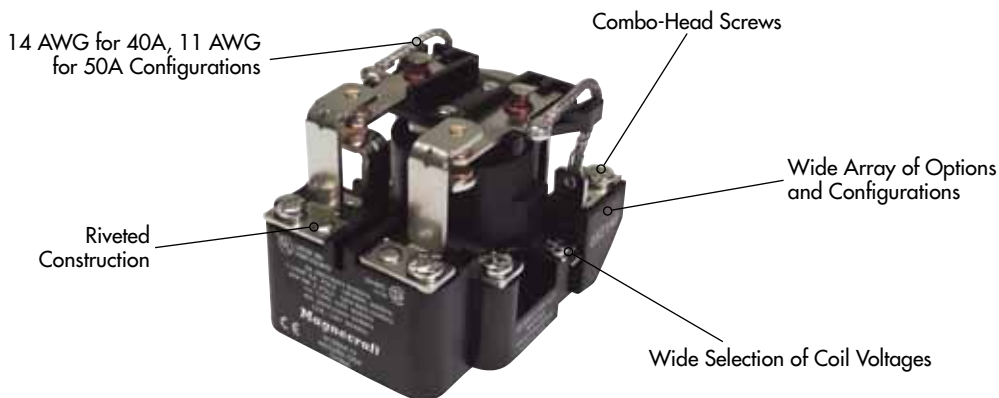
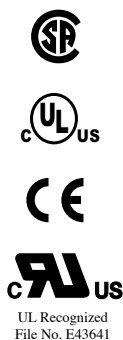


# W199 Open Style Power Relay/Single and Two Pole 40 and 50 Amp Rating (DC and AC)



## General Specifications (UL 508)

Contact Characteristics		Units	199, 199A
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, 5A @ 600VAC 50/60Hz
	⋮	Resistive	40A @ 28VDC
Blowout magnet	⋮	Resistive	See table A below
		HP	1 1/2 @ 120-600 VAC
		Tungsten	15A @ 120VAC
		Pilot Duty	A600
Minimum Switching Requirement	Minimum	mA	100 @ 12 VAC/VDC
Coil Characteristics			
Voltage Range	~	V	6...600
	% of Nominal	⋮	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)	6,000
Operating time (response time)		ms	30
Dielectric	Between coil and contact	~	V
	Between poles	~	V
	Between contacts	~	V
			2200
			2200
			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 (mm <sup>2</sup> )	8 (10)
Terminal Tightening Torque		in-lb (Nm)	7...9 (0.8...1.0)
Weight		grams	227 to 312

Table A:

Additional DC Rating with Magnetic Blowout	Single Make/Break	Double Make/Break
110 VDC	10 A	20 A
144 VDC	—	15 A
220 VDC	4 A	8 A
325 VDC	2 A	4 A
500 VDC	—	2 A



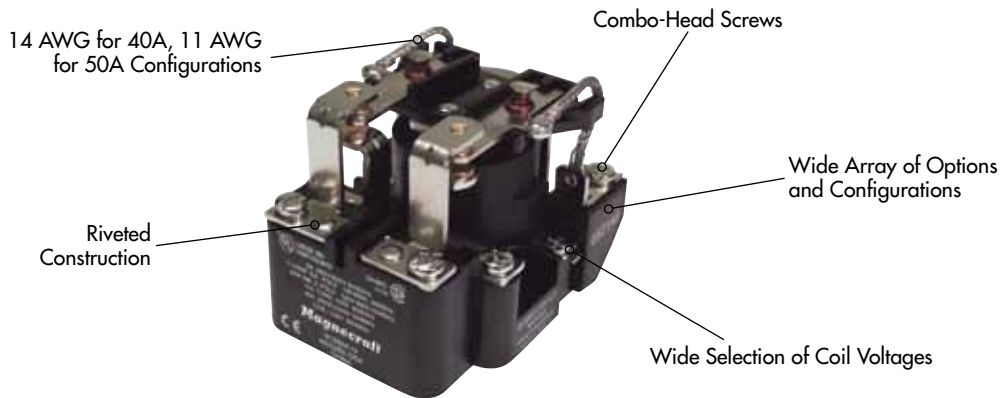
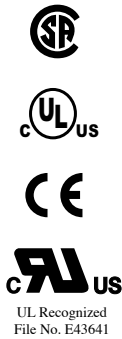
**Optional Cover  
(50-1289-1)**  
See Section 3 p.22

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, 10A @ 600VAC 50/60Hz	50A @ 277V 50/60Hz, 5A @ 600VAC 50/60Hz	50A @ 277V 50/60Hz, 10A @ 600VAC 50/60Hz
40A @ 28VDC	50A @ 28VDC	50A @ 28VDC
See table A below	See table A below	See table A below
2 @ 120-600 VAC	1 1/2 @ 120-600 VAC	2 @ 120-600 VAC
15A @ 120VAC	15A @ 120VAC	15A @ 120VAC
A600	A600	A600
100 @ 12 VAC/VDC	100 @ 12 VAC/VDC	100 @ 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%
6,000	6,000	6,000
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)
227 to 312	227 to 312	227 to 312

**Table B:**

Auxiliary Switch Ratings	SPDT	DPDT
Up to 240 VAC 50/60Hz	10 A (AC1)	10 A (AC1)
Motor Load, 120-240 VAC 50/60Hz	1/4 HP	1/4 HP
Pilot Duty, 120-240 VAC 50/60Hz	278 VA	278 VA
125 VDC	0.4 A (DC1)	0.4 A (DC1)
250 VDC	0.2 A (DC1)	0.2 A (DC1)
Tungsten, 120 VAC 50/60Hz	3 A	3 A

# 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
24 VAC 50/60 Hz	12 Ω	<b>W199AX-3</b>	SPDT	
120 VAC 50/60 Hz	290 Ω	<b>W199AX-4</b>	SPDT	
24 VAC 50/60 Hz	12 Ω	<b>W199AX-13</b>	DPDT	
120 VAC 50/60 Hz	290 Ω	<b>W199AX-14</b>	DPDT	
240 VAC 50/60 Hz	1200 Ω	<b>W199AX-15</b>	DPDT	
24 VAC 50/60 Hz	12 Ω	<b>W199AX-8</b>	DPST-NO	
120 VAC 50/60 Hz	290 Ω	<b>W199AX-9</b>	DPST-NO	
240 VAC 50/60 Hz	1200 Ω	<b>W199AX-10</b>	DPST-NO	
120 VAC 50/60 Hz	290 Ω	<b>W199ADX-4</b>	SPST-NO-DM	
240 VAC 50/60 Hz	1200 Ω	W199ADX-5	SPST-NO-DM	
120 VAC 50/60 Hz	290 Ω	<b>W199ADBX-4</b>	SPST-NO-DM	Magnetic Blowout
120 VAC 50/60 Hz	290 Ω	<b>W199ABX-14</b>	DPDT	Magnetic Blowout
120 VAC 50/60 Hz	290 Ω	W199ABMX-7	DPDT	Auxiliary Switch, Magnetic Blowout
120 VAC 50/60 Hz	290 Ω	<b>W199AMX-64</b>	DPDT	Auxiliary Switch
40A Rated Relays, DC Operated				
12 VDC	70 Ω	<b>W199X-2</b>	SPDT	
24 VDC	290 Ω	<b>W199X-3</b>	SPDT	
6 VDC	18 Ω	<b>W199X-11</b>	DPDT	
12 VDC	70 Ω	<b>W199X-12</b>	DPDT	
24 VDC	290 Ω	<b>W199X-13</b>	DPDT	
110 VDC	6000 Ω	<b>W199X-14</b>	DPDT	
12 VDC	70 Ω	<b>W199X-7</b>	DPST-NO	
24 VDC	290 Ω	<b>W199X-8</b>	DPST-NO	
12 VDC	70 Ω	W199DYX-2	SPST-NC-DB	
12 VDC	70 Ω	<b>W199DX-2</b>	SPST-NO-DM	
24 VDC	290 Ω	<b>W199DX-3</b>	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	<b>W199BX-13</b>	DPDT	Magnetic Blowout
110 VDC	6000 Ω	<b>W199BX-14</b>	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.