# DATASHEET - ETR2-12

## Timing relay, 0.05s-100h, 24-240VAC 50/60Hz, 24-48VDC, 1W, off-delayed



Part no.	ETR2-12
Catalog No.	262686
Alternate Catalog	ETR2-12
No.	
EL-Nummer	4133315
(Norway)	

# **Delivery program**

Product range			ETR2 timing relays
Basic function			Timer relays
Function			Off-delayed
			Fixed timing function
Number of changeover contacts			1
Time range			0.05 s - 100 h
Time range			0.05 - 1 s   0.5 - 10 s   5 - 100 s   0.5 - 10 min   5 - 100 min   0.5 - 10 h   5 - 100 h
Rated operational current			
AC-15			
220 V 230 V 240 V	I <sub>e</sub>	А	4
230 V (N/O)	I <sub>e</sub>	А	3
230 V (NC)	l <sub>e</sub>	А	3
Voltage range	U <sub>LN</sub>	V	24 - 240 V AC, 50/60 Hz 24 - 48 V DC
Width		mm	17.5

### **Technical data**

#### Technical data in sheet catalogue

# Design verification as per IEC/EN 61439

Design vernication as per 126/214 01455			
Technical data for design verification			
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

The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

#### **Technical data ETIM 8.0**

Ratays (EG000019) / Timer relay (EC001439)     Electric engineering, automation, process control engineering / Low-voltage subt/>- benology / Relay and relay (ecl@ss10.0.1-27-37-16-05 (AKF092013))     Type of electric connection   Screw connection     Function delay-on energization   No     Function floating contact on de-energization   No     Function floating starting with pulse, fixed time   No     Function floating, starting with pulse, fixed time   No     Folde function, starting with pulse, variable   No     Rende operation possible   No     Reade control supply voltage Us at AC 50HZ
Type of electric connectionSrew connectionFunction delay-on energizationNoFunction delay on de-energizationYesFunction floating contact on energizationNoFunction floating contact on de-energizationNoFunction floating contact on de-energizationNoFunction floating contact on de-energizationNoFunction star-deltaNoFunction pluse shapingNoFunction floating, starting with pause, fixed timeNoFunction floating, starting with pause, fixed timeNoFunction floating contact blockNoRemote operation possibleNoSutable as remote controlNoPluggable on auxiliary contact blockVRated control supply voltage Us at AC 50HZVRated control supply voltage Us at AC 60HZVVoltage type for actuatingZVoltage type for actuatingZNominal currentAStreedANominal currentA
Function delay-on energization   No     Function delay on de-energization   Yes     Function floating contact on energization   No     Function floating contact on de-energization   No     Function star- delta   No     Function floating contact on de-energization   No     Function floating contact on de-energization   No     Function plase shaping   No     Function flashing, starting with pause, fixed time   No     Function flashing, starting with pause, fixed time   No     Clock function, starting with pause, variable   No     Clock function, starting with pause, variable   No     With plug-in socket   No     Renote operation possible   No     Suitable as remote control   No     Pluggable on auxiliary contact block   V   42     Rated control supply voltage Us at AC 50HZ   V   42     Rated control supply voltage Us at AC 60HZ   V   42     Notimal current   V   42   420     Rated control supply voltage Us at AC 60HZ   V   42   420     Nominal current   A   A   A/DC   A/DC   A/DC
Function delay on de-energization   Yes     Function floating contact on energization   No     Function floating contact on de-energization   No     Function floating contact on de-energization   No     Function floating contact on de-energization   No     Function star-delta   No     Function floating, starting with pause, fixed time   No     Function floating with pause, fixed time   No     Function floating with pause, fixed time   No     Clock function, starting with pause, variable   No     Clock function, starting with pause, variable   No     Vith plug-in socket   No     Remote operation possible   No     Suitable as remote control   No     Pluggable on auxiliary contact block   V     Rated control supply voltage Us at AC 50HZ   V     Rated control supply voltage Us at AC 60HZ   V     Rated control supply voltage Us at AC 60HZ   V     Rated control supply voltage Us at AC 60HZ   V     Voltage type for actuating   V     Voltage type for actuating   V     Voltage type for actuating   V     Nominal current   V
Function floating contact on energization   No     Function floating contact on de-energization   No     Function star-delta   No     Function star-delta   No     Function floating, starting with pause, fixed time   No     Function floating, starting with pause, fixed time   No     Function floating, starting with pause, fixed time   No     Clock function, starting with pause, variable   No     Clock function, starting with pause, variable   No     Vith plug-in socket   No     Remote operation possible   No     Suitable as remote control   No     Pluggable on auxiliary contact block   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   A   2/c0C     Voltage type for actuating   A   3
Function floating contact on de-energization   Image: Sector Se
Function star-delta   No     Function pulse shaping   No     Function flashing, starting with pulse, fixed time   No     Function flashing, starting with pulse, fixed time   No     Clock function, starting with pulse, variable   No     Clock function, starting with pulse, variable   No     Clock function, starting with pulse, variable   No     With plug-in socket   No     Remote operation possible   No     Suitable as remote control   No     Plugable on auxiliary contact block   Mo     Rated control supply voltage Us at AC 50HZ   V     Rated control supply voltage Us at AC 60HZ   V     Voltage type for actuating   V     Voltage type for actuating   AC/DC     Nominal current   A   A
Function pulse shapingNoFunction flashing, starting with pause, fixed timeNoFunction flashing, starting with pulse, fixed timeNoClock function, starting with pulse, variableNoClock function, starting with pulse, variableNoClock function, starting with pulse, variableNoWith plug-in socketNoRemote operation possibleNoSuitable as remote controlNoPulggable on auxiliary contact blockNoRated control supply voltage Us at AC 50HZVRated control supply voltage Us at AC 60HZVNotage type for actuatingVVoltage type for actuatingVNominal currentA
Function flashing, starting with pause, fixed time   No     Function flashing, starting with pulse, fixed time   No     Clock function, starting with pulse, variable   No     Clock function, starting with pulse, variable   No     With plug-in socket   No     Remote operation possible   No     Suitable as remote control   No     Plugable on auxiliary contact block   No     Rated control supply voltage Us at AC 50HZ   V     Atta do control supply voltage Us at DC   V     Voltage type for actuating   V     Atta do control supply voltage Us at DC   V     Voltage type for actuating   Y     Atta do control supply voltage Us at DC   A     Nominal current   A
Function flashing, starting with pulse, fixed timeNoClock function, starting with pulse, variableNoClock function, starting with pulse, variableNoWith plug-in socketNoRemote operation possibleNoSuitable as remote controlMoPlugable on auxiliary contact blockNoRated control supply voltage Us at AC 50HZVAtted control supply voltage Us at AC 50HZVRated control supply voltage Us at AC 50HZVAtted control supply voltage Us at AC 50HZAttedNominal currentAttedAtted control supply voltage Us at AC 50HZAttedAtted control sup
Clock function, starting with pause, variable   No     Clock function, starting with pulse, variable   No     With plug-in socket   No     Remote operation possible   No     Suitable as remote control   No     Pluggable on auxiliary contact block   No     Rated control supply voltage Us at AC 50HZ   V     Atted control supply voltage Us at AC 60HZ   V     Atted control supply voltage Us at AC 60HZ   V     Atted control supply voltage Us at AC 60HZ   V     Atted control supply voltage Us at AC 60HZ   V     Atted control supply voltage Us at AC 60HZ   V     Atted control supply voltage Us at AC 60HZ   V     Atted control supply voltage Us at AC 60HZ   V     Atted control supply voltage Us at DC   V     Voltage type for actuating   A     Nominal current   A
Clock function, starting with pulse, variable   Mo     With plug-in socket   No     Remote operation possible   No     Suitable as remote control   Mo     Pluggable on auxiliary contact block   No     Rated control supply voltage Us at AC 50HZ   V   24 - 240     Rated control supply voltage Us at DC   V   24 - 240     Valtage type for actuating   Mo   Actoc     Nominal current   A   A
With plug-in socket   No     Remote operation possible   No     Suitable as remote control   No     Plugable on auxiliary contact block   No     Rated control supply voltage Us at AC 50HZ   V     Rated control supply voltage Us at AC 60HZ   V     Rated control supply voltage Us at AC 60HZ   V     Valtage type for actuating   V     Nominal current   A
Remote operation possible   No     Suitable as remote control   Mo     Pluggable on auxiliary contact block   No     Rated control supply voltage Us at AC 50HZ   V     Rated control supply voltage Us at AC 60HZ   V     Rated control supply voltage Us at AC 60HZ   V     Voltage type for actuating   V     Voltage type for actuating   V     Nominal current   A
Suitable as 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 V 24 - 240   Nominal current A A 3
Pluggable on auxiliary contact block Image: Marcine Stream of Stre
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 V 24 - 240   Nominal current A A
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 V AC/DC   Nominal current A 3
Rated control supply voltage Us at DC Y 24 - 240   Voltage type for actuating AC/DC   Nominal current A 3
Voltage type for actuating AC/DC   Nominal current A
Nominal current A 3
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
Number of outputs, delayed, normally closed contact 0
Number of outputs, delayed, normally open contact 0
Number of outputs, delayed, change-over contact
Outputs, reversible delayed/undelayed No
With semiconductor output No
Suitable for DIN rail (top hat rail) mounting
Suitable for front mounting No
Width mm 17.5
Height mm 70
Depth mm 63