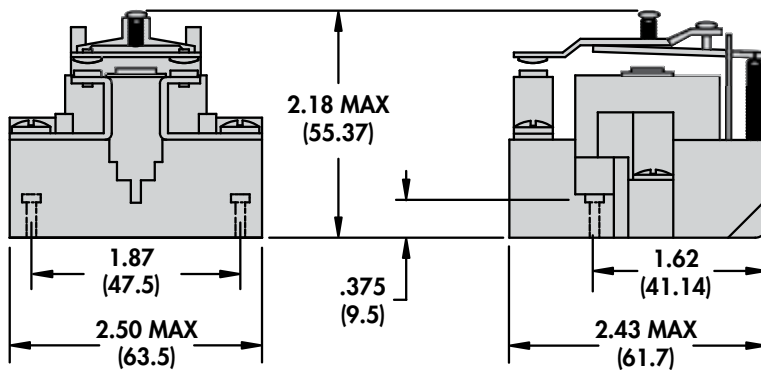
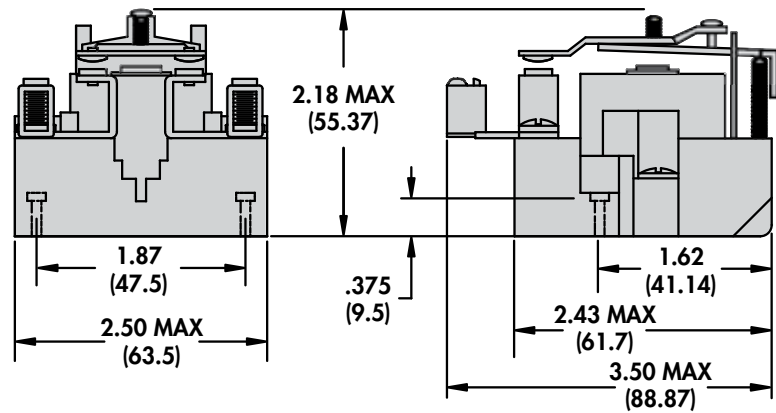
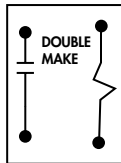
DPDT w/Auxiliary Switch and QC Connectors on Coil



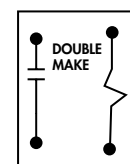
*More configurations available.



SPST-NO-DM w/Pressure Wire Connectors



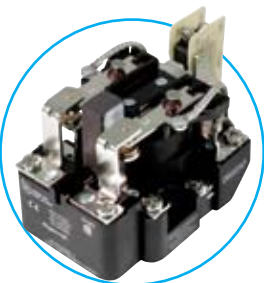
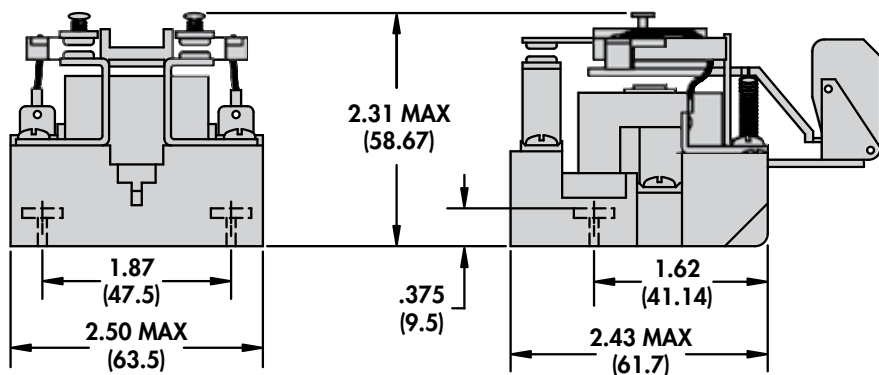
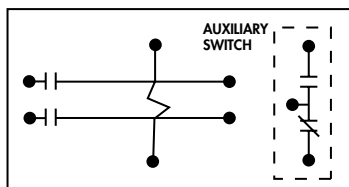
SPST-NO-DM



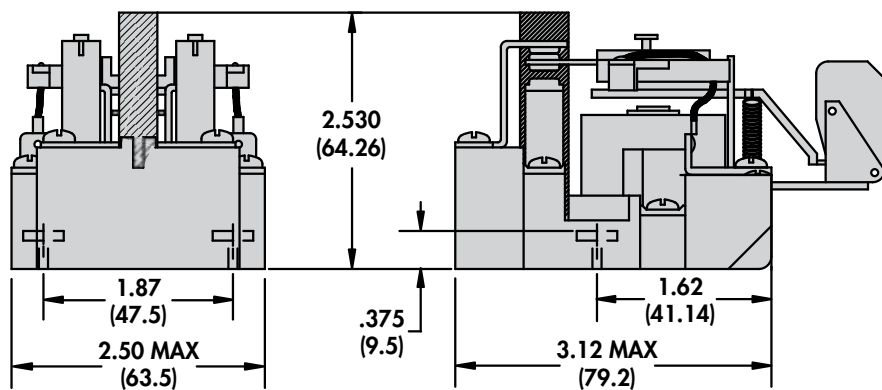
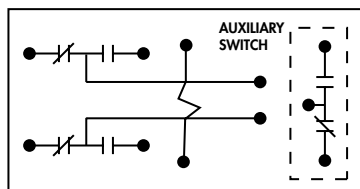
*More configurations available.



DPST-NO w/Auxiliary Switch



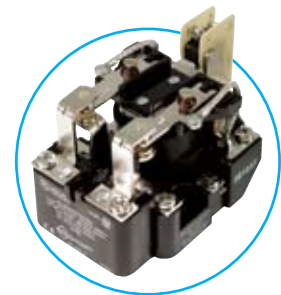
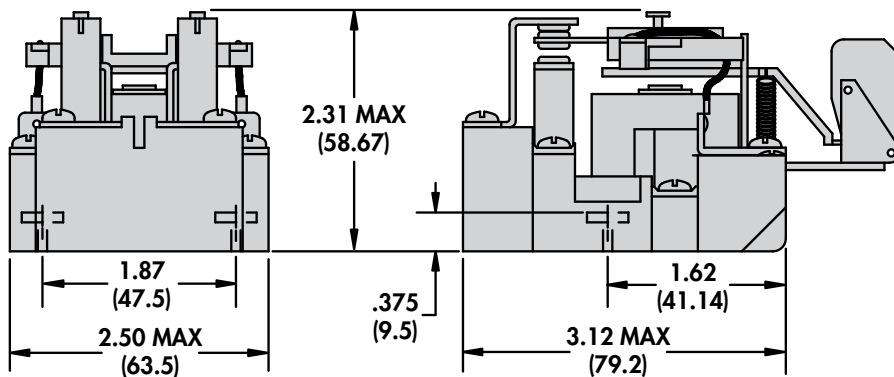
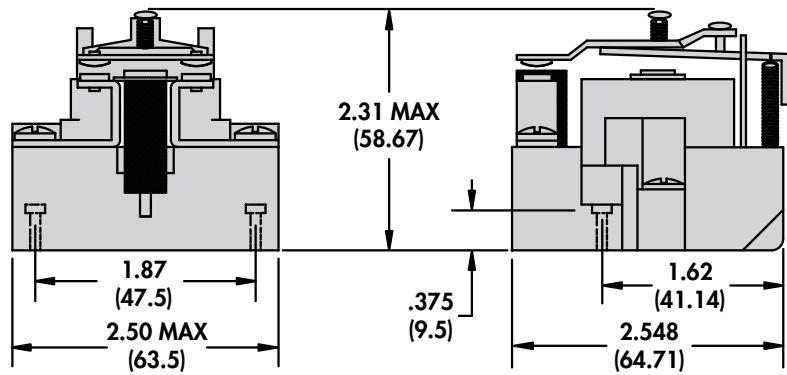
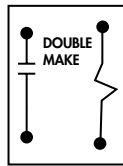
DPDT w/Blowout Magnet and Auxiliary Switch



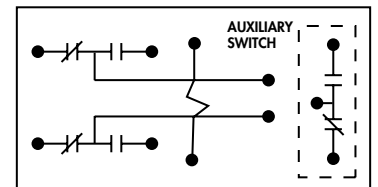
*More configurations available.



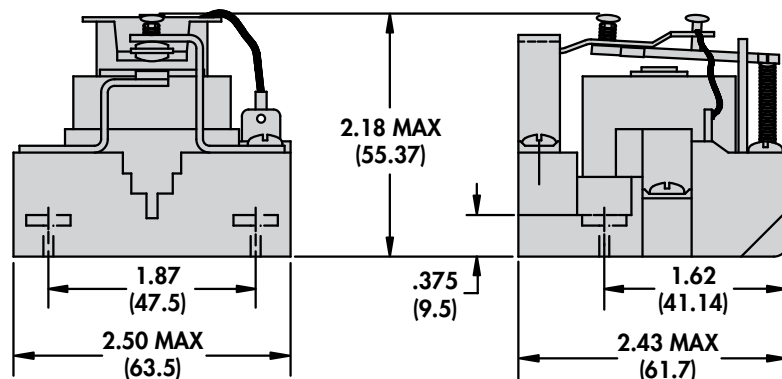
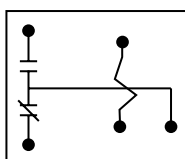
SPST-NO-DM w/Blowout Magnet



DPDT w/Auxiliary Switch



SPDT



*More configurations available.