

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 E58304

Contact Data

Contact arrangement	1 form A (NO)
Rated voltage	277VAC
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, 277VAC, general use, 85°C	6x10 ³
EW60-1A3	NO	120VAC, 1.5HP, 85°C	1x10 ⁵
EW60-1A3	NO	16 or 20A, 277VAC, electr. ballast, 70°C	50x10 ³
EW60-1A3	NO	16A, 120VAC, electronic ballast, 85°C	50x10 ³
EW60-1A3	NO	20A, 277VAC, standard ballast, 85°C	100x10 ³
EW60-1A3	NO	20A, 120VAC, tungsten, 85°C	100x10 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
Mechanical endurance, DC coil	1x10E6

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

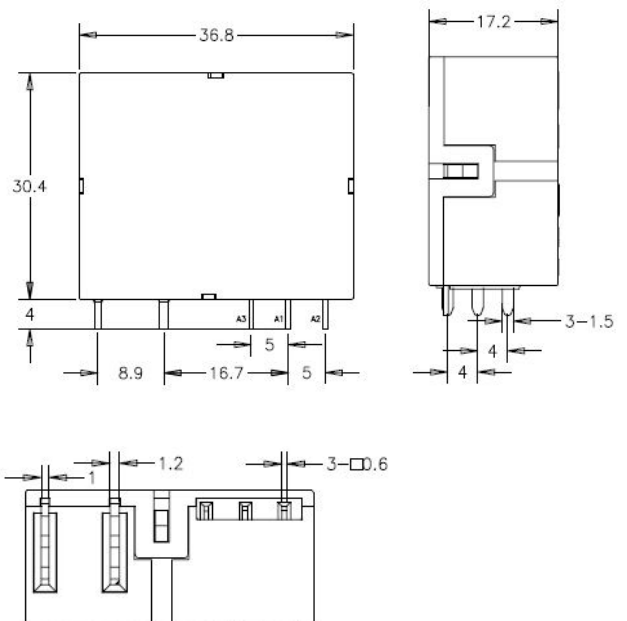
Other Data

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

Ambient temperature	-40 to +85°C
Category of environmental protection	
IEC 61810	RTI (dust protected)
Vibration resistance (functional)	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

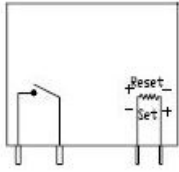
Dimensions



Power Latching Relay EW60 (Continued)

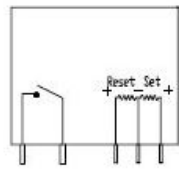
Wire Connection drawing

bistable 1 coil:



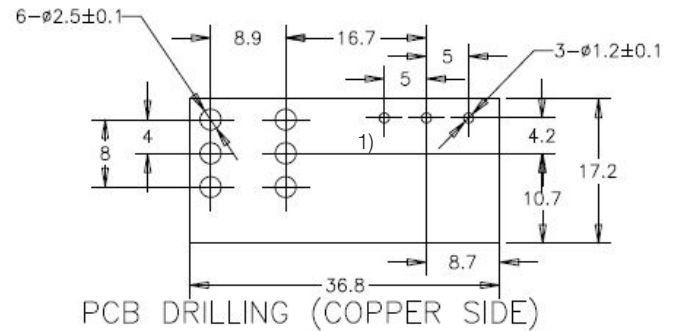
Single Coil

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
EW60-1A3-BL24D04	Vertical	24V Bistable, 1 Coil 1.5W	AgSnO ₂	2071366-3
EW60-1A3-CL24D04	Vertical	24V Bistable, 2 Coils 3W	AgSnO ₂	2071366-4

Other types on request