

Power Latching Relay EW60

- 1 pole 60A, 1 form A (NO) contact
- Polarized bistable (latching) with 1 or 2 coils
- NEMA 410-2011, 16A, 277VAC, electronic ballast; 20A branch circuit
- 480A inrush, 2.1m sec

Typical applications

Lighting control, bus actuator, power distribution, circuit protection, inverter

Approvals

UL

Contact Data

| | |
|--|-------------------------|
| Contact arrangement | 1 form A (NO) |
| Rated voltage | 250VAC |
| Max. switching voltage | 440VAC |
| Rated current | 60A |
| Breaking capacity max. | 15kVA |
| Contact material | AgSnO ₂ |
| Initial voltage drop | ≤1mΩ @ 3A, 12V |
| Frequency of operation with/without load | 360/3600h ⁻¹ |

Contact ratings

| Type | Contact | Load | Cycles |
|----------|---------|----------------------------------|----------------------|
| UL508 | | | |
| EW60-1A3 | NO | 60A, 250VAC, resistive, 70°C | 1x10 ⁴ 1) |
| EW60-1A3 | NO | 60A, 250VAC, general use, 70°C | 6x10 ³ |
| EW60-1A3 | NO | 120VAC, 1HP (horsepower) 23°C | 1x10 ⁴ |
| EW60-1A3 | NO | 16 or 20A, electr. ballast, 70°C | 50x10 ³ |

1) in Process

Coil Data

| | |
|---------------------------------|--------------------------------|
| Magnetic system | polarized, bistable (latching) |
| Number of coils | 1 or 2 |
| Coil voltage range | 12VDC |
| Min./Max. energization duration | 100ms/1min at <10% duty factor |

Coil versions, bistable coil

| Coil code | Rated voltage VDC | Set voltage VDC | Reset voltage VDC | Coil resistance Ω±10% | Rated coil power W |
|------------------------|-------------------|-----------------|-------------------|-----------------------|--------------------|
| bistable 1 coil | | | | | |
| BL12 | 12 | 9.6 | 9.6 | 96 | 1.5 |
| bistable 2 coil | | | | | |
| CL12 | 12 | 9.6 | 9.6 | 48 | 3/3 |

All figures are given for coil without preenergization, at ambient temperature +23°C
Max. coil power: 130% of rated coil power
Other coil voltages on request

Coil operation

| coil terminals | 1 coil | | 2 coils | | |
|----------------|--------|----|---------|----|----|
| | A1 | A2 | A1 | A2 | A3 |
| Set | - | + | - | + | |
| Reset | + | - | - | | + |

Contact position not defined at delivery

Insulation Data

| | |
|---------------------------------|----------------------|
| Initial dielectric strength | |
| between open contacts | 1500V _{rms} |
| between contact and coil | 4000V _{rms} |
| Initial surge withstand voltage | |
| between contact and coil | 10000V (1.2/50μs) |
| Clearance/creepage | |
| between contact and coil | ≥6/9mm |



| | |
|------------------------------------|----------|
| Material group of insulation parts | IIIa |
| Tracking index of relay base | PTI 175V |

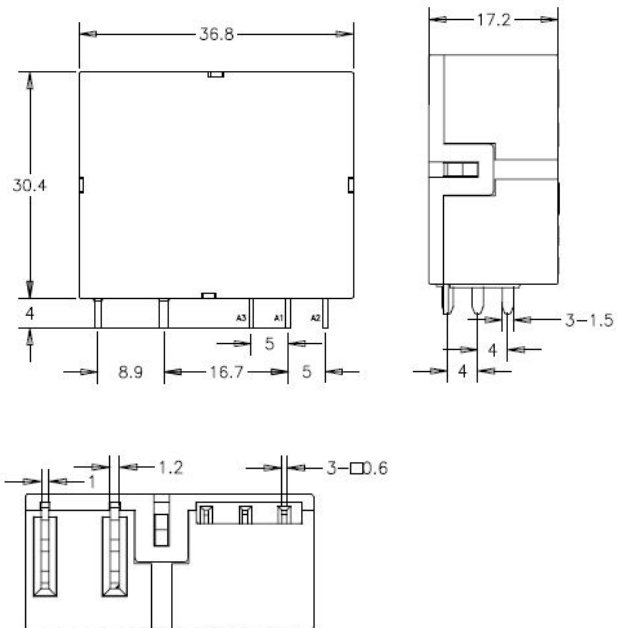
Other Data

Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customer-support/rohssupportcenter

| | |
|--------------------------------------|--|
| Ambient temperature | -40 to 70°C |
| Category of environmental protection | IEC 61810 |
| Vibration resistance (functional) | RTI (dust protected) 1.5mm double amplitude ¹⁾ |
| Shock resistance (functional) | 50g |
| Shock resistance (destructive) | 100g |
| Terminal type | PCB Mounting |
| Weight | appr. 37.5g |
| Packaging/unit | 200pcs/carton |

¹⁾ 10...55Hz

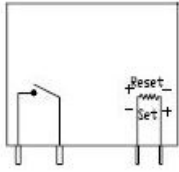
Dimensions



Power Latching Relay EW60 (Continued)

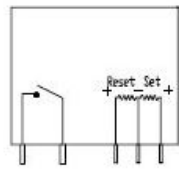
Wire Connection drawing

bistable 1 coil:



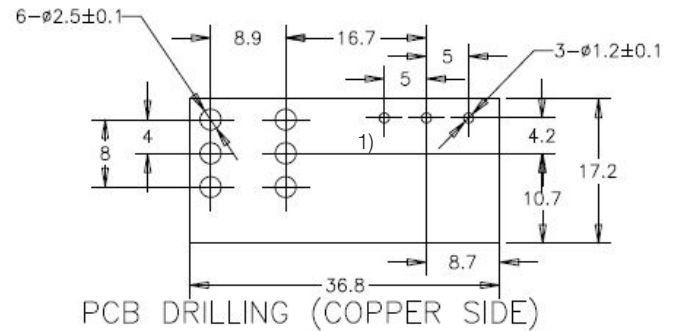
Single Coil

bistable 2 coils:



Dual Coil

PCB Drilling (Copper Side)



1) if 2 coil version

Product code structure

Typical product code

EW 6 0 -1 A 3 -B L12 D 0 4

Type (product family)

Version - Current class / Model

6 60A

Version - Orientation and PerformanceClass

0 vertical (Bottom-right), standard performance

Number of Contact Poles

1 1 pole

Contact configuration

A form A (NO Contact)

Contact material

3 AgSnO₂

Coil version

B bistable 1 coil
C bistable 2 coils

Coil voltage

L12 Low Sensitivity, 12V,

Category of Protection

D RT1 (dust proof)

Mechanical feature

0 standard

Terminals

4 pcb terminals

| Product code | Design | Coil | Contact material | Part Number |
|------------------|----------|----------------------------|--------------------|-------------|
| EW60-1A3-BL12D04 | Vertical | 12V Bistable, 1 Coil, 1.5W | AgSnO ₂ | 2071366-1 |
| EW60-1A3-CL12D04 | Vertical | 12V Bistable, 2 Coils 3W | AgSnO ₂ | 2071366-2 |

Other types on request

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[TE Connectivity:](#)

[EW60-1A3-CL12D04,00000](#) [EW60-1A3-BL12D04,00000](#)