## **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 1.5 - 30 s 5 - 100 s 1.5 - 30 min 5 - 100 min 0.5 - 10 h 5 - 100 h
Rated operational current			
AC-15			
220 V 230 V 240 V	le	A	4
230 V (N/O)	l <sub>e</sub>	А	3
230 V (NC)	l <sub>e</sub>	Α	3
Voltage range	U <sub>LN</sub>	V	24 - 240 V AC, 50/60 Hz 24 - 48 V DC
Width		mm	17.5
Terminal marking according to EN 50042 A2 $16$ $15$ $15$ $16$ $18$			

#### **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 <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 relay (EC001439)					
Electric engineering, automation, process control engineering / Low-voltage switch technology / Relay and socket / Timed relay (ecl@ss10.0.1-27-37-16-05 [AKF092013])					
Type of electric connection			Screw connection		
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 pulse shaping			No		
Function flashing, starting with pause, fixed time			No		
Function flashing, starting with pulse, fixed time			No		
Clock function, starting with pause, variable			No		
Clock function, starting with pulse, variable			No		
With plug-in socket			No		
Remote operation possible			No		
Suitable 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		
Nominal current		Α	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			0		
Number of outputs, delayed, normally closed contact			0		
Number of outputs, delayed, normally open contact			0		
Number of outputs, delayed, change-over contact			1		
Outputs, reversible delayed/undelayed			No		
With semiconductor output			No		
Suitable for DIN rail (top hat rail) mounting			Yes		
Suitable for front mounting			No		
Width		mm	18		
Height		mm	70		
Depth		mm	63		

## **Approvals** Product Standards IEC/EN 61812-1; IEC/EN 60947-5-1; UL 508; CSA-22.2 No. 14; CE marking UL File No. E29184 NKCR, NKCR7 UL Category Control No. CSA File No. UL report valid CSA Class No. 3211-03 North America Certification UL listed, certified by UL for use in Canada Degree of Protection IEC: IP20, UL/CSA Type: -**Characteristics** Flow diagram for timing functions LED legend Time not running, contact 15 – 18 closed Time running, contact 15 - 18 closed Time running, contact 15 – 18 not closed A2/A1 linked A2/A1 not linked 12 Off-delayed A1-A2 B1 15-18 t Power LED

**Rel LED** 



