# **DATASHEET - DILM32-XTEY20(RA24)**



Timer module, 24VAC/DC, 1-30s, star-delta

Part no. DILM32-XTEY20(RA24)
Catalog No. 101446

XTCEXTEYC20T

Alternate Catalog

No

**EL-Nummer** 4130298

(Norway)



# **Delivery program**

Dontory program	
Product range	Accessories
Accessories	Timer modules
Description	For star-delta applications Cannot be combined with top mounting auxiliary contacts Incl. suppressor circuits
$U_S$	24 V AC/DC
Time range	Changeover time 1 - 30 s Changeover delay 50 ms
For use with	DILM7 - DILM38 DILMP20 DILMP32-DILMP45 DILA DILMF7 DILMF11 DILMF14 DILMF25 DILMF32
Contact sequence	$ \begin{array}{c} A_1 \\  \hline A_2 \end{array} $ $ \begin{array}{c} 57 \\ 67 \\ 68 \end{array} $

# **Technical data**

#### General

General			
Standards			DIN EN 61812, IEC/EN 60947, VDE 0660, UL, CSA
Lifespan, mechanical			
AC operated	Operations	x 10 <sup>6</sup>	3
DC operated	Operations	x 10 <sup>6</sup>	3
Climatic proofing			Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
Ambient temperature			
Open		°C	-25 - +60
Enclosed		°C	- 25 - 40
Storage		°C	- 40 - 80
Mounting position			As required, except suspended
Mechanical shock resistance (IEC/EN 60068-2-27)			
Half-sinusoidal shock, 10 ms			
N/O contact		g	6
N/C contact		g	6
Degree of Protection			IP20
Protection against direct contact when actuated from front (EN 50274)			Finger and back-of-hand proof
Weight		kg	0.08
Terminal capacities		$\text{mm}^2$	
Solid		mm <sup>2</sup>	1 x (0.75 - 2.5) 2 x (0.75 - 1.5)
Flexible with ferrule		mm <sup>2</sup>	1 x (0.75 - 1.5) 2 x (0.75 - 1.5)
Solid or stranded		AWG	18 - 14
Terminal screw			M3.5
Pozidriv screwdriver		Size	2

Standard screwdriver		mm	0.8 x 5.5
Max. tightening torque		Nm	1 x 6 1.2
Contacts		IVIII	1.2
Rated impulse withstand voltage	U <sub>imp</sub>	V AC	4000
Overvoltage category/pollution degree			III/3
Rated insulation voltage	Ui	V AC	250
Rated operational voltage	U <sub>e</sub>	٧	250
Rated operational current	l <sub>e</sub>	Α	
AC-15			
220 V 230 V 240 V	I <sub>e</sub>	Α	3
DC-13			
DC-13 L/R - 15 ms			
Contacts in series:		Α	
1	24 V	Α	1
1	60 V	Α	0.2
1	110 V	Α	0.2
1	220 V	Α	0.1
DC L/R ≦ 50 ms			
Contacts in series:		Α	
1	24 V	Α	1
1	60 V	Α	0.2
1	110 V	Α	0.2
1	220 V	Α	0.1
DC-13 L/R - 300 ms			
Contacts in series:		Α	
1	24 V	Α	1
1	60 V	Α	0.2
1	110 V	Α	0.2
1	220 V	Α	0.1
Safe isolation to EN 61140		V 40	AFG.
between coil and auxiliary contacts		V AC	250
between the auxiliary contacts  Conventional thermal current	I.	V AC	250
	I <sub>th</sub>	Α	4
Short-circuit rating without welding max. fuse		A gG/gL	
Magnet systems		A yu/yL	1
Voltage tolerance			
Pick-up voltage		x U <sub>s</sub>	
AC operated		V AC	
	Pick-up	x U <sub>c</sub>	0.85 - 1.1
DC operated	Pick-up	x U <sub>c</sub>	
	Pick-up	x U <sub>c</sub>	0.7 - 1.2
Power consumption			
60 °C	Sealing	VA	2
AC operated	Sealing	W	1.8
duty factor		% DF	100
Maximum operating frequency		Ops./h	
Max. operating frequency		Ops/h	3600
Can be combined with auxiliary contact		Ops./h	360
Conventional thermal current $I_{th} = I_e$ AC-1			
On-delayed		ms	< 50
Off-delayed		ms	< 200
AC operated 50 Hz	Deviation	%	< 5
Recovery time (after 100% time delay)		ms	70

contact changeover time			
DILM32-XTEE11/DILM32-XTED11	t <sub>u</sub>	ms	10
DILM32-XTEY20	t <sub>u</sub>	ms	50

#### Notes

Notes For rated operational current: Making and breaking conditions to DC-13, L/R constant as stated Max. fuses for short-circuit protection: Transparent overlay "Fuses" for time/current characteristics (please enquire) For pick-up voltage, DC operated:Pure DC, AC bridge rectifier or smoothed double-wave rectification.

## Rating data for approved types

g water to: approved types		
Auxiliary contacts		
Pilot Duty		
AC operated		B300
DC operated		R300
General Use		
AC	V	240
AC	Α	5
DC	V	24
DC	Α	5
Short Circuit Current Rating	SCCR	
Basic Rating		
SCCR	kA	5
max. Fuse	Α	125
max. CB	Α	125
480 V High Fault		
SCCR (fuse)	kA	10/100
max. Fuse	Α	125/70 Class J
SCCR (CB)	kA	10/65
max. CB	Α	50/32
600 V High Fault		
SCCR (fuse)	kA	10/100
max. Fuse	Α	125/125 Class J
SCCR (CB)	kA	10/22
max. CB	Α	50/32

# Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	0
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	0
Static heat dissipation, non-current-dependent	P <sub>vs</sub>	W	1.8
Heat dissipation capacity	P <sub>diss</sub>	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	60
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
10.2.2 Corrosion resistance			Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures			Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat			Meets the product standard's requirements.
$10.2.3.3\ Verification\ of\ resistance\ of\ insulating\ materials\ to\ abnormal\ heat\ and\ fire\ due\ to\ internal\ electric\ effects$			Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation			Meets the product standard's requirements.
10.2.5 Lifting			Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 Mechanical impact			Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 Inscriptions			Meets the product standard's requirements.
10.3 Degree of protection of ASSEMBLIES			Does not apply, since the entire switchgear needs to be evaluated.
10.4 Clearances and creepage distances			Meets the product standard's requirements.
10.5 Protection against electric shock			Does not apply, since the entire switchgear needs to be evaluated.

10.6 Incorporation of switching devices and components	Does not apply, since the entire switchgear needs to be evaluated.
10.7 Internal electrical circuits and connections	Is the panel builder's responsibility.
10.8 Connections for external conductors	Is the panel builder's responsibility.
10.9 Insulation properties	
10.9.2 Power-frequency electric strength	Is the panel builder's responsibility.
10.9.3 Impulse withstand voltage	Is the panel builder's responsibility.
10.9.4 Testing of enclosures made of insulating material	Is the panel builder's responsibility.
10.10 Temperature rise	The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
10.11 Short-circuit rating	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.12 Electromagnetic compatibility	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.13 Mechanical function	The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

#### **Technical data ETIM 7.0**

Relays (EG000019) / Timer block (EC002060)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Component for low-voltage switching technology / Timer block attachment (ecl@ss10.0.1-27-37-13-08 [ACN996011])

Switching function

Setting time

s 1 - 30

Number of contacts as normally open contact

2

Number of contacts as normally closed contact

Number of contacts as normally closed contact

Number of contacts as change-over contact

0

Number of contacts as change-over contact

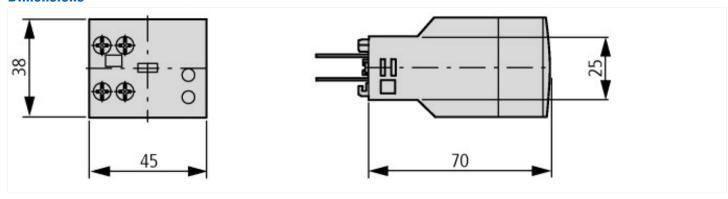
Electronic

### **Approvals**

Operating principle

P P	
Product Standards	IEC/EN 60947-4-1; UL 508; CSA-C22.2 No. 14-05; CE marking
UL File No.	E29184
UL Category Control No.	NKCR
CSA File No.	012528
CSA Class No.	3211-03
North America Certification	UL listed, CSA certified

### **Dimensions**



## **Assets (links)**

**Declaration of CE Conformity** 

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**Instruction Leaflets** 

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