AZ2505

120 AMP LATCHING POWER RELAY

FEATURES

- Low cost
- 120 Amp switching
- Heavy loads to 30,000VA
- 4kV dielectric
- Single or Dual Coil Latching available
- Multiple Termination Options
- UL pending

CONTACTS

Arrangement	SPST-NO (1 Form A) SPST-NC (1 Form B)
Ratings	Resistive load: Max. switched power: 30000VA Max. switched current: 120A Max. switched voltage: 250VAC
Rated Load **UL, CUR**	60A at 250VAC 80A at 250VAC 100A at 250VAC 120A at 250VAC
Material	silver alloy
Resistance	< 2 milliohms initially (6V, 1A voltage drop method)

COIL

Power	
At Pickup Voltage (typical)	563mW Single Coil 1.125W Dual Coil

NOTES

1. All values at 23°C (73.4°F).
2. Relay may pull in with less than “Must Operate” value.
3. Specifications subject to change without notice.
4. Allow suitable slack on leads when wiring, and do not subject the terminals to excessive force.

GENERAL DATA

Life Expectancy **Mechanical** **Electrical**	Minimum operations 1 x 10^6 1 x 10^4 at 60A, 250VAC Res.
Set Time (max)	20ms at nominal coil voltage
Reset Time (max)	20ms at nominal coil voltage
Dielectric Strength **(at sea level for 1 min.)**	4000VAC coil to contact 1500VAC between open contacts
Insulation Resistance	1000 megohms min. at 500 VDC
Ambient Temperature **Operating** **Storage**	At nominal coil voltage -40°C (-40°F) to 85°C (194°F) -40°C (-40°F) to 90°C (194°F)
Vibration	0.059" DA at 10–55Hz
Operating Humidity	20 - 85%RH (non-condensing)
Shock **Operating** **Non-Operating**	 10 g 100 g
Enclosure	P.B.T. polyester
Terminals	Quick connect terminal
Max. Solder Temp.	270°C (518°F)
Max. Solder Time	5 seconds
Weight	50 grams

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RELAY ORDERING DATA

COIL SPECIFICATIONS -Single Coil					ORDER NUMBER	
Nominal Coil VDC	Set Voltage VDC	Reset Voltage VDC	Max. Continuous VDC[1]	Coil Resistance ± 10%	1 Form A	1 Form B
5	3.75	4.0	6.5	25	AZ2505P1–1A–5D	AZ2505P1–1B–5D
6	4.50	4.8	7.8	36	AZ2505P1–1A–6D	AZ2505P1–1B–6D
9	6.75	7.2	11.7	81	AZ2505P1–1A–9D	AZ2505P1–1B–9D
12	9.00	9.6	15.6	144	AZ2505P1–1A–12D	AZ2505P1–1B–12D
24	18.00	19.2	31.2	576	AZ2505P1–1A–24D	AZ2505P1–1B–24D

Add suffix 'E' after A or B for 80A contacts, 'H' for 100A contacts, or 'T' for 120A contacts. Add Termination Suffix as seen in Chart below. Note[1]: Max continuous voltage should not be applied for more than 30 seconds.

COIL SPECIFICATIONS -Dual Coil					ORDER NUMBER	
Nominal Coil VDC	Set Voltage VDC	Reset Voltage VDC	Max. Continuous VDC[1]	Coil Resistance ± 10%	1 Form A	1 Form B
5	3.75	4.0	6.5	12.5 + 12.5	AZ2505P2–1A–5D	AZ2505P2–1B–5D
6	4.50	4.8	7.8	18 + 18	AZ2505P2–1A–6D	AZ2505P2–1B–6D
9	6.75	7.2	11.7	40.5 + 40.5	AZ2505P2–1A–9D	AZ2505P2–1B–9D
12	9.00	9.6	15.6	72 + 72	AZ2505P2–1A–12D	AZ2505P2–1B–12D
24	18.00	19.2	31.2	288 + 288	AZ2505P2–1A–24D	AZ2505P2–1B–24D

Add suffix 'E' after A or B for 80A contacts, 'H' for 100A contacts, or 'T' for 120A contacts. Add Termination suffix as seen in chart below. Note[1]: Max continuous voltage should not be applied for more than 30 seconds.

TERMINATION OPTIONS

MS	Stationary Contact: Shunt	Moveable Contact: Lead Wire
MH	Stationary Contact: Shunt	Moveable Contact: Tab
MC	Stationary Contact: Shunt	Moveable Contact: Shunt
WHS	Stationary Contact: Tab	Moveable Contact: Lead Wire
WHH	Stationary Contact: Tab	Moveable Contact: Tab
CH	Stationary Contact: Tab	Moveable Contact: Shunt

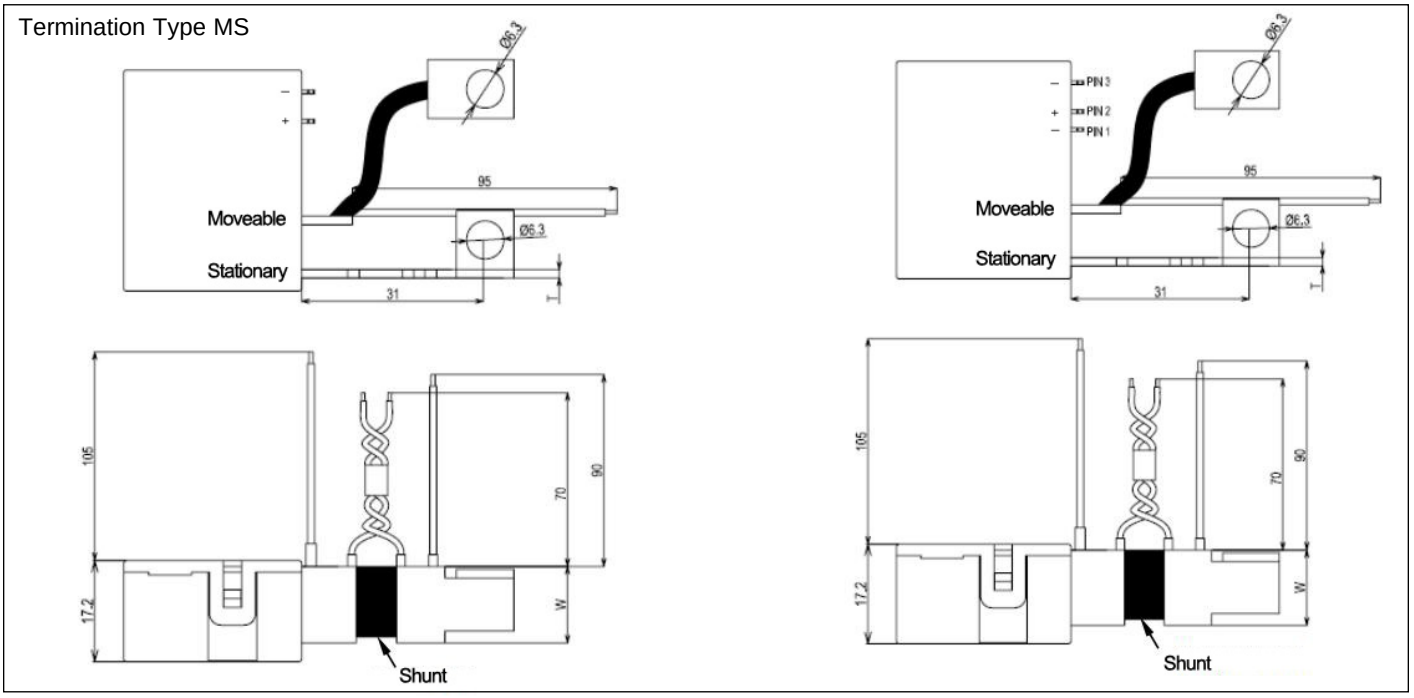
WSS	Stationary Contact: Lead Wire	Moveable Contact: Lead Wire
WSH	Stationary Contact: Lead Wire	Moveable Contact: Tab
CS	Stationary Contact: Lead Wire	Moveable Contact: Shunt
*PCB	Printed Circuit Board	Tin Plated Terminals

* Only available in 60A, 80A, and 100A version

MECHANICAL DATA

Single Coil

Dual Coil



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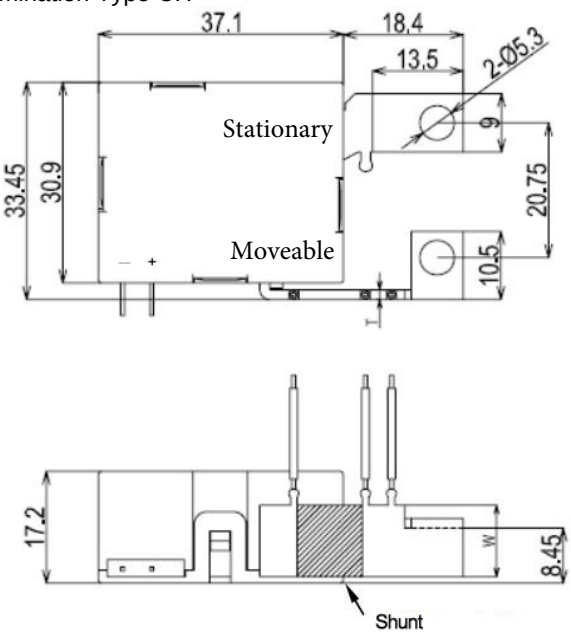
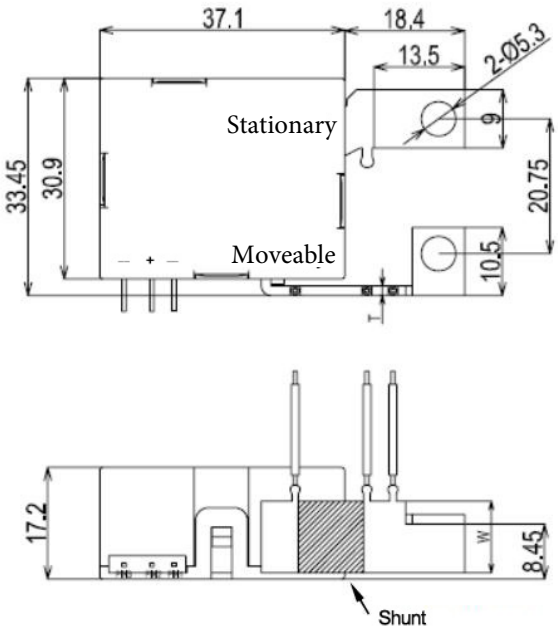
Single Coil

Dual Coil

Termination Type CH

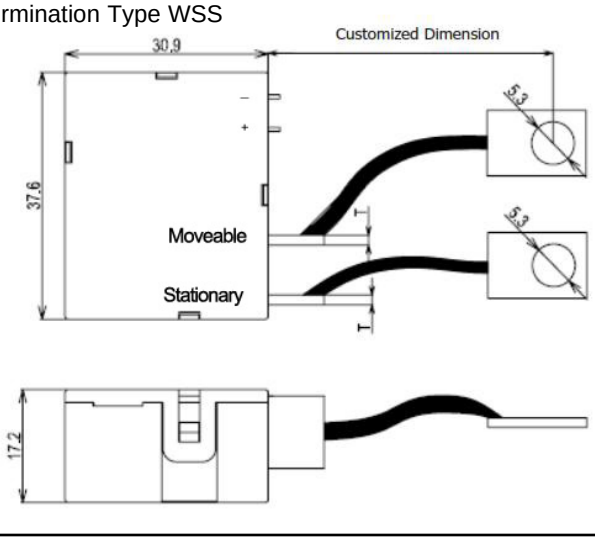


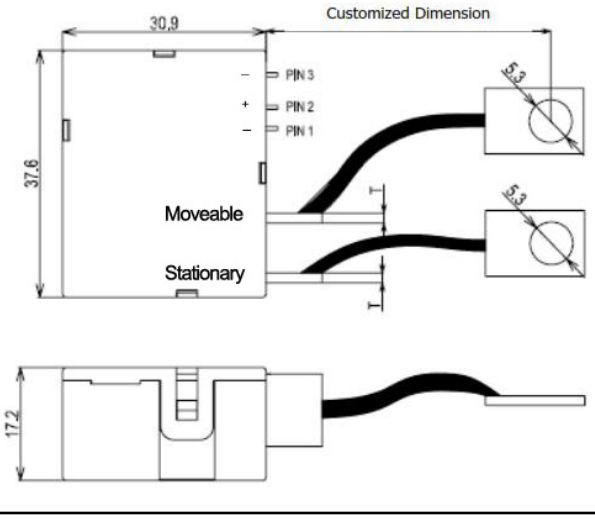


Single Coil

Dual Coil

Termination Type WSS

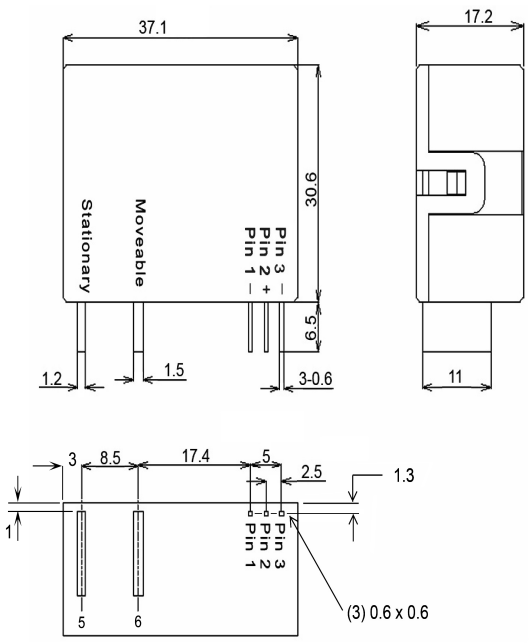




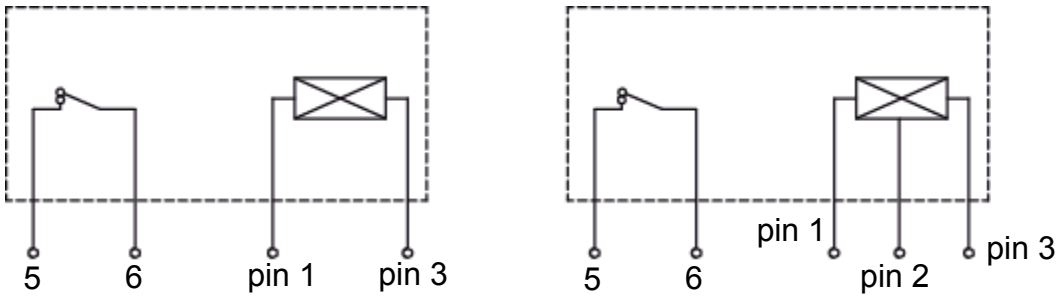
Load Current	Tab Thickness(T)
60A	1.0mm
80A	1.5mm
100A	2.0mm
120A	2.5mm

Dual Coil

Termination Type PCB



Wiring Diagram



NOTE:

1. Single Coil Latching Version

(1). After energizing Pin 3(+) and Pin 1(-), 50ms pulse, Terminal 5 and 6 is conncected.

(2). After energizing Pin 1(+) and Pin 3(-), 50ms pulse, Terminal 5 and 6 is diconncected.

1. Double Coil Latching Version

(1). After energizing Pin 2(+) and Pin 1(-), 50ms pulse, Terminal 5 and 6 is conncected.

(2). After energizing Pin 2(+) and Pin 3(-), 50ms pulse, Terminal 5 and 6 is diconncected.