

● Features

- Latching relay
- 20A switching capability
- Both 1 coil and 2 coils available
- 5KV dielectric strength between coil and contacts
- Environmental friendly product RoHS compliant
- Dimensions: 29.0 x 12.7 x 15.7 mm



● Application

- Electric Meter
- Smart Home Application, etc.

● Contact Data

Contact Arrangement	1A, 1C
Contact Material	Ag Alloy
Contact Rating	16A 250VAC
Max. Switching Power	4000VA
Max. Switching Voltage	250VAC
Max. Switching Current	20A
Contact Resistance	$\leq 50\text{m}\Omega$
Electrical Endurance	5×10^4 (NO: 16A 250VAC, Resistive load, at 85°C, 1s on 9s off)
Mechanical Endurance	2×10^6

● Coil Parameter (at 23°C)

1 Coil type

Coil Voltage (VDC)		Coil Resistance ($\Omega \pm 10\%$)	Pickup Voltage(max) (VDC)	Release Voltage(max) (VDC)	Coil Power (W)
Rated	Max.				
5	6.0	62	3.5	3.5	0.4

- Coil Parameter (at 23°C)

1 Coil type

Coil voltage (VDC)		Coil Resistance ($\Omega \pm 10\%$)	Pickup Voltage(max) (VDC)	Release Voltage(max) (VDC)	Coil Power (W)
Rated	Max.				
6	7.2	90	4.2	4.2	0.4
9	10.8	202	6.3	6.3	
12	14.4	360	8.4	8.4	
24	28.8	1440	16.8	16.8	

2 Coils type

Coil voltage (VDC)		Coil Resistance ($\Omega \pm 10\%$)	Pickup Voltage(max) (VDC)	Release Voltage(max) (VDC)	Coil Power (W)
Rated	Max.				
5	7.5	42	3.5	3.5	0.6
6	9.0	55	4.2	4.2	
9	13.5	135	6.3	6.3	
12	18.0	240	8.4	8.4	
24	36.0	886	16.8	16.8	

- Operation Condition

Insulation Resistance (initial)		1000M Ω (500VDC)
Dielectric Strength	Between Contacts	1000VAC, 1min
	Between Contact and Coil	5000VAC, 1min
Shock Resistance	Functional	98m/s ²
	Endurance	980m/s ²
Vibration Resistance		10~55Hz double amplitude 1.5mm
Ambient Temperature		-40 ~ +85°C

Latching Relay I L2B



RELAY / ISO9001 / IATF16949 CERTIFIED

● Operation Condition

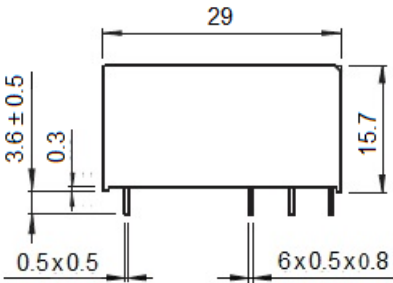
Operate Time	≤ 10ms
Release Time	≤ 10ms
Relative Humidity	5%~85%
Weight	Approx. 13.5g

● Ordering Information

		L2B	-12D	2	-A	-S	(XXX)
Model							
Coil Voltage	5, 6, 9, 12, 24 VDC						
Coil Sort	Nil: 1 coil 2: 2 coils						
Contact Arrangement	A: 1 Form A C: 1 Form C						
Construction	Nil: Flux tight S: Sealed						
Special Code	Nil: Standard XXX: Customer special requirement						

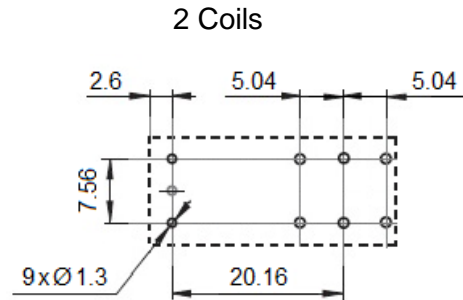
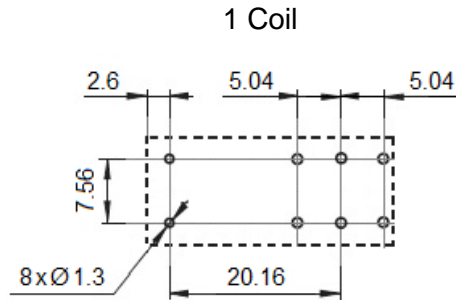
● Dimensions (UNIT: mm)

Outline Dimensions

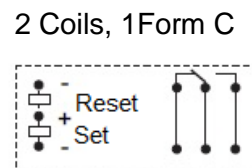
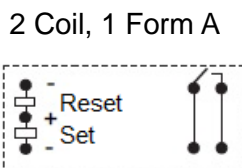
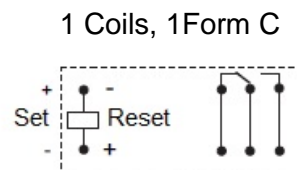
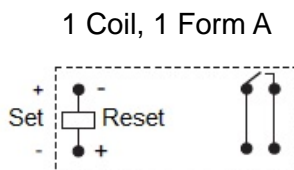


● Dimensions (UNIT: mm)

Mounting (Bottom views)



Wiring Diagram (Bottom views)



Remark: 1) In case of no tolerance shown in outline dimension: outline dimension $\leq 1\text{mm}$, tolerance should be $\pm 0.2\text{mm}$; outline dimension $>1\text{mm}$ and $<5\text{mm}$, tolerance should be $\pm 0.3\text{mm}$; outline dimension $\geq 5\text{mm}$, tolerance should be $\pm 0.5\text{mm}$.

2) The tolerance without indicating for PCB layout is always $\pm 0.1\text{mm}$.

Notice

1. The data shown above are initial values.
2. Relay is on the "reset" or "set" status when being released from stock, with the consideration of shock arisen from transit and relay mounting, relay would be changed to "set" or "reset" status, therefore, when application (connecting the power supply), please reset the relay to "set" or "reset" status on request.
3. Do not energize voltage to "set" coil and "reset" coil simultaneously. And also long energized time (more than 1 min) should be avoided.
4. Normally the load terminals are not suitable for reflow solder, wave solder or tin solder, we suggest use spot welding. Load terminals shall be prevented from assemble stress, or freely move.
5. Relays used for metering measuring applications are usually made with dust proof structure, while most relays could



Latching Relay I L2B

RELAY / ISO9001 / IATF16949 CERTIFIED

be made specially per customer's specific requirements. No longer than 6 months' storage time is recommended for this kind of relay, and please pay attention to the storage environment. To ensure contact reliability, we will keep contact status be closed when delivery if no special required by customer.

Disclaimer

The specification is for reference only. See to "Terminology and Guidelines" for more information. Specifications subject to change without notice. We could not evaluate all the performance and all the parameters for every possible application. Thus the user should be in a right position to choose the suitable product for their own application. If there is any query, please contact IOEC for the technical service. However, it is the user's responsibility to determine which product should be used only.

In & Out Electronic Corporation. All rights of IOEC are reserved.