EV Bistable Relay-PCB Soldering Type

16120

Making Electricity safer by IVY METTERING

60A Bistable RELAY

- Max.Switching Current:60A
- Rated Coil Consumption:1.5/3W(20ms)
- Dimension:38*30*16.5mm
- IEC62055-31 UC2 Certified,IEC61810-1 Compliant
- Widely used in EV field, industrial control field,etc

Technical Parameter

Rated Load	60A 250VAC
Contact Form	1A/1B
Contact Material	$AgSnO_2$
Max. Switching Voltage	250VAC
Max. Switching Current	60A
Max. Switching Power	15000VA
Contact Resistance	<1.5mΩ
Pick-up Time	20ms
Release Time	20ms
Electrical Endurance	10000 Cycles
Mechanical Endurance	100000 Cycles
Temp.Rise	≤55K When Ambient 40℃

Insulation Resistance	1000MΩ(DC 500V)
Dielectric Strength:	
Coil to Contact	4000VAC,50/60Hz,1Min.
Across Open Contact	2000VAC,50/60Hz,1Min.
Contact Gap	0.45mm Gap Min
Ambient Temperature	-40°C~70°C
Ambient Humidity	45%~95%RH
Vibration	1.5mm(DA),10 ~ 55Hz
Shock Resistance:	
Functional	10G(100m/s2)
Destructive	100G(1000m/s2)
Surge Immunity	2200A/10ms
Dielectric Creepage	10mm

Coil Data

	Single Coil(Latching)	Dual Coil(Latching)
Coil Consumption	1.5W	3.0W
Pulse Duration	Min.100 ms	Min.100ms

Nominal Coil Voltage	**Minimum Operating Voltage**	**Coil Resistance(Ω±10%)@23°C**	
		Single Coil(Latching)	**Dual Coil(Latching)**
12VDC	8.4VDC	96Ω	2*48Ω

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Ordering Information

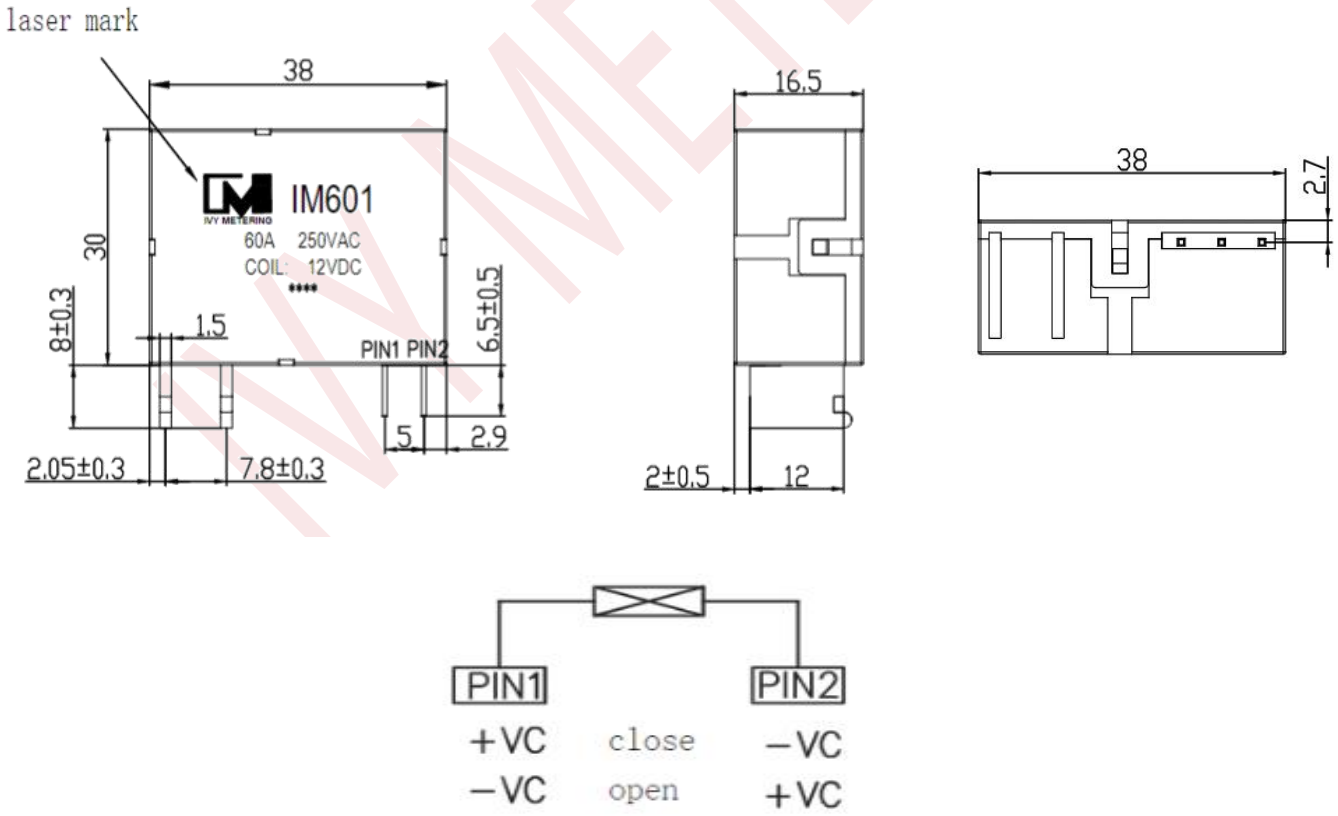
Capacity /Coil Voltage Coil (Single/Coil)/Contact Form	60A / 12VDC
Single Coil, 1A	16120-S
Dual Coil, 1A	16120-D
Single Coil, 1B	16120-3

Dimensional Drawing & Wiring Diagram

All dimension in mm unless otherwise noted ,For more information, please contact IVY Metering.

Outline Dimensions(Standard Terminal) (Unit:mm)

16120-S



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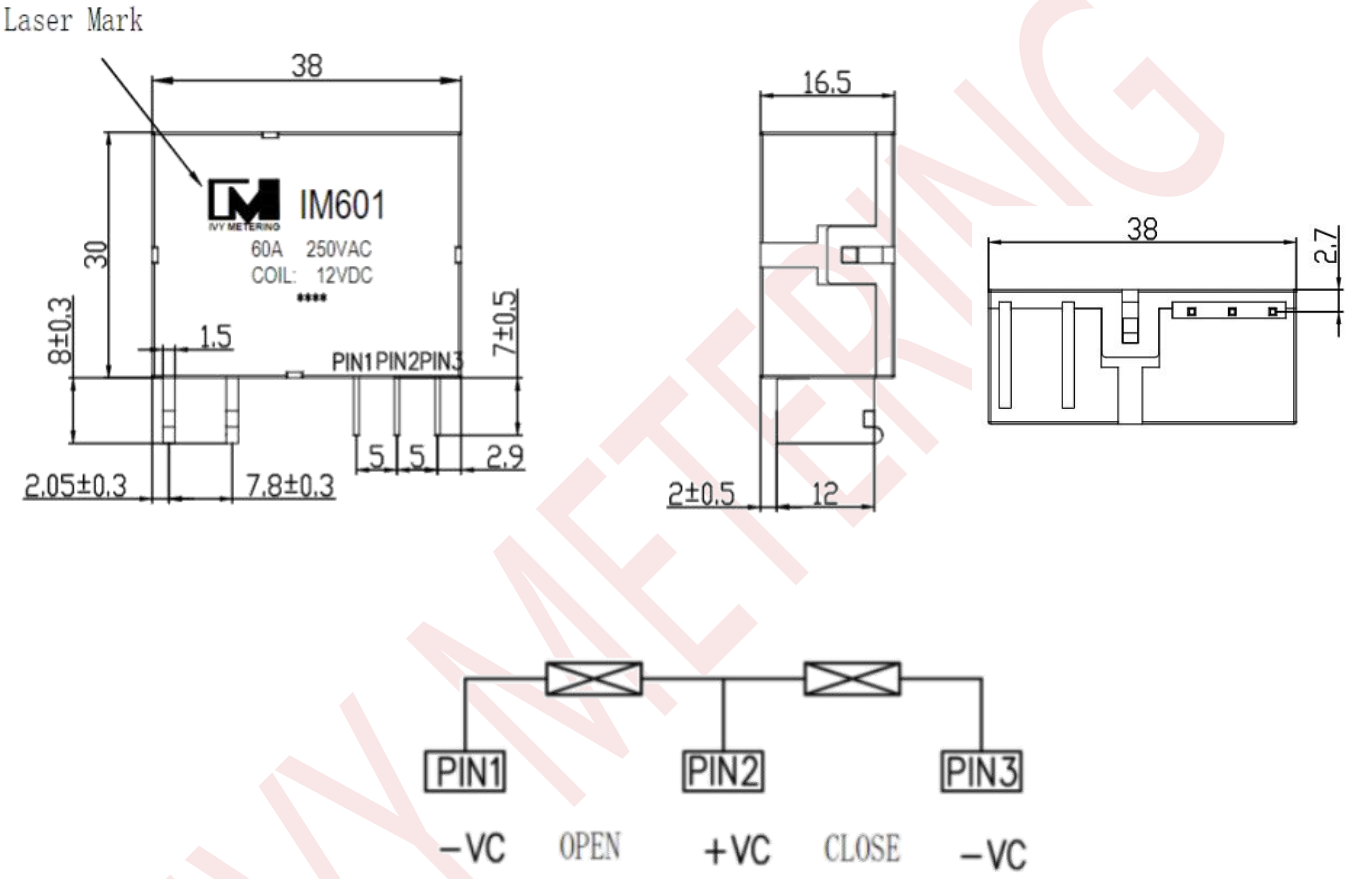
Dimensional Drawing & Wiring Diagram

16120-D



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EV Bistable Relay-PCB Soldering Type

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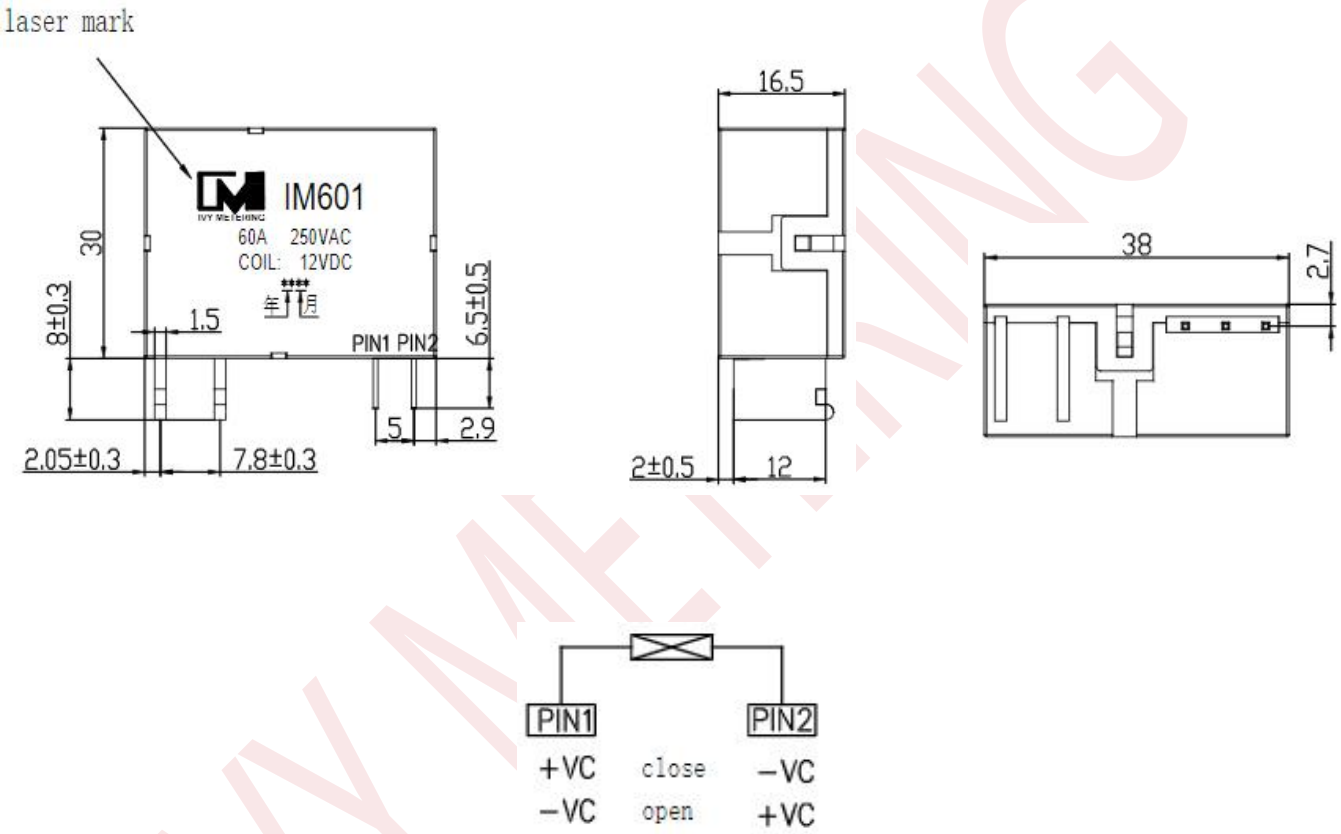
Dimensional Drawing & Wiring Diagram

16120-3



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Additional Notes

Disclaimer: This data sheet is for reference only .All specifications are subject to change without prior notice.IVY Metering cannot predict every possible application for our relays. While we do our best to make our relays as versatile as possible, we highly recommend contacting our engineering team if you have any questions.IVY Metering is not responsible for malfunctioning relays when operated outside the specified parameters given in this data sheet.

Precautions on Usage

For the purpose of guiding the users on design and installation properly, and lower the influences of installation force, damages and performance caused by use improperly. Please read below clauses before using:

1. Please do NOT squiggly the terminal of latching relay, and keep the test bench clean, the latching relay can not be over-squeezed or over-stacked.
2. Generally speaking, when installing dual screw mounting type latching relay, except special terminals, we suggest to insert the screws to the fixing hole, PRE-TIGHTEN BOTH by dedicated tools, then lock with the specified torque to avoid locking one terminal then rotating the relay with force.
3. The latching relay and terminal should be fixed tightly and NO LOOOSENING, or there will be high temperature rise on the load terminal of latching relay.
4. Do NOT open the cover of latching relay personally, it may cause the failure of relay due to the changes of parameters,performance and invasion of foreign objects.
5. It's NOT suitable to execute reflux welding and wave welding on the load terminal of latching relay, we suggest to choose manual welding which may last for no more than 2S.
6. The form of contacts are normally open or normally closed (NO, NC), but it may change due to the factors of transportation or being shocked during installation, please reset the form into NO or NC as per the needs.
7. Taking or Moving the latching relay, you should contact the main part and place lightly. Please do NOT pull or push the sampling wires of latching relay or carrying the latching relay via the sampling wires, please separate the relay and return to our factory once the relay fall down.
8. To ensure the correct disconnection,connection and long term stable operation of latching relay while using, and considering the factors such as the changes of environmental temperatures,the driving voltage on the coil or the motor shall reach AT LEAST 90% of nominal voltage and the pulse width shall be AT LEAST 5 times of operation time.
9. Please do NOT drive the disconnection coil and connection coil at the same time,it;s not correct to drive the coil for a long time(Suggestion time is $\leqslant$1 minute), please inquiry for special circumstances.
10. To ensure the reliability of product, the default contact form is normally closed without specifying.
11. The stacking level of the packages should not be too high (under 5 layers), it's the anti-dust structure and the terminal is customized hence please take care of the environment and the storage time is LESS THAN 6 Months.
12. Special requirements (such as using under harsher environments such as strong magnetism, explosiveness, and extremely low temperatures, ultra-sensitive action, ultra-low power consumption, ultra-low resistance value, ultra-high pressure resistance, too low temperature rise and other requirements) should be discussed with manufacturer before ordering, or standard version will be supplied.