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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
GTIN	4046356046619
Weight per Piece (excluding packing)	166.700 g
Custom tariff number	85364900
Country of origin	Austria

Technical data

Note

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

Width	22.5 mm
Height	90 mm



Technical data

Dimensions

Depth	113 mm

Ambient conditions

Ambient temperature (operation)	-25 °C 55 °C
	-25 °C 40 °C (corresponds to UL 508)
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. 2x 10 ⁷ 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 %



Technical data

General

Nominal frequency	48 Hz 400 Hz
Rated insulation voltage	300 V (acc. to EN 50178)
Conformance	CE-compliant
UL, USA/Canada	UL/C-UL listed UL 508

Connection data

Conductor cross section flexible min.	0.5 mm²
Conductor cross section flexible max.	2.5 mm ²
Conductor cross section solid min.	0.5 mm²
Conductor cross section solid max.	2.5 mm ²
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
Low Voltage Directive	Conformance with LV directive 2006/95/EC
Flammability rating according to UL 94	V0
Conformance	CE-compliant
UL, USA/Canada	UL/C-UL listed UL 508

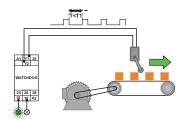
Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

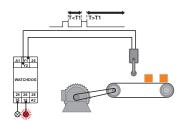
Drawings



Application drawing



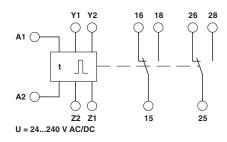
Application drawing



Function: Pulse sequence evaluation

Message for incorrect pulse

Block diagram



Classifications

eCl@ss

eCI@ss 5.0	27371701
eCl@ss 5.1	27371700
eCl@ss 6.0	27371700
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
ETIM 6.0	EC001439

UNSPSC

UNSPSC 6.01	30211920
UNSPSC 7.0901	39121519
UNSPSC 11	39121519
UNSPSC 12.01	39121519
UNSPSC 13.2	39122329



Approvals			
Approvals			
Approvals			
UL Listed / cUL Listed / EAC	/ cULus Listed		
Ex Approvals			
Approval details			
UL Listed	UL	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 172140
cUL Listed	CUL	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 172140
EAC	EAC		RU C- DE.**08.B-00957
cULus Listed	c UL us		

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