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Multi-functional timer relay with 7 functions and two adjustable time ranges (50 ms - 10 h), wide-range power supply unit, 2 PDTs

#### **Product Description**

Increasingly higher demands are being placed on safety and system availability – across all sectors. Processes are becoming more and more complex, not only in mechanical engineering and the chemical industry, but also in plant and automation technology. Demands on power engineering are also increasing constantly.

The timer relays in the ETD series can be used to control time sequences in production and process technology.

#### Why buy this product

- Universal use thanks to wide range of functions and selectable time ranges
- Time ranges from a few milliseconds to several days
- 2 floating PDT outputs
- Variable supply voltage range



#### **Key Commercial Data**

Packing unit	1 STK
GTIN	4 046356 046619

#### Technical data

#### Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area

#### **Dimensions**

Width	22.5 mm
Height	90 mm
Depth	113 mm

#### Ambient conditions

Ambient temperature (operation)	-25 °C 55 °C
	-25 °C 40 °C (corresponds to UL 508)



# Technical data

## Ambient conditions

Ambient temperature (storage/transport)	-25 °C 70 °C
Permissible humidity (operation)	15 % 85 %
Noise immunity	EN 61000-6-2

## Coil side

Input voltage range	24 V DC 240 V DC -20 % +25 %
	24 V AC 240 V AC -15 % +10 %
Temperature sensitivity	≤ 0.01 %/K
Function	lp: Switched-mode beginning with the pause
	li: Switched-mode beginning with the pulse
	ER: With switch-on and release delay with control contact
	EWu: With switch-on delay and single shot leading edge, voltage controlled
	EWs: With switch-on delay and single shot leading edge with control contact
	WsWa: With single shot leading edge and single shot trailing edge with control contact
	Wt: Pulse sequence evaluation (retriggerable release delay)
Time setting range	50 ms 10 h (10 time end ranges)
Recovery time	500 ms

#### Contact side

Contact type	2 floating PDT contacts
Maximum switching voltage	250 V AC (in acc. with IEC 60664-1)
Interrupting rating (ohmic load) max.	750 VA (3 A/250 V AC, module aligned, ≤ 5 mm spacing)
	1250 VA (5 A/250 V AC, module not aligned, ≥ 5 mm spacing)
Output fuse	5 A (fast-blow)

#### General

Status display	Green LED (POWER)
	Yellow LED (relay active)
Mechanical service life	Approx. 2 x 10 <sup>7</sup> cycles
Nominal power consumption	2.5 VA (1 W)
Test voltage relay winding/relay contact	4 kV
Mounting position	any
Assembly instructions	on standard DIN rail NS 35 in accordance with EN 60715
Color	green
Housing insulation material	Polyamide PA, self-extinguishing
Permissible humidity (operation)	15 % 85 %
Nominal frequency	48 Hz 400 Hz
Rated insulation voltage	300 V (According to EN 50178)
Conformance	CE-compliant
UL, USA / Canada	UL/C-UL listed UL 508



# Technical data

## Connection data

Conductor cross section flexible min.	0.5 mm²
Conductor cross section flexible max.	2.5 mm²
Conductor cross section solid min.	0.5 mm²
Conductor cross section solid max.	2.5 mm²
Conductor cross section AWG min.	20
Conductor cross section AWG max.	14
Stripping length	8 mm
Connection method	Screw connection

## Control contact

Connection name	Floating, basic isolation between connection and input/output/bridge Y1-Y2
Load capacity	Cannot carry load
Cable length	< 10 m
Control pulse length	min. 50 ms (Only with Wt function: > 7 ms)

# Standards and Regulations

Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Noise emission	EN 61000-6-4
Noise immunity	EN 61000-6-2
Flammability rating according to UL 94	V0
Low Voltage Directive	Conformance with LV directive 2006/95/EC
Conformance	CE-compliant
UL, USA / Canada	UL/C-UL listed UL 508

# Classifications

# eCl@ss

eCl@ss 4.0	27371103
eCl@ss 4.1	27371103
eCl@ss 5.0	27371701
eCl@ss 5.1	27371701
eCl@ss 6.0	27371790
eCl@ss 7.0	27371790
eCl@ss 8.0	27371605
eCl@ss 9.0	27371605

## **ETIM**

ETIM 2.0	EC001439
ETIM 3.0	EC001439
ETIM 4.0	EC001439
ETIM 5.0	EC001439



# Classifications

## **UNSPSC**

UNSPSC 6.01	30211920
UNSPSC 7.0901	39121519
UNSPSC 11	39121519
UNSPSC 12.01	39121519
UNSPSC 13.2	39121519

# Approvals Approvals Approvals UL Listed / cUL Listed / EAC / EAC / cULus Listed Ex Approvals Approvals submitted Approval details UL Listed

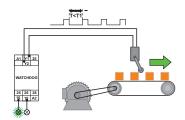
cULus Listed \*\*\*

Drawings

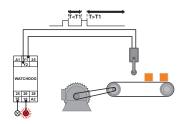
EAC



#### Application drawing



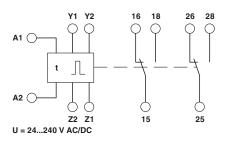
#### Application drawing



Function: Pulse sequence evaluation

Message for incorrect pulse

#### Block diagram



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Product	Code	Reference	Product link
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