



Timing relay, 0.05s-100h, 24-240VAC 50/60Hz, 24-48VDC, 1W, flashing, 2 times

Part no. **ETR2-44**  
Article no. **262730**  
Catalog No. **ETR2-44**

## Delivery programme

|                                        |          |    |                                                                                                 |
|----------------------------------------|----------|----|-------------------------------------------------------------------------------------------------|
| Product range                          |          |    | ETR2 timing relays                                                                              |
| Basic function                         |          |    | Timer relays                                                                                    |
| Function                               |          |    | Flashing, pulse initiating<br>Flashing, pause initiating                                        |
|                                        |          |    | Pulse and pause times independently adjustable<br>Fixed timing function                         |
| Number of changeover contacts          |          |    | 1                                                                                               |
| Time range                             |          |    | 0.05 s - 100 h                                                                                  |
| Time range                             |          |    | 0.05 - 1 s<br>1.5 - 30 s<br>5 - 100 s<br>1.5 - 30 min<br>5 - 100 min<br>0.5 - 10 h<br>5 - 100 h |
| <b>Rated operational current</b>       |          |    |                                                                                                 |
| AC-15                                  |          |    |                                                                                                 |
| 220 V 230 V 240 V                      | $I_e$    | A  | 4                                                                                               |
| 230 V (N/O)                            | $I_e$    | A  | 3                                                                                               |
| 230 V (NC)                             | $I_e$    | A  | 3                                                                                               |
| Voltage range                          | $U_{LN}$ | V  | 24 - 240 V AC, 50/60 Hz<br>24 - 48 V DC                                                         |
| Width                                  |          | mm | 17.5                                                                                            |
|                                        |          |    |                                                                                                 |
| Terminal marking according to EN 50042 |          |    |                                                                                                 |

## Technical data

### Technical data in sheet catalogue

|                                        |  |  |               |
|----------------------------------------|--|--|---------------|
| Other technical data (sheet catalogue) |  |  | Timing relays |
|----------------------------------------|--|--|---------------|

## Design verification as per IEC/EN 61439

|                                                                                                                        |            |    |                                                                    |
|------------------------------------------------------------------------------------------------------------------------|------------|----|--------------------------------------------------------------------|
| Technical data for design verification                                                                                 |            |    |                                                                    |
| 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 6.0

|                                                                                                                                                                    |  |    |                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----|------------------|
| Relays (EG000019) / Timer relay (EC001439)                                                                                                                         |  |    |                  |
| Electric engineering, automation, process control engineering / Low-voltage switch technology / Relay and socket / Timed relay (ecI@ss8.1-27-37-16-05 [AKF092010]) |  |    |                  |
| Type of electric connection                                                                                                                                        |  |    | Screw connection |
| Function delay-on energization                                                                                                                                     |  |    | No               |
| Function delay on de-energization                                                                                                                                  |  |    | No               |
| Function floating contact on energization                                                                                                                          |  |    | No               |
| Function floating contact on de-energization                                                                                                                       |  |    | No               |
| Function star-delta                                                                                                                                                |  |    | No               |
| Function pulse shaping                                                                                                                                             |  |    | No               |
| Function flashing, starting with pause, fixed time                                                                                                                 |  |    | Yes              |
| Function flashing, starting with pulse, fixed time                                                                                                                 |  |    | Yes              |
| Clock function, starting with pause, variable                                                                                                                      |  |    | Yes              |
| Clock function, starting with pulse, variable                                                                                                                      |  |    | Yes              |
| With plug-in socket                                                                                                                                                |  |    | No               |
| Remote operation possible                                                                                                                                          |  |    | Yes              |
| Suitable only for remote control                                                                                                                                   |  |    | No               |
| Pluggable on auxiliary contact block                                                                                                                               |  |    | No               |
| Rated control supply voltage Us at AC 50HZ                                                                                                                         |  | V  | 24 - 240         |
| Rated control supply voltage Us at AC 60HZ                                                                                                                         |  | V  | 24 - 240         |
| Rated control supply voltage Us at DC                                                                                                                              |  | V  | 24 - 240         |
| Voltage type for actuating                                                                                                                                         |  |    | AC/DC            |
| Time range                                                                                                                                                         |  | s  | 0.05 - 360000    |
| Number of outputs, undelayed, normally closed contact                                                                                                              |  |    | 0                |
| Number of outputs, undelayed, normally open contact                                                                                                                |  |    | 0                |
| Number of outputs, undelayed, change-over contact                                                                                                                  |  |    | 0                |
| Number of outputs, delayed, normally closed contact                                                                                                                |  |    | 0                |
| Number of outputs, delayed, normally open contact                                                                                                                  |  |    | 0                |
| Number of outputs, delayed, change-over contact                                                                                                                    |  |    | 0                |
| Outputs, reversible delayed/undelayed                                                                                                                              |  |    | No               |
| With semiconductor output                                                                                                                                          |  |    | No               |
| Width                                                                                                                                                              |  | mm | 18               |
| Height                                                                                                                                                             |  | mm | 70               |
| Depth                                                                                                                                                              |  | mm | 63               |

Approvals

|  |  |  |                                                                       |
|--|--|--|-----------------------------------------------------------------------|
|  |  |  | IEC/EN 61812-1; IEC/EN 60947-5-1; UL 508; CSA-22.2 No. 14; CE marking |
|  |  |  | E29184                                                                |

|  |  |                                              |
|--|--|----------------------------------------------|
|  |  | NKCR, NKCR7                                  |
|  |  | UL report valid                              |
|  |  | 3211-03                                      |
|  |  | UL listed, certified by UL for use in Canada |
|  |  | IEC: IP20, UL/CSA Type: -                    |

### Characteristics

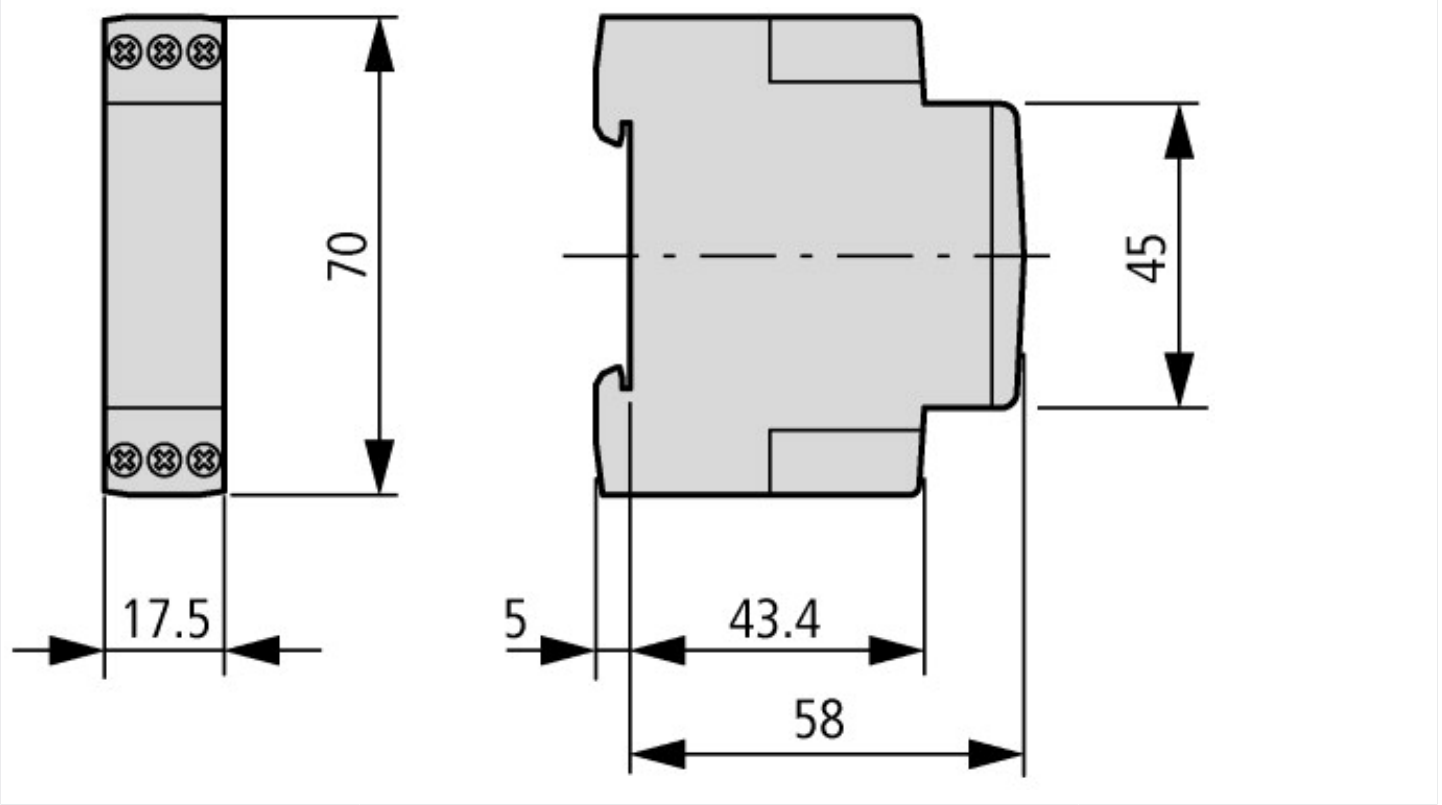
#### Flow diagram for timing functions

LED legend



44 flashing, 2 variable times

### Dimensions



### Additional product information (links)

#### IL04910005Z (AWA2527-2372) Solid-state timing relay

|                                                     |                                                                                                                                                                       |
|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IL04910005Z (AWA2527-2372) Solid-state timing relay | <a href="ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL04910005Z2016_02.pdf">ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL04910005Z2016_02.pdf</a> |
| Terminal marking                                    | <a href="http://ecat.moeller.net/flip-cat/?edition=HPLEN&amp;startpage=11.7">http://ecat.moeller.net/flip-cat/?edition=HPLEN&amp;startpage=11.7</a>                   |
| Timing functions                                    | <a href="http://ecat.moeller.net/flip-cat/?edition=HPLEN&amp;startpage=11.8">http://ecat.moeller.net/flip-cat/?edition=HPLEN&amp;startpage=11.8</a>                   |
| Load limit curves                                   | <a href="http://ecat.moeller.net/flip-cat/?edition=HPLEN&amp;startpage=11.10">http://ecat.moeller.net/flip-cat/?edition=HPLEN&amp;startpage=11.10</a>                 |
| Timing relays                                       | <a href="http://ecat.moeller.net/flip-cat/?edition=HPLEN&amp;startpage=11.13">http://ecat.moeller.net/flip-cat/?edition=HPLEN&amp;startpage=11.13</a>                 |