

P	LTR	DESCRIPTION	DATE	DWN	APVD
	A	TE STANDARD UPDATED	15JUL2024	KS	RB

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### Bistable Power Relay 300A 24VDC

WITH ENERGY STORAGE

**ENVIRONMENTAL CHARACTERISTICS**

TEMPERATURE RANGE.....-40°C TO +85°C (-40°F TO +185°F)  
 MAX. ALTITUDE RATING.....50 000 FT  
 SEAL.....IEC 529,2.EDITION 1989-IP67 6 FT/1MIN.) AND IP6K9K  
 SHOCK G-LEVEL......6G/11 MSEC  
 VIBRATION......4G/50-2000 Hz

**ELECTRICAL CHARACTERISTICS**

MIN. INSULATION RESISTANCE, INITIAL.....100 MEGOHMS  
 AFTER LIVE OR ENVIRONMENTAL......50 MEGOHMS  
 DIELECTRIC WITHSTANDING VOLTAGE.....1050 VAC / 1min  
 MAX. CONTACT DROP, INITIAL......0,15 VDC  
 AFTER LIFE TEST......0,175 VDC  
 OVERLOAD......2400 AMP for 1 sec.; 600 AMP for 20 sec.  
 DUTY RATING......300 AMP CONTINUOUS  
 QUIESCENT CURRENT..... <3mA

**RATED CONTACT LOAD**

MOTOR LOAD......50 000 CYCLES  
 MECHANICAL LIFE.....100 000 CYCLES

**ELECTRONICS AND OPERATING CHARACTERISTICS**

VOLTAGE RANGE......18-32 VDC  
 NOMINAL VOLTAGE......24 VDC  
 PICK UP VOLTAGE MIN......18 VDC FULL TEMP. RANGE  
 PICK UP COIL RESISTANCE..... 7,8 Ohm ±20%  
 DROP OUT COIL RESISTANCE..... 8,4 Ohm ±20%

**CIRCUIT TIME**

MIN. PICK UP TIME......500 MSEC  
 BOUNCE TIME......MAX. 5 MSEC  
 MIN. DROP OUT TIME......100 MSEC

**WEIGHT......0,61 kg= 1.32 POUND MAX.**

**WIRE SECTION (AT NOMINAL LOAD)......MIN. 95mm² /0.147 sq. in./ AWG 0000**

SUBJECT TO CHANGE

Date	Name	mm	Scale	Drawing No.
Create 08.12.2010	Kaise	General Tolerances DIN ISO 2768 cL	1:1	31-311-12-E
Ediled 27.11.2019	Mielk			
Check 28.11.2019	Kaise			

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## Technical Data

The basic Principle of this relay is a proved two coil device with a pull in and drop out coil with permanent powerless magnetic holding. An impulse into the controlled coil switches the relay in to the on position. The electronic function holds this position without power. When the power supply is removed, the electronic capacitor stores enough energy in order to deactivate the relay. The relay has only TWO control connections which makes it possible to replace a standard monostable relay with a bi-stable relay giving the advantage of powerless holding. The electronic capacitor is charged during the switch-on process. When the power supply is removed, the capacitor discharges the power into the drop out coil and therefore switches off the relay. The characteristics of a standard bi-stable relay requires re-supply of energy to drop out the coil. The electronics are short-circuit protected with coil control, energy storage monitoring, reverse polarity and coil removal.

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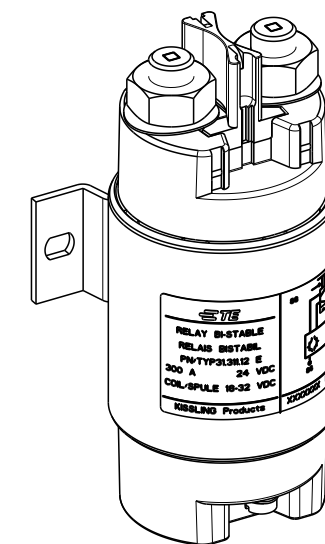
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NOTE  
Bemerkungen:

1 TE-CONNECTIVITY ORDER-NUMBER  
TE-Connectivity Bestellnummer



1	K1142045	A	BISTABLE POWER RELAY 300A 24VDC Bistables Leistungsrelais 300A 24VDC	1
TE ORDER-NO.	REV.	DESCRIPTION	ITEM NO.	



NAME BISTABLE POWER RELAY 300A 24VDC Bistables Leistungsrelais 300A 24VDC			
SIZE	CAGE CODE	DRAWING NO.	RESTRICTED TO
A3	00779	31-311-12-E	-
CUSTOMER DRAWING		SCALE	SHEET
		5:1	1 OF 1
			REV A

THIS DRAWING IS A CONTROLLED DOCUMENT.		DWN	G.Kaiser	08DEC2010
DIMENSIONS:		CHK	N.Mielke	27NOV2019
mm	TOLERANCES UNLESS OTHERWISE SPECIFIED: DIN ISO 2768 cL	APVD	G.Kaiser	28NOV2019
0 PLC ±	1 PLC ±	PRODUCT SPEC		
2 PLC ±	3 PLC ±	APPLICATION SPEC		
4 PLC ±	ANGLES ±	WEIGHT		
MATERIAL	FINISH			