



|  |  |               |        |   |
|--|--|---------------|--------|---|
| Product designation                                |  |               |        | Time relay  |
| Product type designation                           |  |               |        | L48M  |
| <b>General characteristics</b>                     |  |               |        |   |
| Description  |  |               |        | Multifunction time relay, multiscale and multivoltage |
| Function   |  |               |        | Multifunction   |
| <b>Supply circuit</b>                              |  |               |        |   |
| Rated auxiliary supply voltage $U_s$               |  |               |        | 24...240VAC/DC  |
| Rated auxiliary supply voltage $U_s$               |  |               |        |   |
| AC   |  | min           | VAC    | 24  |
|  |  | Max           | VAC    | 240   |
| DC   |  | min           | VDC    | 24  |
|  |  | Max           | VDC    | 240   |
| Rated frequency                                    |  |               | Hz     | 50/60   |
| Operating voltage range                            |  |               |        | 0.85...1.1 $U_s$                                      |
| Maximum power consumption / dissipation            |  |               | W      | 6VA   |
| Immunity time for microbreakings                   |  |               | ms     | ≤40   |
| <b>Timing circuit</b>                              |  |               |        |   |
| Time setting range                                 |  |               |        | 0.05min...10h   |
| Setting accuracy                                   |  |               | %      | ±5  |
| Repeat accuracy                                    |  |               | %      | ±0.5  |
| Influence of voltage variation                     |  |               | %      | ±0.5  |
| Resetting time                                     |  |               |        |   |
|  |  | During timing | ms     | ≥100  |
|  |  | Elapsed time  | ms     | ≥65   |
| <b>Relay outputs</b>                               |  |               |        |   |
| Number of relays                                   |  |               | Nr.    | 2   |
| Contact arrangement                                |  |               |        | 2 delayed C/O   |
| Maximum switching voltage                          |  |               | VAC    | 250   |
| IEC Conventional free air thermal current $I_{th}$ |  |               | A      | 5   |
| UL/CSA and IEC/EN 60947-5-1 designation            |  |               |        | B300  |
| <b>Insulation (input-output)</b>                   |  |               |        |   |
| Rated insulation voltage $U_i$                     |  |               | V      | 250   |
| Power frequency withstand voltage                  |  |               | kV     | 2   |
| <b>Operations</b>                                  |  |               |        |   |
| Mechanical life                                    |  |               | cycles | 3000000   |
| Electrical life (with rated load)                  |  |               | cycles | 100000  |
| <b>Ambient conditions</b>                          |  |               |        |   |
| Temperature  |  |               |        |   |
| Operating temperature                              |  | min           | °C     | -10   |
|  |  | max           | °C     | +60   |

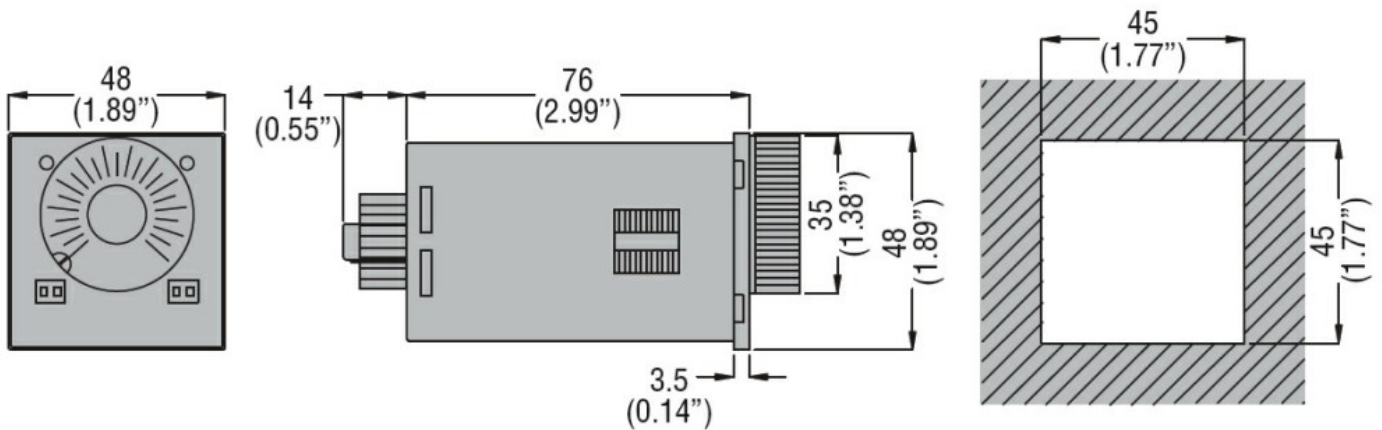
Storage temperature

|     |    |     |
|-----|----|-----|
| min | °C | -30 |
| max | °C | +80 |

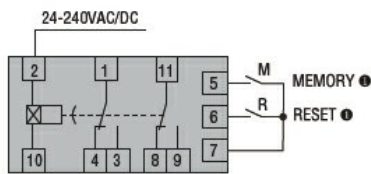
**Housing**

|                        |                                    |
|------------------------|------------------------------------|
| Material               | Self-extinguishing polyamide       |
| Mounting               | Plug-in housing with 11-pin socket |
| Degree of protection   | IP40 on front, IP20 terminals      |
| Dimensions (W x H x D) | mm 48 x 48 x 90                    |
| Weight                 | g 135                              |

**Dimensions [mm (in)]**



**Wiring diagrams**



T (preset time) = T1+T2

● Contacts "M" and "R" are to be volt free (dry).

**Certifications and compliance**

**Compliance**

CSA C22.2 n°14  
IEC/EN 61812-1  
UL508

**Certificates**

cURus  
EAC

**ETIM classification**

ETIM 8.0

EC001439 -  
Timer relay