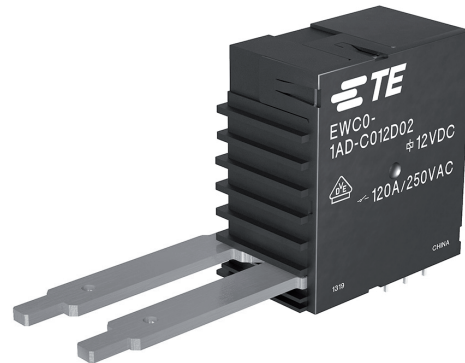


**Power Latching Relay EW100/120**

Preliminary Datasheet

- 1 pole 100 or 120A, 1 form A (NO) contact
- High Performance version meets requirements of UC3/IEC62055-31 @ 120A:
  - 5000 cycles p.f.1 + 5000 cycles p.f.0.5
  - 3/6kA short circuit
- Polarized bistable (latching), 2 coils
- Shunt implementation optional
- Various terminal configurations



EW100\_v2

**Typical applications**

Electricity meters, pre-paid power meters

**Approvals**

VDE (planned)

Technical data of approved types on request

Contact Data	100A	120A
Contact arrangement	1 form A (NO)	
Rated voltage	250VAC	
Max. switching voltage	400VAC	
Rated current	100A	120A
Breaking capacity max.	25kVA	30kVA
Short circuit resistance	UC1/IEC62053-21: 3kA	UC3/IEC62055-31: C.5: 3kA; C.6-1: 6kA; C.6-2: 3kA
Contact material	AgSnO <sub>2</sub>	
Frequency of operation, with/without load	1/30min-1	
Mechanical endurance	10 <sup>5</sup> cycles	

**Coil Data**

Magnetic system	polarized, bistable (latching)	
Number of coils	2	
Coil voltage range	5 to 24VDC	
Min./Max. energization duration	20ms/3min at <10% duty factor	
Coil insulation system according UL	class F	

**Coil versions, bistable 2 coils**

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω±10%	Rated coil power W
C009	9	6.8	6.8	18	4.5
C012	12	9.0	9.0	32	4.5
C018	18	13.5	13.5	72	4.5
C024	24	18.0	18.0	128	4.5

All figures are given for coil without preenergization, at ambient temperature +23°C

Other coil voltages on request

Note: Contact position not defined at delivery

**Coil operation**

	A1	A2	A3
	-	+	
		-	+

Contact position not defined at delivery

**Insulation Data**

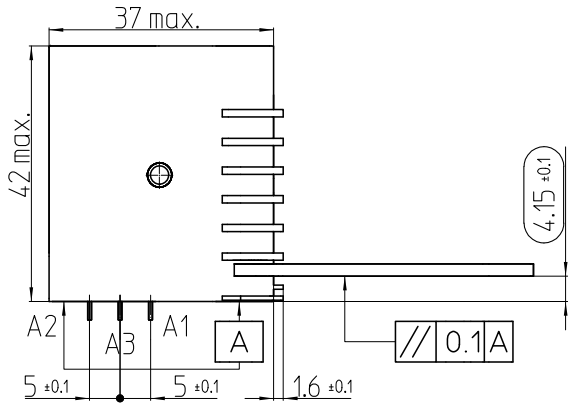
Initial dielectric strength	
between open contacts	2000V <sub>rms</sub>
between contact and coil	4000V <sub>rms</sub>
Initial surge withstand voltage	
between contact and coil	12kV (1.2/50μs)
Clearance/creepage	
between contact and coil	≥10/10mm
Material group of insulation parts	IIIa
Tracking index of relay base	PTI 125V

**Other Data**

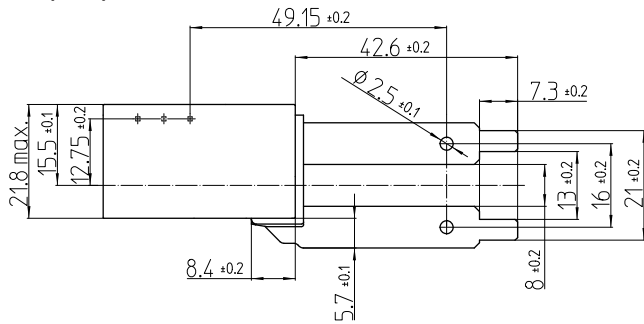
Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at [www.te.com/customer-support/rohssupportcenter](http://www.te.com/customer-support/rohssupportcenter)

Terminal type	Blades and PCB terminals
Ambient temperature	-20 to +70°C
Category of environmental protection	
IEC 61810	RTII - flux proof
Vibration resistance (functional)	15g
Shock resistance (functional)	5g
Shock resistance (destructive)	100g
Terminal type	coil terminals: pcb load terminals: copper
Mounting position	any
Mounting distance	≥7mm
Weight	72g
Resistance to soldering heat THT	
IEC 60068-2-20	260°C / 5s
Packaging/unit	tray/12 , box/120

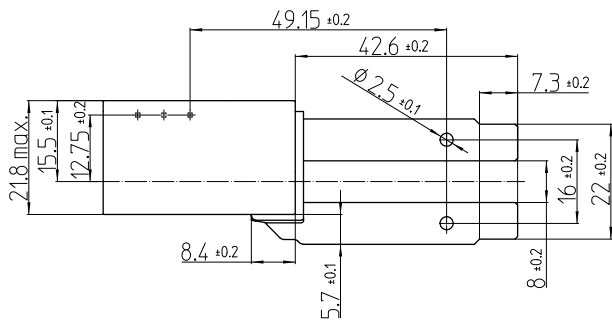
**Dimensions, vertical design**



**EWA (100A)**



**EWC (120A)**



**Power Latching Relay EW100/120**

Preliminary Datasheet

**Product code structure**

Typical product code

**EW A 0 -1 A D -C 012 F 0 2**

**Type**

**Model**

- A** 100A
- C** 120A

**Design, Performance Class**

- 0** vertical (up-right), UC1
- 1** horizontal (flat), UC1
- A** vertical (up-right); High Performance (UC3)
- B** horizontal (flat); High Performance (UC3)

**Number of Contact Poles**

- 1** 1 pole

**Contact configuration**

- A** form A (NO contact)

**Contact material**

- D** AgSnO bifurcated contacts

**Coil version**

- C** bistable 2 coils

**Coil voltage**

**Category of Protection**

- F** Flux proof

**Mechanical feature**

- 0** Standard

**Terminals**

- 2** straight contact blades <sup>1)</sup>

**Variant**

1) Customized terminals or shunt implementation on request