# DATASHEET - DILM32-XTED11-10(RA24)



Timer module, 24VAC/DC, 0.5-10s, off-delayed

Part no. DILM32-XTED11-10(RA24)
Catalog No. 104943

XTCEXTED10C11T

No.

**EL-Nummer** 4130296

Alternate Catalog

(Norway)



# **Delivery program**

Don'tory program	
Product range	Accessories
Accessories	Timer modules
Description	Off-delayed, auxiliary voltage-free Cannot be combined with top mounting auxiliary contacts Incl. suppressor circuits
$U_S$	24 V AC/DC
Time range	1.5 - 30 s
For use with	DILM7 - DILM38 DILMP20 DILMP32-DILMP45 DILA DILMF7 DILMF11 DILMF14 DILMF25 DILMF32
Contact sequence	A1 57 65 A2 58 66

### **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		$\mathrm{mm}^2$	
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 1 x 6

Martin migration delings   Martin migration de	Max. tightening torque		Nm	1.2
New of tables category polition degree  1	Contacts			
Make Cimulation voltage	Rated impulse withstand voltage	$U_{imp}$	V AC	4000
Tables do pessibilaris vilatign    Lance   Lan	Overvoltage category/pollution degree			III/3
AC-15 COUNT	Rated insulation voltage	Ui	V AC	250
AC-15 200 V240 V 10	Rated operational voltage	U <sub>e</sub>	V	250
101   101	Rated operational current	I <sub>e</sub>	Α	
DC-13 (LIPAT - To miss	AC-15			
DC 13 LPR - 15 ms	220 V 230 V 240 V	l <sub>e</sub>	Α	3
Cartacts in series:	DC-13			
1	DC-13 L/R - 15 ms			
1 1 100 A 0 0.2  1 1 100 A 0 0.1  Contracts in series:  Contracts in series:  A 1 1 0 0.2  1 1 0 0.0  1 0 0.0  1 0	Contacts in series:		Α	
1 1 10 20 0 10 10 10 10 10 10 10 10 10 10 10 10	1	24 V	Α	1
1 D.C. of services	1	60 V	Α	0.2
DC UN = 50 ms  Contacts in series:  24 V A 1  1 1 0 00 V A 0.2  1 1 10 V A 0.2  1 1 0 0.13 UR - 300 ms  Contacts in series:  Contacts in series:  Contacts in series:  1 1 24 V A 1  1 10 0 24 V A 0.2  1 1 0 0.2 V A 0.2  20 V A 0.2	1	110 V	Α	0.2
Contacts in seriess	1	220 V	Α	0.1
1	DC L/R ≦ 50 ms			
1	Contacts in series:		Α	
1	1	24 V	Α	1
1	1	60 V	Α	0.2
DC-13 UR - 300 ms	1	110 V	Α	0.2
Contracts in series:         24 V         A         1           1         24 V         A         1           1         60 V         A         0.2           1         10 V         A         0.1           1         1         20 V         A         0.1           Sale isolation to EN 61140         VAC         250           between the auxiliary contacts         VAC         250           between the auxiliary contacts         VAC         250           between the auxiliary contacts         VAC         250           Conventional thermal current         In         A QG/Q         4           Magnet systems         VAC         250           Valuage to larance         VAC         YAC         20           Pick-up voltage         VAC         20         25-1           A Operated         Pick-up         XU <sub>c</sub> 05-1           DC operated         Pick-up         XU <sub>c</sub> 07-12           Power consumption         Sealing         VA         2           AC operated         Sealing         VA         09-1           Max. operating frequency         Opxh         00-1           Max. operating frequency	1	220 V	Α	0.1
1	DC-13 L/R - 300 ms			
1	Contacts in series:		Α	
1 1 10	1	24 V	Α	1
1         220 V         A         0.1           Safe isolation to EN 61140         VAC         250           between coil and auxiliary contacts         VAC         250           Conventional thermal current         In A         A         4           Soft-ricricult rating without welding         VAC         250           Magnet systems         VAC         4 gG/gL         4           Motorate Uniforance         VAC         VAC           Pick-up voltage         VAC         4 gG/gL         4 GA (parated)           DC operated         Pick-up         VL <sub>c</sub> 0.5 - 1.1           Power consumption         VL <sub>c</sub> 0.7 - 1.2           Power consumption         VL <sub>c</sub> 0.7 - 1.2           Power consumption         VL <sub>c</sub> 0.7 - 1.2           Max operating frequency         Sealing         VA         2           AC operated         Sealing         VA         2           Max apperating frequency         Ops./h         300           Max apperating frequency         Ops./h         300           Conventional thermal current $I_{th} = I_a AC-1$ Max (parated)         Max (parated)         Max (parated)           On-delayed         Max (parated) <t< td=""><td>1</td><td>60 V</td><td>Α</td><td>0.2</td></t<>	1	60 V	Α	0.2
Sale is olation to EN 61140         VAC         250           between coil and auxiliary contacts         VAC         250           between the auxiliary contacts         VAC         250           Conventional thermal current         Inh         A         4           Short-circuit rating without welding         A g6/gL         4           max. fuse         A g6/gL         4           Magnet systems         VL         C           Voltage tolerance         YU         VL         B           Pick-up voltage         XU         SU         B           AC operated         Pick-up         XU         B5-11           DC operated         Pick-up         XU         B5-11           Power consumption         Su F         C         C           AC operated         Sealing         VA         2         C           AC operated         Sealing         VA         2         C           Max influency         So F         D0         B         B         B           Max operating frequency         So F         D0 ps/h         B         B         B           Conventional thermal current $I_{th} = I_{th} AC-1$ MS         C         D         B	1	110 V	Α	0.2
between coll and auxiliary contacts         V AC         250           between the auxiliary contacts         V AC         250           Conventional thermal current         Inh.         A         4           Short-circuit rating without welding max. fuse         A 96/gt.         4           Masgnet systems         V VAC         5           Pick-up voltage         X U <sub>s</sub> 4           AC operated         Pick-up         X U <sub>s</sub> 85-1.1           DC operated         Pick-up         X U <sub>s</sub> 07-1.2           Power consumption         Pick-up         X U <sub>s</sub> 07-1.2           Power consumption         Sealing         VA         2           AC operated         Sealing         VA         2           AC operated         Sealing         VA         2           AMA operating frequency         Sp. P         100           Max mum operating frequency         Ops/h         300           Max perating frequency         Ops/h         300           Conventional thermal current I <sub>In</sub> = I <sub>0</sub> AC-1         ms         < 50           Off-delayed         ms         < 200           AC operated 50 Hz         ms         < 200           AC operated 50 H	1	220 V	Α	0.1
between the auxiliary contacts         V AC         250           Conventional thermal current         Inh         A B         4           Short-circuit rating without welding max. fuse         A gG/gL         4           Wagnet systems         V AC         V AC           Pick-up voltage         x U <sub>S</sub> 4           AC operated         V AC         5           DC operated         Pick-up         x U <sub>C</sub> 05 - 1.1           DC operated         Pick-up         x U <sub>C</sub> 05 - 1.1           Power consumption         Pick-up         x U <sub>C</sub> 05 - 1.2           Power consumption         Sealing         V A         2           AC operated         Sealing         V A         2           AC operated         Sealing         V A         2           Max operating frequency         V D         100           Maximum operating frequency         0ps/h         360           Max operating frequency         0ps/h         360           Conventional thermal current lins = l <sub>0</sub> AC-1         Max operating frequency         360           Con delayed         M	Safe isolation to EN 61140			
Conventional thermal current         Ith         A g G/L         4           Short-circuit rating without welding         A g G/L         4           Mass fuse         A g G/L         4           Voltage tolerance         V CU         V CU           Pick-up voltage         X U <sub>S</sub> V CU           AC operated         Pick-up         X U <sub>C</sub> 0.5 - 1.1           DC operated         Pick-up         X U <sub>C</sub> 0.7 - 1.2           Power consumption         X U <sub>C</sub> 0.7 - 1.2           GO °C         Sealing         W         2.8           AC operated         Sealing         W         1.8           AC operated         Sealing         W         1.8           AU operating frequency         DO gs/h         1.00           Max operating frequency         Ops/h         360           Can be combined with auxiliary contact         Ops/h         360           Conventional thermal current I <sub>th</sub> = I <sub>0</sub> AC-1         ms         < 50           MC operated 50 Hz         Power interested 50 Hz         ms         < 50           Recovery time (after 100% time delay)         Power interested 50 Hz         ms         < 50           Power interested 50 Hz         Power interested 5	between coil and auxiliary contacts		V AC	250
Short-circuit rating without welding         A g6/gL         4           Magnet systems         VAC         VAC           Pick-up voltage         VAC         VAC           AC operated         Pick-up         VL         0.85-1.1           DC operated         Pick-up         VL         0.7-1.2           Power consumption         Sealing         VA         2           AC operated         Sealing         VA         1           Max immum operating frequency         Ops/h         500           Max immum operating frequency         Ops/h         360           Conventional thermal current $I_{th} = I_{th} AC$ -1         MS         50           On-delayed         MS         50         360           Off-delayed         MS         50         360           Or operated <td>between the auxiliary contacts</td> <td></td> <td>V AC</td> <td>250</td>	between the auxiliary contacts		V AC	250
Magnet systems         X Us         Image of the problem of the proble	Conventional thermal current	I <sub>th</sub>	Α	4
Magnet systems         Voltage tolerance         V Us         V US <t< td=""><td>Short-circuit rating without welding</td><td></td><td></td><td></td></t<>	Short-circuit rating without welding			
Voltage tolerance         X Us         X Us           Pick-up voltage         X US         VAC           AC operated         VAC         0.85 - 1.1           DC operated         Pick-up         X Uc         0.7 - 1.2           Power consumption         VAC         0.7 - 1.2           AC operated         Sealing         VA         2           AC operated         Sealing         VA         1.8           duty factor         Sealing         W         1.8           Max. operating frequency         Ops/h         500           Can be combined with auxiliary contact         Ops/h         360           Conventional thermal current l <sub>ih</sub> = l <sub>a</sub> AC-1         MS         <50	max. fuse		A gG/gL	4
Pick-up voltage	Magnet systems			
N				
Pick-up   X Uc   DC operated   Pick-up   X Uc   Pick-up   X Uc   DC operated   DC operate				
Pick-up x U <sub>c</sub> Pick-up x U <sub>c</sub> Pick-up x U <sub>c</sub> Power consumption  60 °C AC operated  AC operated  Maximum operating frequency Max. operating frequency Can be combined with auxiliary contact  Conventional thermal current I <sub>th</sub> = I <sub>e</sub> AC-1  On-delayed Off-delayed AC operated 50 Hz Recovery time (after 100% time delay)  One delayed Conventional time delay)  Deviation  Pick-up x U <sub>c</sub> VA  2  AC 0,7 - 1.2  Power consumption  NA U <sub>c</sub> VA  2  NB  NB  NB  NB  NB  NB  NB  NB  NB	AC operated			
Power consumption  60 °C Sealing VA AC operated  AC operated  Maximum operating frequency Maximum operating frequency Can be combined with auxiliary contact  Conventional thermal current lth = le AC-1  On-delayed  AC operated 50 Hz Recovery time (after 100% time delay)  Contact changeover time  Pick-up x U U 0,7 - 1.2  O,7 - 1.2		Pick-up	x U <sub>c</sub>	0.85 - 1.1
Power consumption  60 °C  AC operated  AC operated  Maximum operating frequency  Max. operating frequency  Can be combined with auxiliary contact  On-delayed  Off-delayed  AC operated 50 Hz  Recovery time (after 100% time delay)  Contact changeover time  Sealing  VA  2  1.8  1.00	DC operated	Pick-up	x U <sub>c</sub>	
Sealing VA 2 AC operated Sealing VA 1.8 duty factor		Pick-up	x U <sub>c</sub>	0.7 - 1.2
AC operated  AC operated 50 Hz  Recovery time (after 100% time delay)  AC operated 50 Hz  AC opera	Power consumption			
duty factor % DF 100  Maximum operating frequency Ops./h  Max. operating frequency Ops./h  Can be combined with auxiliary contact Ops./h  Conventional thermal current l <sub>th</sub> = l <sub>e</sub> AC-1  On-delayed ms < 50  Off-delayed ms < 200  AC operated 50 Hz  Recovery time (after 100% time delay) ms 70  contact changeover time	60 °C	Sealing	VA	2
Maximum operating frequency  Max. operating frequency  Can be combined with auxiliary contact  Conventional thermal current Ith = Ie AC-1  On-delayed  Off-delayed  AC operated 50 Hz  Recovery time (after 100% time delay)  Contact changeover time  Ops./h  Ops./h  3600  Ops./h  360  The second off-delayed  The second o	AC operated	Sealing	W	1.8
Max. operating frequency Can be combined with auxiliary contact Conventional thermal current Ith = Ie AC-1  On-delayed Off-delayed AC operated 50 Hz Recovery time (after 100% time delay)  Ontact changeover time  Ops/h 3600  Ops/h 3600  The secondact of Solution The secondact of	duty factor		% DF	100
Can be combined with auxiliary contact  Conventional thermal current Ith = Ie AC-1  On-delayed  Off-delayed  AC operated 50 Hz  Recovery time (after 100% time delay)  ontact changeover time  Ops./h  360  ms  < 50  ms  < 200  AC operated 50 Hz  ms  70  The contact changeover time  The contact changeover time  Ops./h  The contact changeover time after 100% time delay)  The contact change over time after 100% time delay)  The contact change over time after 100% time delay)  The contact change over time after 100% time delay after 100% time a	Maximum operating frequency		Ops./h	
Conventional thermal current I <sub>th</sub> = I <sub>e</sub> AC-1  On-delayed  Off-delayed  Off-delayed  AC operated 50 Hz  Recovery time (after 100% time delay)  Contact changeover time  The AC-1  The AC-	Max. operating frequency		Ops/h	3600
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	Can be combined with auxiliary contact		Ops./h	360
off-delayed ms < 200 AC operated 50 Hz Recovery time (after 100% time delay) ms 70 contact changeover time	Conventional thermal current $I_{th} = I_e$ AC-1			
AC operated 50 Hz  Recovery time (after 100% time delay)  contact changeover time  Deviation % < 5  ms 70	On-delayed		ms	< 50
Recovery time (after 100% time delay) ms 70 contact changeover time	Off-delayed		ms	< 200
contact changeover time	AC operated 50 Hz	Deviation	%	< 5
	Recovery time (after 100% time delay)		ms	70
DILM32-XTEE11/DILM32-XTED11 t <sub>u</sub> ms 10	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

The state of 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	S	CCR	
Basic Rating			
SCCR	k	А	5
max. Fuse	A	L	125
max. CB	A		125
480 V High Fault			
SCCR (fuse)	k	A	10/100
max. Fuse	А	L	125/70 Class J
SCCR (CB)	k	A	10/65
max. CB	А	L	50/32
600 V High Fault			
SCCR (fuse)	k	A	10/100
max. Fuse	А		125/125 Class J
SCCR (CB)	k	A	10/22
max. CB	A		50/32

#### Design verification as per IEC/EN 61439

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	$P_{vs}$	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)

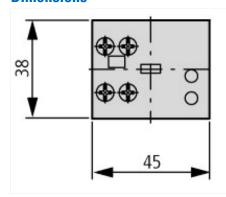
Electric engineering, automation, process control engineering / Low-voltage switch technology / Component for low-voltage switching technology / Timer block attachment (ecl@ss10.0.1-27-37-13-08 [ACN996011])

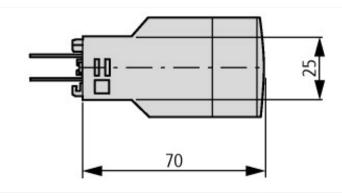
Switching function		Time-delay dropped out
Setting time	s	0.5 - 10
Number of contacts as normally open contact		1
Number of contacts as normally closed contact		1
Number of contacts as change-over contact		0
Operating principle		Electronic

# **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**





# **Assets (links)**

**Declaration of CE Conformity** 

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**Instruction Leaflets** 

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