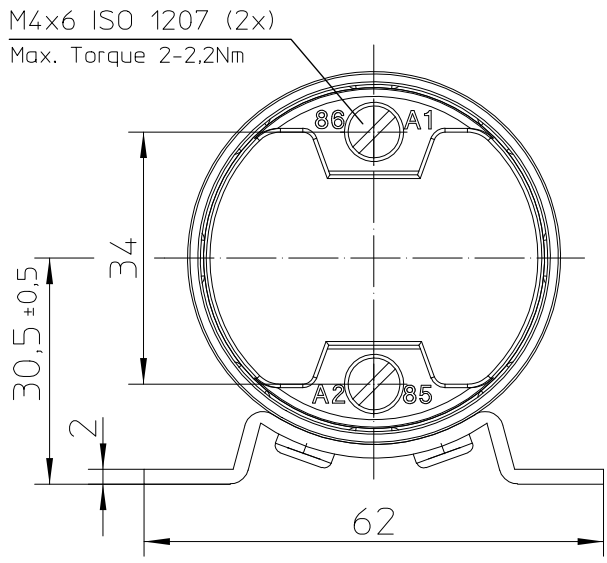
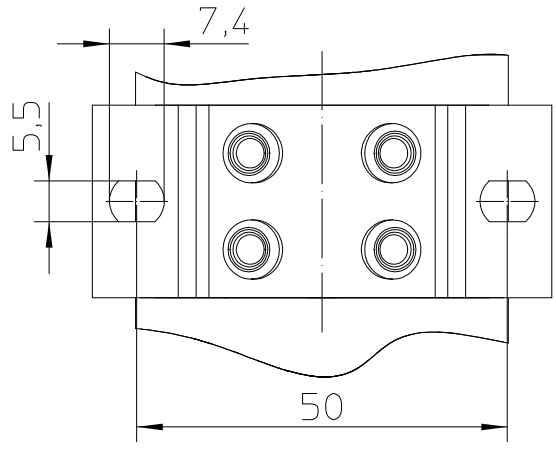
EC No.

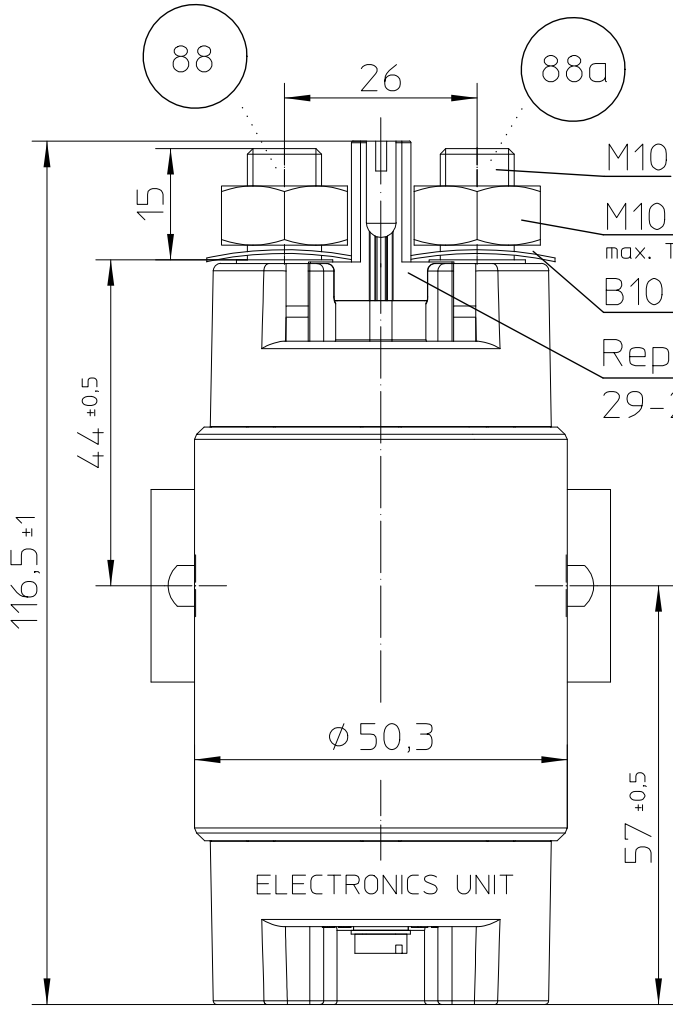
Bistable Power Relay 300A 24VDC

WITH ENERGY STORAGE

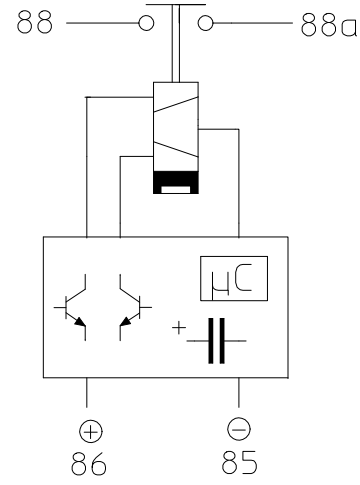


Mounting dimension





CIRCUIT:



	Date	Name
Create	08.12.2010	Kaise
Edited	27.11.2019	Mielk
Check	28.11.2019	Kaise

mm

Scale 1:1

General Tolerances DIN ISO 2768 cL

Drawing No: 31-311-12-E

NSN.:

Technical Data

The basic Principe 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.

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