



Timer module, 24VAC/DC, 0.05-1s, off-delayed

**Part no.** DILM32-XTED11-1(RA24)  
**Catalog No.** 105210  
**Alternate Catalog No.** XTCEXTED1C11T

### Delivery program

|                  |  |   |
|------------------|--|---|
| Product range    |  | Accessories   |
| Accessories      |  | Timer modules   |
| Description      |  | Off-delayed, auxiliary voltage-free<br>Cannot be combined with top mounting auxiliary contacts<br>Incl. suppressor circuits |
| U <sub>S</sub>   |  | 24 V AC/DC  |
| Time range       |  | 0.05 - 1 s  |
| For use with     |  | DILM7 - DILM38<br>DILMP20<br>DILMP32-DILMP45<br>DILA<br>DILMF7<br>DILMF11<br>DILMF14<br>DILMF25<br>DILMF32                  |
| Contact sequence |  |   |

### Technical data

#### 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<br>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   | mm <sup>2</sup> |  |
| Solid   | mm <sup>2</sup> | 1 x (0.75 - 2.5)<br>2 x (0.75 - 1.5)   |
| Flexible with ferrule   | mm <sup>2</sup> | 1 x (0.75 - 1.5)<br>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<br>1 x 6   |
| Max. tightening torque  | Nm              | 1.2  |

## Contacts

|                                       |           |         |       |
|---------------------------------------|-----------|---------|-------|
| Rated impulse withstand voltage       | $U_{imp}$ | V AC    | 4000  |
| Overtoltage 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 $\leq$ 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 |    |  |                 |
| 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.                         |

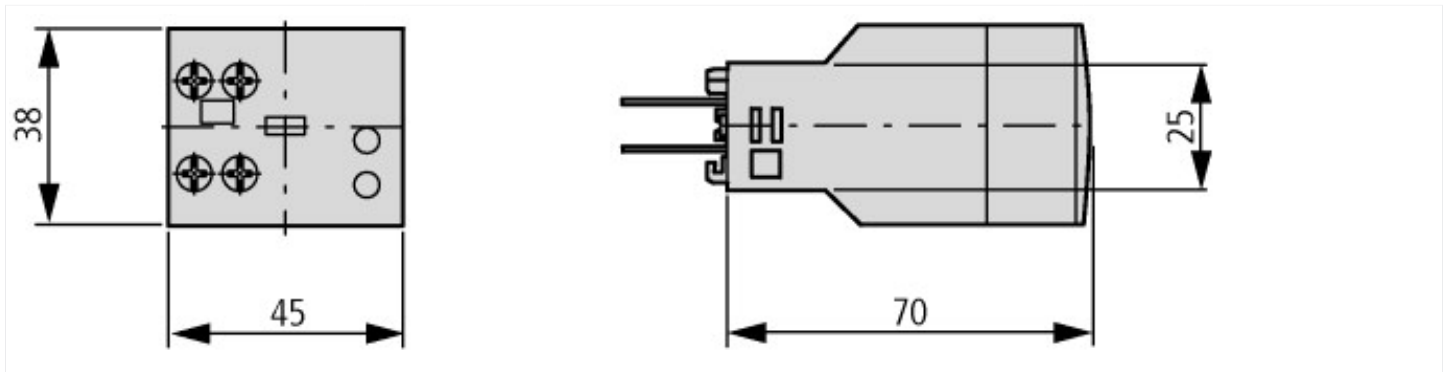
## Technical data ETIM 7.0

|  |   |                        |
|--|---|------------------------|
| 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   |   | Time-delay dropped out |
| Setting time   | s | 0.05 - 1               |
| 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

00002566

### Instruction Leaflets

IL04910004Z2018\_05

## Additional product information (links)

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

|  |   |
|--|---|
| Effect of the Cable Capacitance of Long Control Cables on the Actuation of Contactors          | <a href="http://www.moeller.net/binary/ver_techpapers/ver949en.pdf">http://www.moeller.net/binary/ver_techpapers/ver949en.pdf</a> |
| Switchgear for Luminaires  | <a href="http://www.moeller.net/binary/ver_techpapers/ver955en.pdf">http://www.moeller.net/binary/ver_techpapers/ver955en.pdf</a> |
| Standard Compliant and Functionally Safe Engineering Design with Mechanical Auxiliary Contacts | <a href="http://www.moeller.net/binary/ver_techpapers/ver956en.pdf">http://www.moeller.net/binary/ver_techpapers/ver956en.pdf</a> |
| The Interaction of Contactors with PLCs  | <a href="http://www.moeller.net/binary/ver_techpapers/ver957en.pdf">http://www.moeller.net/binary/ver_techpapers/ver957en.pdf</a> |
| Busbar Component Adapters for modern Industrial control panels                                 | <a href="http://www.moeller.net/binary/ver_techpapers/ver960en.pdf">http://www.moeller.net/binary/ver_techpapers/ver960en.pdf</a> |