DATASHEET - DILM32-XTEE11(RA24)

Timer module, 24VAC/DC, 0.1-100s, on-delayed

Part no.	**DILM32-XTEE11(RA24)**
Catalog No.	**101440**
Eaton Catalog No.	**XTCEXTEEC11T**
EL-Nummer (Norway)	**0004130294**

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Delivery program

Product range		Accessories
Accessories		Timer modules
Description		On-delayed Cannot be combined with top mounting auxiliary contacts Incl. suppressor circuits Time range can be selected
U_S		24 V AC/DC
Time range		convertible 0.05 - 1 s 0.5 - 10 s 5 - 100 s
For use with		DILM7 - DILM38 DILMP20 DILMP32-DILMP45 DILA DILMF7 DILMF11 DILMF14 DILMF25 DILMF32
Contact sequence		

Technical data

General

Standards			DIN EN 61812, IEC/EN 60947, VDE 0660, UL, CSA
Lifespan, mechanical			
AC operated	Operations	x 10^6	3
DC operated	Operations	x 10^6	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		mm²	
Solid		mm²	1 x (0.75 - 2.5) 2 x (0.75 - 1.5)
Flexible with ferrule		mm²	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

			1 x 6
Max. tightening torque		Nm	1.2

Contacts

Rated impulse withstand voltage	U_{imp}	V AC	4000
Overvoltage category/pollution degree			III/3
Rated insulation voltage	U_i	V AC	250
Rated operational voltage	U_e	V	250
Rated operational current	I_e	A	
AC-15			
220 V 230 V 240 V	I_e	A	3
DC-13			
DC-13 L/R - 15 ms			
Contacts in series:		A	
1	24 V	A	1
1	60 V	A	0.2
1	110 V	A	0.2
1	220 V	A	0.1
DC L/R ≦ 50 ms			
Contacts in series:		A	
1	24 V	A	1
1	60 V	A	0.2
1	110 V	A	0.2
1	220 V	A	0.1
DC-13 L/R - 300 ms			
Contacts in series:		A	
1	24 V	A	1
1	60 V	A	0.2
1	110 V	A	0.2
1	220 V	A	0.1
Safe isolation to EN 61140			
between coil and auxiliary contacts		V AC	250
between the auxiliary contacts		V AC	250
Conventional thermal current	I_{th}	A	4
Short-circuit rating without welding			
max. fuse		A gG/gL	4

Magnet systems

Voltage tolerance			
Pick-up voltage		x U_s	
AC operated		V AC	
	Pick-up	x U_c	0.85 - 1.1
DC operated	Pick-up	x U_c	
	Pick-up	x U_c	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_u	ms	10
DILM32-XTEY20	t_u	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

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

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I_n	A	0
Heat dissipation per pole, current-dependent	P_{vid}	W	0
Equipment heat dissipation, current-dependent	P_{vid}	W	0
Static heat dissipation, non-current-dependent	P_{vs}	W	1.8
Heat dissipation capacity	P_{diss}	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.

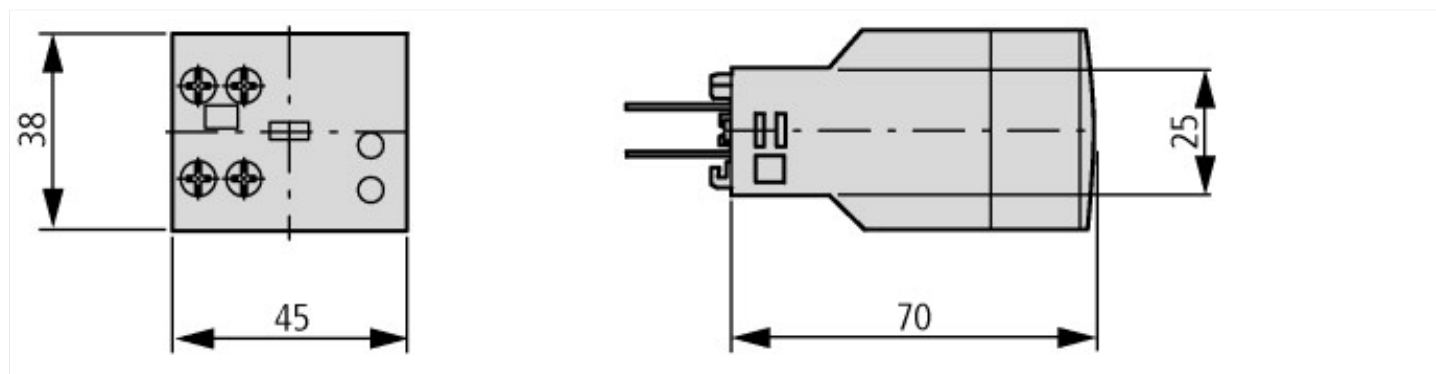|		
10.7 Internal electrical circuits and connections		Is the panel builder's responsibility.
10.8 Connections for external conductors		Is the panel builder's responsibility.
10.9 Insulation properties		
10.9.2 Power-frequency electric strength		Is the panel builder's responsibility.
10.9.3 Impulse withstand 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		Operating delayed
Setting time	s	0.05 - 100
Number of contacts as normally open contact		1
Number of contacts as normally closed contact		1
Number of contacts as change-over contact		0
Operating principle		Electronic

Approvals

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

Additional product information (links)

IL04910004Z (AWA2527-2320) Electronical timer

IL04910004Z (AWA2527-2320) Electronical timer	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL04910004Z2018_05.pdf
Motor starters and "Special Purpose Ratings" for the North American market	http://www.eaton.eu/ecm/groups/public/@pub/@europe/@electrical/documents/content/pct_3258146.pdf
Switchgear of Power Factor Correction Systems	http://www.moeller.net/binary/ver_techpapers/ver934en.pdf
X-Start - Modern Switching Installations Efficiently Fitted and Wired Securely	http://www.moeller.net/binary/ver_techpapers/ver938en.pdf
Mirror Contacts for Highly-Reliable Information Relating to Safety-Related Control Functions	http://www.moeller.net/binary/ver_techpapers/ver944en.pdf
Effect of the Cabel Capacitance of Long Control Cables on the Actuation of Contactors	http://www.moeller.net/binary/ver_techpapers/ver949en.pdf
Switchgear for Luminaires	http://www.moeller.net/binary/ver_techpapers/ver955en.pdf

Standard Compliant and Functionally Safe Engineering Design with Mechanical Auxiliary Contacts	http://www.moeller.net/binary/ver_techpapers/ver956en.pdf
The Interaction of Contactors with PLCs	http://www.moeller.net/binary/ver_techpapers/ver957en.pdf
Busbar Component Adapters for modern Industrial control panels	http://www.moeller.net/binary/ver_techpapers/ver960en.pdf