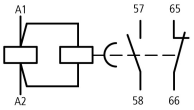


Timer module, 24VAC/DC, 0.1-100s, on-delayed

Part no. DILM32-XTEE11(RA24)
Article no. 101440
Catalog No. XTCEXTEEC11T

Powering Business Worldwide

Delivery programme

Product range			Accessories
Accessories			Timer modules
Description			On-delayed Cannot be combined with top mounting auxiliary contacts Incl. suppressor circuits Zeitbereiche umschaltbar
Voltage range	U_{LN}	V	24 V AC/DC
Time range			convertible 0.05 - 1 s 0.5 - 10 s 5 - 100 s
For use with			DILM7 - DILM32 DILMP20 DILMP32-DILMP45 DILA
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		°C	
Storage		°C	- 40 - 80
Open		°C	- 25 - 60
Enclosed		°C	- 25 - 40
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		mm^2	
Solid		mm^2	1 x (0.75 - 2.5) 2 x (0.75 - 1.5)
Flexible with ferrule		mm^2	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	6000
Overvoltage category/pollution degree			III/3
Rated insulation voltage	U_i	V AC	600

Rated operational voltage	U_e	V	400 AC
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
Short-circuit rating without welding			
Short-circuit protection maximum fuse			
500 V		A gG/gL	4

Magnet systems

Voltage tolerance		x U_c	
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.

Data for design verification according to 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
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.

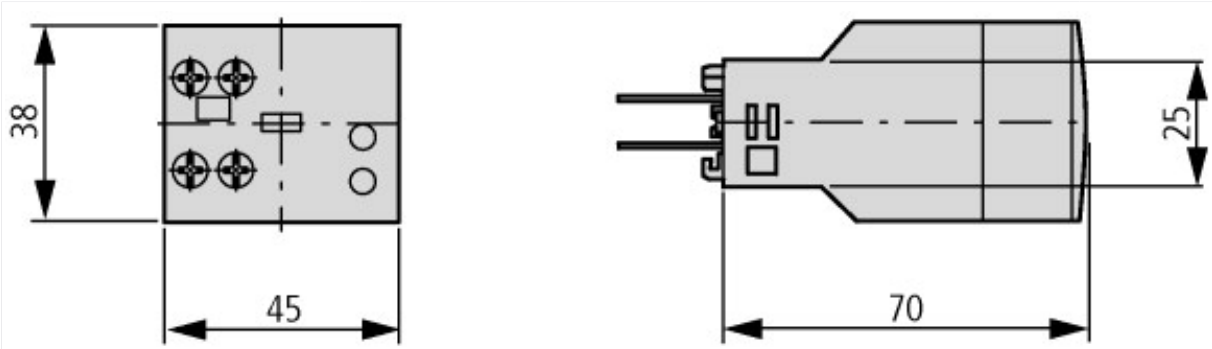
Technical data ETIM 5.0

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@ss8-27-37-13-08 [ACN996007])			
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

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/IL04910004Z2010_10.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
Motor starters and "Special Purpose Ratings" for the North American market	http://www.moeller.net/binary/ver_techpapers/ver953en.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

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