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 _e	A	3
230 V (NC)	l _e	Α	3
Voltage range	U _{LN}	V	24 - 240 V AC, 50/60 Hz 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.

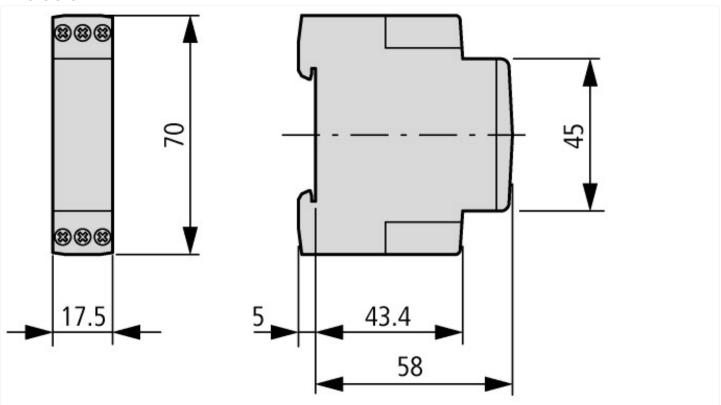
Technical data ETIM 7.0

Electric engineering, automation, process control engineering / Low voltage south /				
Type of electric connection Server connection Function delay on de-margization No Function delay on de-margization Server connection Function delay contect on de-margization No Function fasting straing with pause, fixed time No Function fasting contact on de-margization No Function fasting straing with pause, fixed time No Function fasting with pause, variable No Clock function, starting with pause, variable No Rende corretal you by houlds, variable No Rende corretal you by voltage Us at AC 504Z No Read control supply voltage Us at AC 504Z Yo 42 400 Read control supply voltage Us at AC 504Z No No Read control supply voltage Us at AC 504Z No No Read control supply voltage Us at AC 504Z So So Number of outputs, undelayed, normally closed contact No So Number of outputs, undelayed, nor	Relays (EG000019) / Timer relay (EC001439)			
Principal delay-on energization Image: second	Electric engineering, automation, process control engineering / Low-voltage switch technology / Relay and socket / Timed relay (ecl@ss10.0.1-27-37-16-05 [AKF092013])			
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Rated control supply voltage Us at AC 60HZ Voltage Vy 4-240 Rated control supply voltage Us at DC K	Pluggable on auxiliary contact block			No
Rated control supply voltage Us at DC V 2 4 240 Voltage type for actuating AC/DC Nominal current AC A 3 Time range 05 - 360000 05 - 360000 Number of outputs, undelayed, normally closed contact 0 0 Number of outputs, undelayed, normally closed contact 0 0 Number of outputs, undelayed, normally closed contact 0 0 Number of outputs, undelayed, normally closed contact 0 0 Number of outputs, delayed, normally closed contact 0 0 Number of outputs, delayed, normally closed contact 0 0 Number of outputs, delayed, normally closed contact 0 0 Number of outputs, delayed, normally closed contact 0 0 Number of outputs, delayed, change-over contact 0 0 Number of outputs, delayed, change-over contact 0 0 Suitable for DIN rail (top hat rail) mounting 0 0 Suitable for fort mounting 0 No With mounting 0 0 With mounting <td>Rated control supply voltage Us at AC 50HZ</td> <td></td> <td>V</td> <td>24 - 240</td>	Rated control supply voltage Us at AC 50HZ		V	24 - 240
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Nominal current A 3 Time range 0.05 - 360000 Number of outputs, undelayed, normally closed contact 0 Number of outputs, undelayed, normally closed contact 0 Number of outputs, undelayed, normally closed contact 0 Number of outputs, undelayed, change-over contact 0 Number of outputs, delayed, normally closed contact No Suitable for DIN rail (tcp hat rail) mounting No Suitable for front mounting No With mm Night 8 Meight mm	Rated control supply voltage Us at DC		V	24 - 240
Time range Solo Number of outputs, undelayed, normally closed contact Image Number of outputs, undelayed, normally open contact Image Number of outputs, undelayed, normally closed contact Image Number of outputs, delayed, normally closed contact Image Number of outputs, delayed, normally open contact Image Nutser of therman <td>Voltage type for actuating</td> <td></td> <td></td> <td>AC/DC</td>	Voltage type for actuating			AC/DC
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Number of outputs, delayed, normally open contact I Number of outputs, delayed, change-over contact I Outputs, reversible delayed/undelayed I With semiconductor output I Suitable for DIN rail (top hat rail) mounting I With semiconducting I With hat rail mounting I	Number of outputs, undelayed, change-over contact			0
Number of outputs, delayed, change-over contact Image: Contact output contact	Number of outputs, delayed, normally closed contact			0
Outputs, reversible delayed/undelayed Image: Constraint of the series	Number of outputs, delayed, normally open contact			0
With semiconductor output Mo Suitable for DIN rail (top hat rail) mounting Mo Suitable for front mounting Mo With semiconductor output Mo Buitable for front mounting Mo With semiconductor output Mo Buitable for front mounting Mo With semiconductor output Mo Buitable for front mounting Mo With semiconductor output Mo Buitable for front mounting Mo	Number of outputs, delayed, change-over contact			1
Suitable for DIN rail (top hat rail) mounting Model Suitable for front mounting Model Width Mm Height Mm	Outputs, reversible delayed/undelayed			No
Suitable for front mounting Width Height Model Model <td< td=""><td>With semiconductor output</td><td></td><td></td><td>No</td></td<>	With semiconductor output			No
Width mm 18 Height mm 70	Suitable for DIN rail (top hat rail) mounting			Yes
Height mm 70	Suitable for front mounting			No
	Width		mm	18
Depth mm 63	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

Dimensions



Additional product information (links)

Terminal marking	http://ecat.moeller.net/flip-cat/?edition=HPLEN&startpage=11.7
Timing functions	http://ecat.moeller.net/flip-cat/?edition=HPLEN&startpage=11.8
Load limit curves	http://ecat.moeller.net/flip-cat/?edition=HPLEN&startpage=11.10
Timing relays	http://ecat.moeller.net/flip-cat/?edition=HPLEN&startpage=11.13