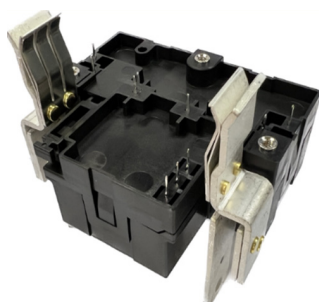


»» Features

- 200A Latching relay is used in a residential meter socket adapter.



»» Type List

Contact form	Designation (provided with)
	Flanged cover (Dust cover)
2B (DPDB)	MR05-2Bc-D1

»» Ordering Information

MR05 - 2B c - D1 □
 1 2 3 4 5

1. MR05 -- Basic series designation

4. D1 -- Flanged cover (Dust cover)

2. 2B -- Double-pole, double-break (DPDB)
main contact

5. □ -- Coil voltage (please refer to the
coil rating data for the availability)

3. c -- Single-pole, double throw (SPDT)
Auxiliary.

»» Contact Rating

Rated load (Resistive)	Making 0A, Carrying 200A, Breaking 200A / 277VAC, On 1s/ Off 9s, at 25°C, 5K ops.
	Making 0A, Carrying 75A, Breaking 75A / 277VAC, On 1s/ Off 9s, at 25°C, 10K ops.
Breaking voltage	Max. 300VAC
Continuous carrying current	Max. 200A

»» Coil Rating (DC) Single coil

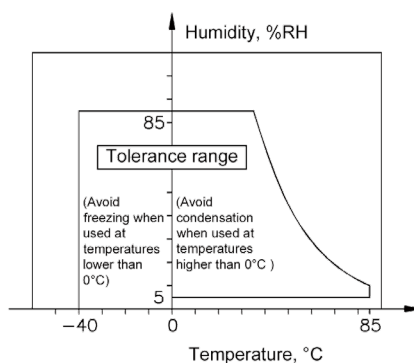
Rated voltage (V)	Rated current ±10 % at 23°C (A)		Coil resistance ±10 % at 23°C(Ω)		Set / Reset voltage (Max.) at 23°C	Pulse duration (ms)	Power consumption at rated voltage	
30	Set	Reset	Set	Reset	85% of rated voltage	50~100	Set	Reset
	2.4	2.4	12.5	12.5			approx. 72W	approx. 72W

Notes : (1) The data shown above are initial values : recommended driving voltage is 1~1.5times of rated voltage.
 (2) If no special required by customer, we will keep the relay on the "set" status when delivery.

»» Specification

Contact material	Ag alloy	
Voltage drop ⁽¹⁾	0.4mΩ Typ. at 200A after 60s	
Operate time ⁽¹⁾	20ms Max.	
Release time ⁽¹⁾	15ms Max.	
Vibration resistance	Operating extremes	10Hz~55Hz 1.5mm
	Damage limits	10Hz~55Hz 1.5mm
Life expectancy	Mechanical	100,000 ops.
Operating ambient temperature	-40~+85°C (no freezing)	
Weight	Approx. 500g (flanged cover)	

- Notes :
- (1) Initial value. Operate and release time excluding contact bounce at rated coil voltage.
 - (2) Unless otherwise specified, all tests are under room temperature and humidity.
 - (3) Applying no diode to this relay. The life expectancy will be lower when a diode is used. To use a varistor (ZNR) could absorb the coil surge of relay that is recommended.
 - (4) Do not use the relay exceeding the coil rating, contact rating and life expectancy, or this may cause the risk of overheating.
 - (5) To assure optimum performance, avoid the relay from dropping, hitting, or other unnecessary shocks.
 - (6) In order to maintain an "Open" or "Closed" state of the relay, the coil voltage should reach the rated voltage. The pulse width should be 50~100ms to ensure a proper change of state. DO NOT energize at the same time on a Dual Coil or energize the coil for longer than 1 minute (damage to the coil could occur).
 - (7) To avoid mounting the relay in strong magnetic fields (near a transformer or magnet) or close to an object that radiates heat.
 - (8) Always keep the oils and fats kind from the main terminal parts.
 - (9) Please pay attention to the phenomenon of freezing in the low temperature environment below 0°C. Please evaluate the actual use of the environment.
 - (10) Relay is on the "reset" or "set" status when being released from stock, with the consideration of shock risen from transit and relay mounting, relay would be changed to "set" or "reset" status, herefore, when application (connecting the power supply), please reset the relay to "set" or "reset" status on request.
 - (11) To avoid unexpected damage, when tightening a screw, use no exceeding specified torque range as below :
M4 screw : 5 N·m
 - (12) All loads are based on 85 mm² harnesses and bus bars.
 - (13) The insertion and withdraw force are less than 180N per jaw.
 - (14) Usage, transport and storage conditions
 - 1. Temperature: -40~+85°C
 - 2. Humidity: 5 to 85% R.H.
 - 3. Pressure: 86 to 106 kPa
 - Furthermore, the humidity range varies with the temperature. So, use relays within the range indicated in the graph below.



(15) Please contact Song Chuan for the detailed information.

»» Insulation Data

Insulation resistance ⁽¹⁾	100MΩ Min. (DC 500V)
Dielectric strength ⁽¹⁾	Between coil and contact : AC 2500V, 50/60Hz 1 min.
	Between open contacts : AC 2500V, 50/60Hz 1 min.
	Between contact circuits : AC 2500V, 50/60Hz 1 min.
Insulation distance	
Clearance / creepage distances	Between coil and contact : ≥ 6.4mm / ≥ 9.5mm
	Between open contacts : ≥ 2.0mm / ≥ 5.0mm
	Between contact circuits : ≥ 9.5mm / ≥ 19.1mm

Notes : (1) Initial value.

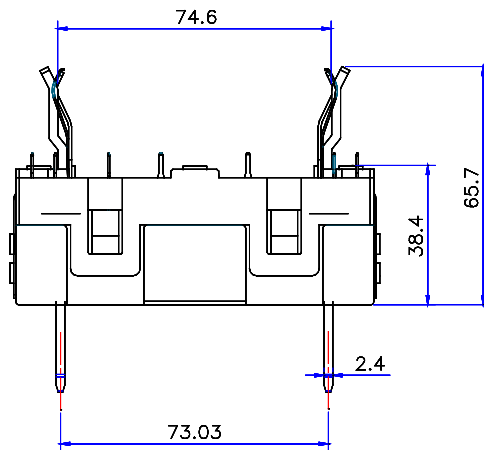
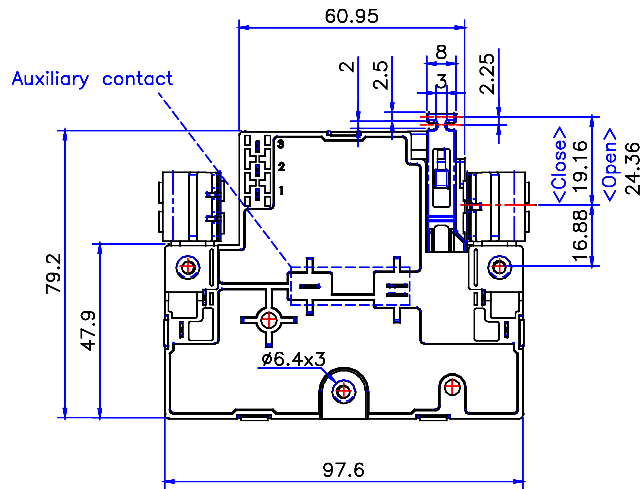
»» Safety Approval

Certified	UL / CUL
File No.	E88991

»» Safety Approval Rating

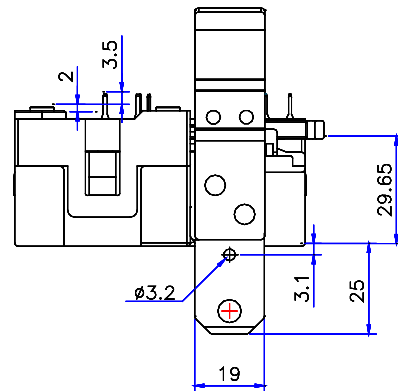
UL / CUL
0A 277VAC, Resistive, Carrying 200A

»» Outline Dimensions



	Set (close)	Reset (open)
Contact position		
Terminal pin	1 / 2 (+) / (-)	2 / 3 (-) / (+)
Auxiliary contact		

TOLERANCE:
 LESS THAN: 1(0.039) ±0.1(0.004)
 5(0.197) ±0.3(0.012)
 20(0.787) ±0.5(0.020)
 MORE THAN: 20(0.787) ±1(0.039)



»» Wiring Diagram (Top view)

