REVISIONS

P	LTR	DESCRIPTION	DATE	DWN	APVD
	A	TE STANDARD UPDATED	04JUL2024	KS	RB
	A1	ECN-25-311103	13MAR2025	RA	SY

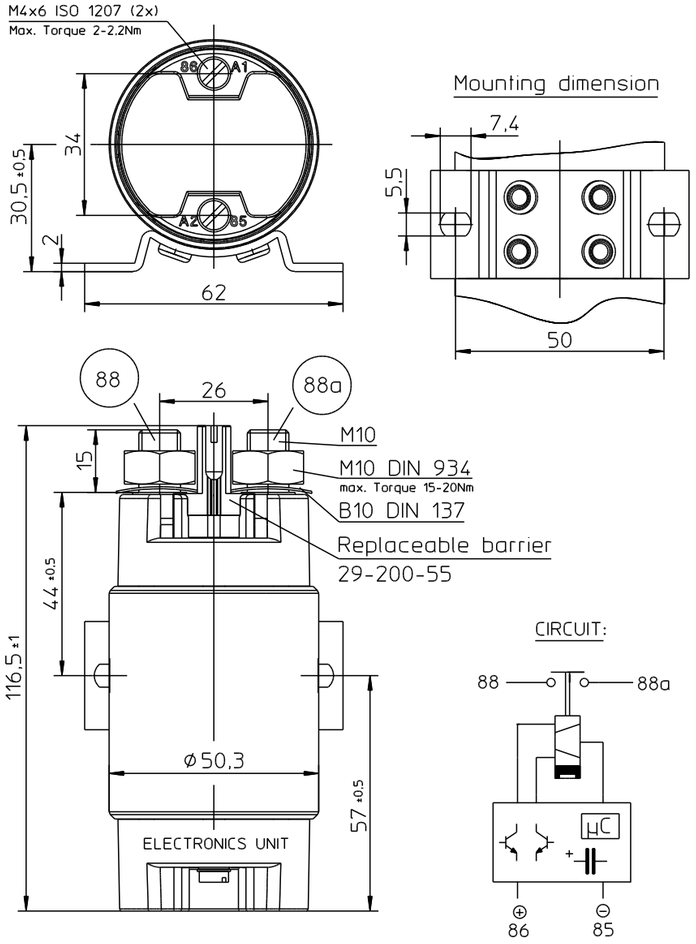
NOTE
Bemerkungen:

1 TE-CONNECTIVITY ORDER-NUMBER
TE-Connectivity Bestellnummer

EC No.

Bistable Power Relay 300A 24VDC

WITH ENERGY STORAGE



EC No.

Bistable Power Relay 300A 24VDC

WITH ENERGY STORAGE

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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 DEACTIVATETHE 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 SWITCHE SOFF 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.

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

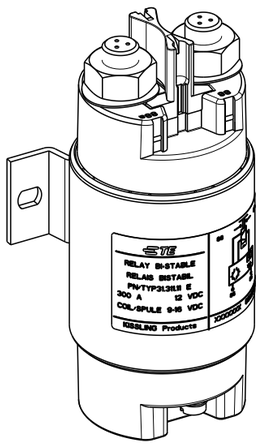
ELECTRONICS AND OPERATING CHARACTERISTICS
VOLTAGE RANGE.....18-32 VDC
NOMINAL VOLTAGE.....24 VDC
PICK UP VOLTAGE MIN.....18 VDC FULL TEMP. RANGE
PICK UP COIL RESISTANCE ..... 7,8 Ohm ±20%
DROP OUT COIL RESISTANCE ..... 8,4 Ohm ±20%

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



1 K1144572	A	BISTABLE POWER RELAY 300A 12VDC Bistables Leistungsrelais 300A 12VDC	1
TE ORDER-NO.	REV.	DESCRIPTION	ITEM NO

THIS DRAWING IS A CONTROLLED DOCUMENT.

DIMENSIONS: mm	TOLERANCES UNLESS OTHERWISE SPECIFIED: DIN ISO 2768 cL	DWN E.Hamarat	17OCT2011
	0 PLC ±	CHK N.Mielke	27NOV2019
	1 PLC ±	APVD G.Kaiser	29NOV2019
	2 PLC ±	PRODUCT SPEC	
	3 PLC ±	APPLICATION SPEC	
	4 PLC ±		
	ANGLES ±		
MATERIAL	FINISH	WEIGHT	

TE Connectivity

NAME
BISTABLE POWER RELAY 300A 12VDC
Bistables Leistungsrelais 300A 12VDC

SIZE	CAGE CODE	DRAWING NO	RESTRICTED TO
A3	00779	C-31-311-11-E	-

CUSTOMER DRAWING	SCALE 5:1	SHEET 1 OF 1	REV A1

1470-19 (3/13)