Timing relay, 1W, 0.05s-100h, 24-240VAV 50/60Hz, 24-48VDC, on-delayed



Part no. ETR2-11 Catalog No. 262684 Alternate Catalog ETR2-11

No.

**EL-Nummer** 4110014

(Norway)

### **Delivery program**

Product range			ETR2 timing relays
Basic function			Timer relays
Function			On-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	l <sub>e</sub>	Α	4
230 V (N/O)	l <sub>e</sub>	Α	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

### **Technical data**

#### Technical data in sheet catalogue

# Design verification as per IEC/EN 61439

3			
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 8.0**

Relays (ER000199)   Timer rolay (EX001459)	IECIIIICAI UALA LIIIVI O.U			
Type of electric connection         Kes           Function delay-on de-nergization         Yes           Function floating contact on energization         No           Function floating contact on de-energization         No           Function floating, starting with passe, fixed time         No           Function floating, starting with passe, fixed time         No           Clock function, starting with pulse, fixed time         No           Clock function, starting with pulse, fixed time         No           Clock function, starting with pulse, fixed time         No           Remote operation possible         No           Suitable as remote control         No           Pluggable on auxiliary contact block         No           Restor control supply voltage Us at AC 69HZ         V         24-240           Retoc control supply voltage Us at AC 69HZ         V         24-8           Retoc control supply voltage Us at AC 69HZ         V         24-8           Nometion of outputs, undelayed, normally closed contact         No         0           Number of outputs, undelayed, normally closed contact         <	Relays (EG000019) / Timer relay (EC001439)			
Function dalay-on energization Function floating-contact on energization Function floating contact on de-energization Function floating contact on de-energization Function floating contact on de-energization Function pulse shaping Function floating contact on de-energization Function pulse shaping Function floating the pulse, fixed time Function floating starting with pause, fixed time Function floating, starting with pause, fixed time Clock function, starting with pulse, fixed time Clock function, starting with pulse, variable Clock function, starting with pulse, variable Clock function, starting with pulse, variable Clock function, starting with pulse, fixed time Clock function starting with pulse, variable Clock function, starting with pulse, fixed time Clock function starting with pulse, fixed time Clock function, starting with pu	Electric engineering, automation, process control engineering / Low-voltage switc	h technology / l	Relay and	socket / Timed relay (ecl@ss10.0.1-27-37-16-05 [AKF092013])
Function flashy on the energization Function floating contact on energization Function floating contact on de-energization Function floating starting with pause, fixed time Function floating, starting with pause, fixed time Function floating, starting with pulse, fixed time Function floating, starting time time Function floating, st	Type of electric connection			Screw connection
Function floating contact on energization Function grain star-delta Function place shaping Function floating, starting with pause, fixed time Function floating, starting with pause, fixed time Function floating, starting with pulse, fixed time Function floating, starting with pulse, variable Clock function, starting with pulse, variable Clock function, starting with pulse, variable Remote operation possible Suitable as remote control Plugable on auxiliary contact block Rated control supply voltage Us at AC 59HZ Rated control supp	Function delay-on energization			Yes
Function floating contact on de-energization Function start-delita Function start-delita Function start-delita Function pluse shaping Function flashing, starting with pulse, fixed time Function flashing, starting with pulse, fixed time Clock function, starting with pulse, variable Clock function,	Function delay on de-energization			No
Function star-delta Function pulse shaping Function flashing, starting with pause, fixed time Function flashing, starting with pulse, fixed time Function flashing, starting with pulse, fixed time Clock function, starting with pulse, variable Clock func	Function floating contact on energization			No
Function pulse shaping Function flashing, starting with pause, fixed time Function flashing, starting with pulse, fixed time Function flashing, starting with pulse, variable Clock function, starting with pu	Function floating contact on de-energization			No
Function flashing, starting with pause, fixed time  Function flashing, starting with pulse, fixed time  Clock function, starting with pulse, variable  Remote operation possible  Remote operation possible  Suitable as remote control  Pluggable on auxiliary contact block  Rated control supply voltage Us at AC 50HZ  Romanda current  Voltage type for actuating  Number of outputs, undelayed, normally closed contact  Number of outputs, undelayed, change-over contact  Number of outputs, delayed, unormally open contact  Number of outputs, delayed, change-over contact  Number of outputs, delayed, normally open contact  Number of outputs, delayed, unormally open contact  Number of outputs, delayed, onermally open contact  Number of outputs, delayed, unormally op	Function star-delta			No
Function flashing, starting with pulse, fixed time  Clock function, starting with pulse, variable  Clock function, starting with pulse, variable  With plug-in socket  Remote operation possible  Suitable as remote control  Pluggable on auxiliary contact block  Rated control supply voltage Us at AC 50HZ  Rated control supply voltage Us at DC  Voltage Sype for actuating  Nominal current  Number of outputs, undelayed, normally closed contact  Number of outputs, undelayed, normally closed contact  Number of outputs, undelayed, change-over contact  Number of outputs, delayed, normally open contact  Number of outputs, delayed, normally open contact  Number of outputs, delayed, change-over contact  Number of outputs, delayed, normally open contact  Number of outputs, delayed, change-over contact  Number of outputs, delayed, change-over contact  Number of outputs, delayed, normally open contact  Number of out	Function pulse shaping			No
Clock function, starting with pause, variable Clock function, starting with pulse, variable With plug-in socket Remote operation possible Suitable as remote control Plugable on auxiliary contact block Rated control supply voltage Us at AC 50HZ Rated control supply Voltage Us at AC 5	Function flashing, starting with pause, fixed time			No
Clock function, starting with pulse, variable With plug-in socket Remote operation possible Suitable as remote control Pluggable on auxiliary contact block Rated control supply voltage Us at AC 50HZ Rated control supply voltage Us at DC Voltage type for actuating Nominal current Romeinal cu	Function flashing, starting with pulse, fixed time			No
With plug-in socket Remote operation possible Suitable as remote control Plugable on auxiliary contact block Rated control supply voltage Us at AC 50HZ Ra	Clock function, starting with pause, variable			No
Remote operation possible  Suitable as remote control  Pluggable on auxiliary contact block  Rated control supply voltage Us at AC 50HZ  Rated control supply voltage Us at AC 60HZ  Rated control supply voltage Us at DC  Voltage type for actuating  Nominal current  AC/IC  Romand current  AC/IC  AC	Clock function, starting with pulse, variable			No
Suitable as remote control         Mo           Pluggable on auxiliary contact block         V         42-40           Rated control supply voltage Us at AC 50HZ         V         24-240           Rated control supply voltage Us at AC 60HZ         V         24-48           Rated control supply voltage Us at DC         V         24-48           Voltage type for actuating         AC/DC           Nominal current         A         3           Time range         S         0.05-380000           Number of outputs, undelayed, normally closed contact         S         0           Number of outputs, undelayed, change-over contact         S         0           Number of outputs, undelayed, change-over contact         S         0           Number of outputs, delayed, normally closed contact         S         0           Number of outputs, delayed, nange-over contact         S         0           Number of outputs, delayed, change-over contact         S         1           Outputs, reversible delayed/undelayed         No         No           With semiconductor output         No         No           Suitable for DIN rail (top hat rail) mounting         No         No           Suitable for front mounting         No         No           Width <td>With plug-in socket</td> <td></td> <td></td> <td>No</td>	With plug-in socket			No
Pluggable on auxiliary contact block Rated control supply voltage Us at AC 50HZ Rated control supply voltage Us at AC 60HZ Rotage type for actuating Voltage type for actuating Nominal current A  B  B  B  B  B  B  B  B  B  B  B  B	Remote operation possible			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 - 48           Voltage type for actuating         AC/DC           Nominal current         A         3           Time range         S         0.05 - 360000           Number of outputs, undelayed, normally closed contact         P         0           Number of outputs, undelayed, normally open contact         P         0           Number of outputs, undelayed, normally closed contact         P         0           Number of outputs, delayed, normally open contact         P         0           Number of outputs, delayed, normally closed contact         P         0           Number of outputs, delayed, normally open contact         P         0           Number of outputs, delayed, change-over contact         P         0           Number of outputs, delayed, change-over contact         P         0           Outputs, reversible delayed/undelayed         P         No           Suitable for DIN rail (top hat rail) mounting         P         Yes           Suitable for front mounting         P         No           Width         No         No<	Suitable as remote control			No
Rated control supply voltage Us at AC 60HZ Rated control supply voltage Us at DC V V 24 - 48 Voltage type for actuating Nominal current AC/DC Nominal current AB	Pluggable on auxiliary contact block			No
Rated control supply voltage Us at DC  Voltage type for actuating  Nominal current  A A  AC/DC  Nominal current  A B  S D.05 - 360000  Number of outputs, undelayed, normally closed contact  Number of outputs, undelayed, normally open contact  Number of outputs, undelayed, change-over contact  Number of outputs, delayed, normally closed contact  Number of outputs, delayed, normally open contact  Number of outputs, delayed, normally open contact  Number of outputs, delayed, normally open contact  Number of outputs, delayed, change-over contact  Number of outputs, delayed (normally open contact  Number of outputs, delayed, change-over contact  Number of outputs, delayed, normally open contact  Number of outputs, delayed, on ormally open contact  Number of outputs, delayed,	Rated control supply voltage Us at AC 50HZ		V	24 - 240
Voltage type for actuating  Nominal current  A 3  Time range Number of outputs, undelayed, normally closed contact Number of outputs, undelayed, normally open contact Number of outputs, undelayed, normally open contact Number of outputs, undelayed, normally closed contact Number of outputs, delayed, normally closed contact Number of outputs, delayed, normally open contact Number of outputs, delayed, change-over contact Number of outputs, delayed, change-over contact Number of outputs, delayed, change-over contact Number of outputs, delayed, normally open contact Number of outputs, delayed, change-over contact Number of outputs, delayed, normally open contact Number of outputs, delayed, n	Rated control supply voltage Us at AC 60HZ		V	24 - 240
Nominal current  Nominal current  S	Rated control supply voltage Us at DC		V	24 - 48
Imerange Number of outputs, undelayed, normally closed contact Number of outputs, undelayed, normally open contact Number of outputs, undelayed, change-over contact Number of outputs, delayed, normally closed contact Number of outputs, delayed, normally open contact Number of outputs, delayed, change-over contact Number of outputs, delayed, normally open contact Number of outputs, delayed, or	Voltage type for actuating			AC/DC
Number of outputs, undelayed, normally closed contact  Number of outputs, undelayed, normally open contact  Number of outputs, undelayed, change-over contact  Number of outputs, delayed, normally closed contact  Number of outputs, delayed, normally open contact  Number of outputs, delayed, normally open contact  Number of outputs, delayed, normally open contact  Number of outputs, delayed, change-over contact  Number of outputs, delayed, change-over contact  No  Outputs, reversible delayed/undelayed  No  With semiconductor output  Suitable for DIN rail (top hat rail) mounting  Suitable for front mounting  No  Width  mm  17.5  Height	Nominal current		Α	3
Number of outputs, undelayed, normally open contact  Number of outputs, undelayed, change-over contact  Number of outputs, delayed, normally closed contact  Number of outputs, delayed, normally open contact  Number of outputs, delayed, normally open contact  Number of outputs, delayed, change-over contact  Number of outputs, delayed, change-over contact  Number of outputs, delayed, change-over contact  No  Utputs, reversible delayed/undelayed  With semiconductor output  No  Suitable for DIN rail (top hat rail) mounting  Ves  Suitable for front mounting  No  Width  mm  17.5  Height  mm  70	Time range		S	0.05 - 360000
Number of outputs, undelayed, change-over contact  Number of outputs, delayed, normally closed contact  Number of outputs, delayed, normally open contact  Number of outputs, delayed, change-over contact  No  With semiconductor output  No  Suitable for DIN rail (top hat rail) mounting  Yes  Suitable for front mounting  No  Width  mm 17.5  Height  mm 70	Number of outputs, undelayed, normally closed contact			0
Number of outputs, delayed, normally closed contact  Number of outputs, delayed, normally open contact  Number of outputs, delayed, change-over contact  Outputs, reversible delayed/undelayed  With semiconductor output  Suitable for DIN rail (top hat rail) mounting  Vidth  Width  Mo  Vidth  Mo  Vidth  Mo  Vidth  Mo  Vidth  No  Vi	Number of outputs, undelayed, normally open contact			0
Number of outputs, delayed, normally open contact  Number of outputs, delayed, change-over contact  Outputs, reversible delayed/undelayed  With semiconductor output  Suitable for DIN rail (top hat rail) mounting  Suitable for front mounting  Width  Mo  Width  Mmm  17.5  Height	Number of outputs, undelayed, change-over contact			0
Number of outputs, delayed, change-over contact  Outputs, reversible delayed/undelayed  With semiconductor output  Suitable for DIN rail (top hat rail) mounting  Vidth  Width  Min  1  No  No  No  No  Width  In  In  In  In  In  In  In  In  In  I	Number of outputs, delayed, normally closed contact			0
Outputs, reversible delayed/undelayed  With semiconductor output  Suitable for DIN rail (top hat rail) mounting  Suitable for front mounting  Width  In mm  Min m	Number of outputs, delayed, normally open contact			0
With semiconductor output  Suitable for DIN rail (top hat rail) mounting  Suitable for front mounting  Width  Mmm  17.5  Height	Number of outputs, delayed, change-over contact			1
Suitable for DIN rail (top hat rail) mounting  Suitable for front mounting  Width  Height  Yes  No  No  70	Outputs, reversible delayed/undelayed			No
Suitable for front mountingNoWidthmm17.5Heightmm70	With semiconductor output			No
Width mm 17.5 Height 70	Suitable for DIN rail (top hat rail) mounting			Yes
Height mm 70	Suitable for front mounting			No
	Width		mm	17.5
Depth mm 63	Height		mm	70
	Depth		mm	63