

TOZ 120VUC 230VAC1A**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image

Similar to illustration

- 1 NO contact (Triac (zero-cross switch))
- 6.4 mm wide
- 1 A AC output current
- Unique multi-voltage input from 24 to 230 V UC
- Input voltages from 12 V DC to 230 V UC with coloured marking: AC: red, DC: blue, UC: white

General ordering data

Version	TERMSERIES, Solid-state relay, Rated control voltage: 120 V UC $\pm 10\%$, Rated switching voltage: 24...240 V AC, Continuous current: 1 A, Tension-clamp connection
Order No.	1127580000
Type	TOZ 120VUC 230VAC1A
GTIN (EAN)	4032248908981
Qty.	10 pc(s).

Creation date September 16, 2022 12:54:20 AM CEST

Catalogue status 09.09.2022 / We reserve the right to make technical changes.

TOZ 120VUC 230VAC1A

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

Dimensions and weights

Depth	87.8 mm	Depth (inches)	3.457 inch
Height	90.5 mm	Height (inches)	3.563 inch
Width	6.4 mm	Width (inches)	0.252 inch
Net weight	30.2 g		

Temperatures

Storage temperature	-40 °C...70 °C	Operating temperature	-20 °C...60 °C
Humidity	5-95% relative humidity, T _u = 40°C, without condensation		

Probability of failure

MTTF	693 Years
------	-----------

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1	SCIP	9e2cbc49-76d9-4611-b8ec-5b4f549a0aa9
------------	----------------	------	--------------------------------------

Rated data UL

Ambient temperature (operational), max.	60 °C	Output current derating (ohmic)	1 A @ 25 °C, 0.3 A @ 60 °C
Connection cross-section AWG, min.	AWG 26	Connection cross-section AWG, max.	AWG 14
Type of conductor	rigid copper conductor, flexible copper conductor	Pollution severity level	2

Control side

Rated control voltage	120 V UC ±10 %	Nominal control current	5 mA AC (±30 %), 3 mA DC (±30 %)
Power rating	0.48 VA	Pull-in/drop-out voltage, typ.	82 V / 65 V AC 86 V / 74 V DC
Status indicator	Green LED	Protective circuit	Rectifier
Coil voltage of the replacement relay deviating from the rated control voltage	Yes	Coil voltage of the replacement relay	60 V DC

Load side

Rated switching voltage	24...240 V AC	Continuous current	1 A
Rated switching current	1 A	Inrush current	15 A / 10 ms
Switch-on delay	< 11 ms	Switch-off delay	< 11 ms
Voltage drop at max. load	≤ 1.6 V	Leakage current	< 1.5 mA
Min. switching current	20 mA	Short-circuit-proof	No
Protective circuit, load side	RC element	Contact type	1 NO contact (Triac (zero-cross switch))
Output voltage frequency range	50 / 60 Hz	max. switching frequency (AC control voltage)	3 Hz
max. switching frequency (DC control voltage)	3 Hz		

General data

Rail	TS 35
------	-------

Creation date September 16, 2022 12:54:20 AM CEST

TOZ 120VUC 230VAC1A

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

Test button available	No	
Colour	black	
UL94 flammability rating component	Component	Housing
	UL94 flammability rating	V-0
	Component	Retaining clip
	UL94 flammability rating	V-0

Insulation coordination

Rated voltage	300 V	Pollution severity	2
Surge voltage category	III	Clearance and creepage distances for control side - load side	≥ 5.5 mm
Dielectric strength for control side - load side	2.5 kV _{eff}	Dielectric strength to mounting rail	4 kV _{eff} / 1 Min.
Impulse withstand voltage	6 kV (1.2/50 µs)	Protection degree	IP20

Further details of approvals / standards

Certificate No. (DNVGL)	TAA00001E5	Certificate no. (cULus)	E141197
-------------------------	------------	-------------------------	---------

Connection data

Wire connection method	Tension-clamp connection	Stripping length, rated connection	8 mm
Clamping range, rated connection	1.5 mm ²	Clamping range, min.	0.14 mm ²
Clamping range, max.	2.5 mm ²	Wire connection cross section AWG, min.	AWG 26
Wire connection cross section AWG, max.	AWG 14	Wire cross-section, solid, min.	0.14 mm ²
Wire cross-section, solid, max.	2.5 mm ²	Wire cross-section, solid, min. (AWG)	AWG 26
Wire cross-section, solid, max. (AWG)	AWG 14	Wire connection cross section, finely stranded, min.	0.14 mm ²
Wire connection cross section, finely stranded, max.	2.5 mm ²	Wire cross-section, finely stranded, min. (AWG)	AWG 26
Wire cross-section, finely stranded, max. (AWG)	AWG 14	Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min.	0.14 mm ²
Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max.	1.5 mm ²	Conductor cross-section, flexible, AEH (DIN 46228-1), min.	0.14 mm ²
Conductor cross-section, flexible, AEH (DIN 46228-1), max.	1.5 mm ²	Twin wire-end ferrules, min.	0.5 mm ²
Twin wire-end ferrules, max.	1 mm ²	Blade size	0.6 x 3.5 mm
Gauge to IEC 60947-1	A1, B1		

Classifications

ETIM 6.0	EC001504	ETIM 7.0	EC001504
ETIM 8.0	EC001504	ECLASS 9.0	27-37-16-04
ECLASS 9.1	27-37-16-04	ECLASS 10.0	27-37-16-04
ECLASS 11.0	27-37-16-04	ECLASS 12.0	27-37-16-04

TOZ 120VUC 230VAC1A**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com**Technical data****Approvals**

Approvals



ROHS	Conform
UL File Number Search	UL Website
Certificate no. (cULus)	E141197

Downloads

Approval/Certificate/Document of Conformity	EU Konformitätserklärung / EU Declaration of Conformity
Engineering Data	CAD data – STEP
Engineering Data	EPLAN, WSCAD
User Documentation	Beipackzettel / Package Insert – multilingual
Catalogues	Catalogues in PDF-format
Brochures	

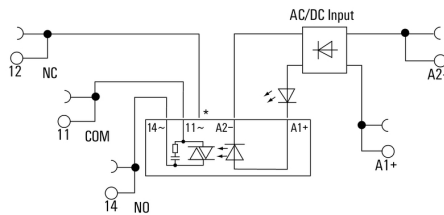
TOZ 120VUC 230VAC1A

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com

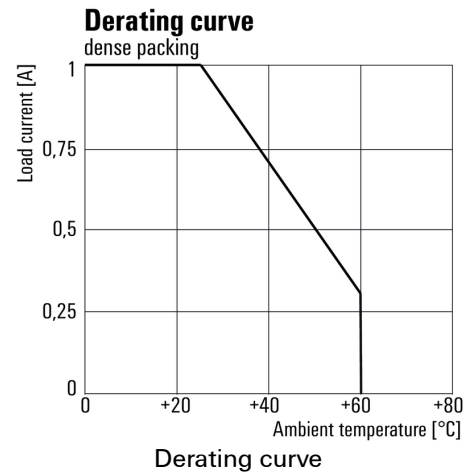
Drawings

Wiring diagram

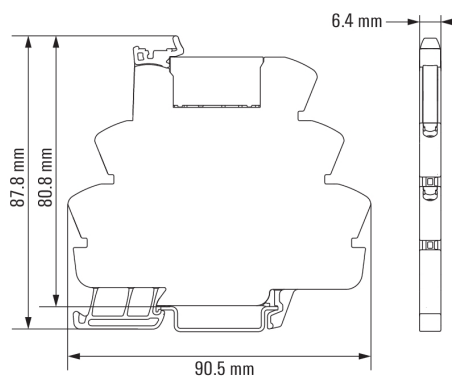


*Contact is assembled in socket but not used with solid-state relays

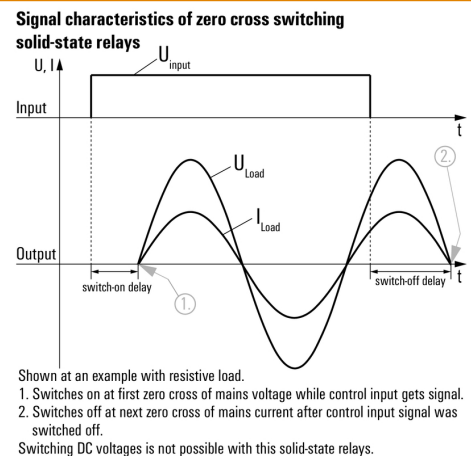
Graph



Dimensional drawing



Graph



TOZ 120VUC 230VAC1A

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Drawings

Miscellaneous

Type code TERMSERIES solid-state relay versions



Type codes