## **DATASHEET - ETR4-51-W**

Part no.

(Norway)

No.

Timing relay, star-delta, 50 ms, 1W, 3-60s, 400VAC



ETR4-51-W Catalog No. 031885 Alternate Catalog XTTR6A60S51N 0004110007 **EL-Nummer** 



## **Delivery program**

Product range			ETR4 timing relays
Basic function			Timer relays
Function			Star-delta switching
			Changeover contact with a changeover time of 50 ms Fixed timing function
Number of changeover contacts			1
Time range			3 - 60 s
Time range			3 - 60 s
Rated operational current			
AC-14			
380 V 400 V 415 V	I <sub>e</sub>	А	3
			Value applies starting with release 001.
AC-15			
220 V 230 V 240 V	I <sub>e</sub>	А	3
380 V 400 V 415 V	l <sub>e</sub>	А	3
			Value applies starting with release 001.
Voltage range	U <sub>LN</sub>	V	400 V AC, 50/60 Hz
Width		mm	22.5
$A1 \qquad 17$ $A1 \qquad$			

Terminal marking according to EN 50042

# **Technical data**

General			
Standards			Standard IEC/EN 61812 VDE 0435
Lifespan, mechanical			
AC operated	Operations	x 10 <sup>6</sup>	30
DC operated	Operations	x 10 <sup>6</sup>	30
Climatic proofing			Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
Ambient temperature			
Ambient temperature, storage		°C	- 45 - + 85
Open		°C	-25 - +60
Enclosed		°C	- 25 - + 45
Mounting position			As required
Mechanical shock resistance (IEC/EN 60068-2-27)			
Half-sinusoidal shock, 20 ms		g	
Make contact		g	4
Degree of protection			
Terminals			IP20
Weight		kg	0.1
Terminal capacities		mm <sup>2</sup>	

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Sold a random Sold a random Sold a random set sold a random	Solid		mm <sup>2</sup>	1 x (0.5 - 2.5) 2 x (0.5 - 1.5)
ContentHare <th< td=""><td>Flexible with ferrule</td><td></td><td>mm<sup>2</sup></td><td></td></th<>	Flexible with ferrule		mm <sup>2</sup>	
head mysike order statusMan<	Solid or stranded		AWG	1 x (20 - 14)
Non-starting with which we have and a starting with which we have a starting with we have a starting wi	Contacts			
Density starting wind wind wind wind wind wind wind wind	Rated impulse withstand voltage	U <sub>imp</sub>	V AC	6000
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20 V20 V20 V1P P P P 	440 V	۱ <sub>e</sub>	А	3
DC-1AndMain and breaking conditions to DC13, time constant as statedNoteAMain and breaking conditions to DC13, time constant as stated24VNASLR max. 50 msNASConv. thermal currentNASNoteNASNoteNAMain and breaking conditions to DC13, time constant as statedNoteNASNoteNSSNoteNASMax. fuse, break contactsNASNoteNNSMax. fuse, break contactsNASNoteNNNNMax. fuse, break contactsNNNMax. fuse, break contactsNNNActNNNNActNNNNActNNNNActNNNNActNNNNActNNNNActNNNNActNNNN <td>AC-15</td> <td></td> <td></td> <td></td>	AC-15			
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LR max. 15 msAA24 VAA5LR max. 50 msAA2CorrectAAAACorrectAAAANoteAAAAMax. fuse, make contactsAAAAMax. fuse, break contactAAAAMax. fuse, break con	DC-11			
2 VeAAI/A max.50mAAAI/A max.60mAAAI/A max.60mAAAMar.00mAAA	Note			Making and breaking conditions to DC13, time constant as stated
If max 50 msA12L/R max 50 msImportA12Conv. thermal currentImportAAANotAAAANotAAAAAMax. fuse, make contactsAAAAAMax. fuse, break contactsAAA	L/R max. 15 ms		A	
Normal currentHereAreAreAreNorman current protocols devices 2007 200 Mark 1990 Mark 19	24 V	۱ <sub>e</sub>	A	1.5
Note         Max. fuse, make contacts         A g6U         Max. supplied directly from mains or transformer > 1000 VA           Max. fuse, make contacts         A g6U         G         A g6U         G           Max. overcurrent protective device, 220/230 V         V         R2-B4/1-H1         R2-B4/1-H1           Mated operational voltage         Ve         V         Note         Note           Acc         Ve         Ve         Note	L/R max. 50 ms		A	1.2
Note         Men supplied directly from mains or transformer > 1000 VA           Max. fuse, make contacts         A gGU         A		I <sub>th</sub>	A	6
Max. fuse, make contacts       A g6/gl       A g6/gl       G         Max. fuse, break contacts       A g6/gl       A g6/gl       G         Max. overcurrent protective device, 220/230 V       Ve       Type       K2-B4/1-HI         Magnet systems       Ve       Ve       Ve         Rated operational voltage       Ve       Ve       Ve         AC       Faced frequency AC       Face       40         Tolerance AC operated min.       Ke       Ke       83         Tolerance AC operated max.       Ke       Ke       10         Power consumption       Ke       Ke       Ke         Pick-up AC       Ve       Ve       Ve         Sealing AC       Ve       Sa       Sa         Duty factor       Ke       Ke       Sa         Max.mun operating frequency       Ke       Ke       Sa				
Max. fuse, break contacts     A gG/Q     A gG/Q       Max. overcurrent protective device, 220/230 V     Type     FA2-B/1-H       Marcer systems     V     FA2-B/1-H       Max. doperational voltage     V     V       Ac     V     V       Acter frequency AC     I     A0       Tolerance AC operated min.     I     V     V       Foreword     V     V     V       Power consumption     I     V     V       Pick-up AC     V     V     V       Sealing AC     V     V     V       Duty factor     I     V     Saling AC       Max. doperating frequency     I     V     Saling AC				
Max. overcurrent protective device, 220/230 V     Type     FA2-B4/-HI       Magnet systems     Rated roperational voltage     Ve     Ve       AC     Ve     40       Rated frequency AC     FA2     7-63       Tolerance AC operated min.     Ke     Ke     10       Prover consumption     Ke     Ke     10       Prover consumption     Ke     Ke     10       Prok-up AC     Ke     Ke     10       Sealing AC     Ke     Ke     10       Duty factor     Ke     Ke     10       Max. operating frequency     Ke     Ke     10				
Agenet systems         Notes           Rated operational voltage         Ve         Ve         Ac         Ac <td></td> <td></td> <td></td> <td></td>				
Rated operational voltageUeVeACImage: Construction of the constru			туре	1742-04/1-DI
AC40Reted frequency ACHz47-63Tolerance AC operated min.TuleTuleTolerance AC operated max.TuleTuleProver consumptionTuleTulePick-up ACTuleTuleSealing ACVA5Duty factorSuSuMaximum operating frequencyTuleSuMaximum operating frequencyTuleSu <tr< td=""><td>Rated operational voltage</td><td>U<sub>e</sub></td><td>V</td><td></td></tr<>	Rated operational voltage	U <sub>e</sub>	V	
Tolerance AC operated min.     x Uc     0.85       Tolerance AC operated max.     x Uc     1.0       Power consumption     x Uc     1.0       Pick-up AC     VA     0.5       Sealing AC     VA     0.5       Duty factor     VA     0.5       Maximum operating frequency     Gast     VA				400
Tolerance AC operated max.     x U <sub>c</sub> 1.1       Power consumption     K     K       Pick-up AC     VA     0.5       Sealing AC     VA     0.5       Duty factor     % DF     10       Maximum operating frequency     G     Max	Rated frequency AC		Hz	47 - 63
Power consumptionPower consumptionPower consumptionPower consumptionPower consumptionVA0.5Pick-up ACVAVA0.5Sealing ACVAVA0.5Duty factor% DF100Maximum operating frequencyOps/m400	Tolerance AC operated min.		x U <sub>c</sub>	0.85
Power consumptionPower consumptionPower consumptionPower consumptionPower consumptionVA0.5Pick-up ACVAVA0.5VA0.5Duty factor% DF100VA0.5Maximum operating frequencyOps/h400400	Tolerance AC operated max.		x U <sub>c</sub>	1.1
Pick-up ACVA0.5Sealing ACVA0.5Duty factor% DF10Maximum operating frequencyOps/h400	Power consumption			
Duty factor     % DF     100       Maximum operating frequency     Ops/h     4000			VA	0.5
Maximum operating frequency Ops/h 4000	Sealing AC		VA	0.5
	Duty factor		% DF	100
Minimum command time	Maximum operating frequency		0ps/h	4000
	Minimum command time			

AC		ms	50
Repetition accuracy (deviation)		%	≦ 0.5
Recovery time (after 100% time delay)		ms	70
Contact changeover time	tu	ms	50
Electromagnetic compatibility (EMC)			
Electrostatic discharge (ESD)			
annlied standard			IEC/EN 61000_4_2

applied standard       IEC/EN 61000-4-2         Air discharge       KV       8         Contact discharge       KV       6         Electromagnetic fields (RFI)       IEC/EN 61000-4-3       IEC/EN 61000-4-3         applied standard       V/m       80 - 1000 MHz: 10 1.4 2 GHz: 3 2.0 - 27 GHz: 1         Radio interference suppression       KV       Stopping Conducted)         Burst       Supping cables: 1 scoording to IEC/EN 61000-4-4         power pulses (Surge)       KV       Supping cables: 1 scoording to IEC/EN 61000-4-5         Immunity to line-conducted interference to (IEC/EN 61000-4-6)       V       10			
Instrumentation       Instrumentation         Contact discharge       Instrumentation         Electromagnetic fields (RFI)       Instrumentation         applied standard       Instrumentation         Instrumentation       Instrumentation         Radio interference suppression       Instrumentation         Burst       Instrumentation         power pulses (Surge)       Instrumentation         Instrumentation       Instrumentatio	applied standard		IEC/EN 61000-4-2
Electromagnetic fields (RFI)   applied standard   Image: transform of trans	Air discharge	kV	8
applied standardIEC/EN 61000-4-3Image: Supple standardImage: Supple standard<	Contact discharge	kV	6
Radio interference suppression     KV/m     80 - 1000 MHz: 10 1.4 - 2 GHz: 3 2.0 - 2.7 GHz: 1       Burst     EN 55011, Class B (conducted) EN 55011, Class B (radiated)       power pulses (Surge)     KV     Supply cables: 2 Signal cables: 1 according to IEC/EN 61000-4-4	Electromagnetic fields (RFI)		
Image: series of the series	applied standard		IEC/EN 61000-4-3
Burst     Supply cables: 2 Signal cables: 1 according to IEC/EN 61000-4-4       power pulses (Surge)     CM       Power pulses (Surge)     CM		V/m	1.4 - 2 GHz: 3
power pulses (Surge)     Signal cables: 1 according to IEC/EN 61000-4-4       2 kV (symmetrical) 4 kV (asymmetrical) according to IEC/EN 61000-4-5	Radio interference suppression		
4 kV (asymmetrical) according to IEC/EN 61000-4-5	Burst	kV	Signal cables: 1
Immunity to line-conducted interference to (IEC/EN 61000-4-6) V 10	power pulses (Surge)		4 kV (asymmetrical)
	Immunity to line-conducted interference to (IEC/EN 61000-4-6)	V	10

# Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I <sub>n</sub>	А	6
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	1.4
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	0
Static heat dissipation, non-current-dependent	P <sub>vs</sub>	W	0.5
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.

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

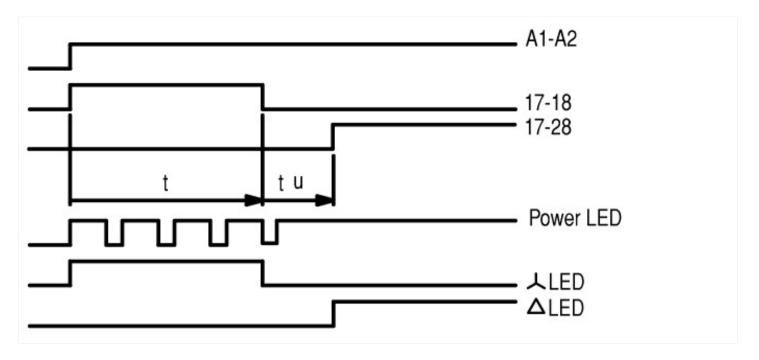
### **Technical data ETIM 7.0**

Reider Biologic Strain Stra			
Type of electric connection         Screw connection           Function delay on de-margization         No           Function delay on de-margization         No           Function delay context on de-graptization         No           Function flasting context on de-energization         No           Function flasting context on de-energization         No           Function flasting with pause, field time         No           Function flasting with pause, field time         No           Function flasting with pause, field time         No           Function flasting with pause, waitable         No           Clock function, starting with pause, waitable         No           Plagable for memote cortrol         No           Reade control spassible         No           Statube for memote cortrol         No           Reade control spassible         No           Nomber of outputs, undelayd, normally closed context         No           No         No      <	Relays (EG000019) / Timer relay (EC001439)		
Function delay-on energization       No         Function factor energization       No         Function factor on de-energization       No         Color determing with pause, fixed time       No         Color determing with pause, strating with pause, writable       No         Color determing with pause, writable       No         Strated cortrol supply voltage Us at AC 504Z       No         Rende cortrol supply voltage Us at AC 504Z       No         Strated cortrol supply voltage Us at AC 504Z       No         Rende cortrol supply voltage Us at AC 504Z       No         Nated cortrol supply voltage Us at AC 504Z       No         Nated cortrol supply voltage Us at AC 504Z       No         Nated cortrol supply voltage Us at AC 504Z       No         Nated cortrol supply voltage Us at AC 504Z       No         Number of outputs, undeleyed, normaly Open conteate       No         <	Electric engineering, automation, process control engineering / Low-voltage switch tec	chnology / Relay and	socket / Timed relay (ecl@ss10.0.1-27-37-16-05 [AKF092013])
Function deam argization     No       Function floating contact on energization     No       Clock function, starting with plays, variable     No       Subale for manufer on possible     No       Remote on parameter contal     No       Playsable on starting with plays, variable     No       Subale for manufer on parameter variable     No       Notare on subjey voltage Us at AC 60HZ     No       Nomber of outputs, undelayed, normally cosed contact     No       Nomber of outputs, undelayed, normally cosed contact     No       Nomber of outputs, delayed, normaly cose contact	Type of electric connection		Screw connection
Function floating contact on deverguation       No         Function fishing, starting with pause, fixed time       No         Function fishing, starting with pause, fixed time       No         Function fishing, starting with pause, fixed time       No         Clock function, starting with pause, fixed time       No         Bendee operating passely       No         Stable for remote control       No         With play in sacket       No         Rendee operating passible       No         Stable for remote control       No         Plagable on audilary contact block       No         Rendee operating passible       No         Stable for remote control       No         Nated control supply voltage Us at AC 60HZ       No         Rendee operating passible       No         Stable for remote control       V       0         Number of outputs, undelayed, normally colsed contract       No         Number of outputs, undelayed, normally colsed contract       No       No         Number of outputs, undelayed, normally colsed contract       No       No         Number of outputs, undelayed, normally colsed contract       No       No       No         Number of outputs, undelayed, normally colsed contract       No       No       No <td>Function delay-on energization</td> <td></td> <td>No</td>	Function delay-on energization		No
Function floating contact on de-energization       Image: Section floating with pulse, fixed time       Yes         Function floating with pulse, fixed time       No         Chack function, starting with pulse, fixed time       No         Chack function, starting with pulse, wirable       No         Chack function, starting with pulse, wirable       No         Stable for mote corrord       No         Nated corrol supply voltage Us at AC 50HZ       No         Stable for mote corrord       No         Nated corrol supply voltage Us at AC 50HZ       No         Nated corrol supply voltage Us at AC 50HZ       No         Nated corrol supply voltage Us at AC 50HZ       No         Nated corrol supply voltage Us at AC 50HZ       No         Nated corrol supply voltage Us at AC 50HZ       No         Nated corrol supply voltage Us at AC 60HZ       No         Nated corrol supply voltage Us at AC 50HZ       No         Nated corrol supply voltage Us at AC 60HZ       No         Nated corrol supply voltage Us at AC 60HZ       No         Number of outputs, dialeyd, normally closed cortact       No         Number of outputs, dialeyd, normally closed	Function delay on de-energization		No
Incidentian-data       Percention flashing, starting with pause, fixed time       Percention flashing, starting with pause, fixed time         Function flashing, starting with pause, fixed time       Mo         Clock function, starting with pause, variable       Mo         Stable for remote control       Mo         Remote operation possible       Mo         Stable for remote control       Mo         Redict ontrol supply voltage Ust aCK OBIZ       V       Mo         Retide control supply voltage Ust aCK OBIZ       V       Mo         Retide control supply voltage Ust aCK OBIZ       V       Mo         Nominal current       V       Mo         Nominal current       Mo       Mo         Number of outputs, undelayed, normally closed contact       Mo       Mo         Number of outputs, undelayed, normally closed contact       Mo       Mo         Number of outputs, undelayed, normally closed contact       Mo       Mo         Number of outputs, delayed, normally closed contact       Mo       Mo         N	Function floating contact on energization		No
Function plass haping       No         Function flashing, starting with plause, fixed time       No         Function flashing, starting with plause, straid       No         Clock function, starting with plause, variable       No         Clock function, starting with plause, variable       No         With plagin a codet       No         Rendre operation possible       No         Suble for remote control       No         Plugable on auxiliary contact block       No         Rated control supply voltage Us at AC 50HZ       No         Rated control supply voltage Us at AC 50HZ       No         Natchand control supply voltage Us at AC 60HZ       No         Nothing contract block       No         Rated control supply voltage Us at AC 60HZ       No         Nothing contract block       No         Rated control supply voltage Us at AC 60HZ       No         Nothing contract block       No         Nothing contract block       No         Nothing contract block       No         Nother of outputs, undeleyed, normally contract       No         Number of outputs, deleyed, normally contract       No         Number of outputs, deleyed, normally contract       No         Number of outputs, deleyed, normally contract       No </td <td>Function floating contact on de-energization</td> <td></td> <td>No</td>	Function floating contact on de-energization		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         Rende operation possible       No         Subtle for rende control       No         Pulggable on auxiliary contact block       No         Reted control supply voltage Us at AC 50HZ       No         Reted control supply voltage Us at AC 60HZ       V       0-00         Reted control supply voltage Us at AC 60HZ       V       0-00         Nomand current supply voltage Us at AC 60HZ       V       0-00         Notage type for actuating       V       0-00         Nomand current supply voltage Us at AC 60HZ       No       0-00         Nomand current supply voltage Us at AC 60HZ       No       0-00         Nomand current supply voltage Us at AC 60HZ       No       0-00         Nomand current supply voltage Us at AC 60HZ       No       0-00         Number of outputs, undelayed, normally closed contact       No       0-00         Number of outputs, delayed, normally closed contact       No       0-00         Number of outputs, dela	Function star-delta		Yes
Incluin flashing, starting with pulse, fixed time         No           Clock function, starting with pulse, variable         No           Clock function, starting with pulse, variable         No           With pulg-in sockt         No           Rendto operation possible         No           Suitable for rendte control         No           Pulgable on auxiliary contact block         No           Rated control supply voltage Us at AC 50HZ         No           Rated control supply voltage Us at AC 50HZ         Vo           Rated control supply voltage Us at AC 50HZ         Vo           Nonad current         No           Notage type for actuating         No           Number of outputs, undelayed, normally colec contact         No           Number of outputs, undelayed, change-over contact         No           Number of outputs, delayed, normally colec contact         No           Number of outputs, delayed, normally colec contact	Function pulse shaping		No
Clock function, starting with pulse, variable       No         Clock function, starting with pulse, variable       No         With plug-in socket       No         Rendet operation possible       No         Suitable for rendet control       No         Braded control supply voltage Us at AC 50H2       No         Reted control supply voltage Us at AC 50H2       Vo       No         Reted control supply voltage Us at AC 50H2       Vo       No         Reted control supply voltage Us at AC 50H2       Vo       No         Reted control supply voltage Us at AC 50H2       Vo       No         Nombard course       Vo       No       No         Number of outputs, undelayed, normally closed contact       Vo       No       No         Number of outputs, undelayed, normally closed contact       Vo       No       No         Number of outputs, undelayed, normally closed contact       Vo       No	Function flashing, starting with pause, fixed time		No
Clck function, starting with pulse, variable       No         With plug-in socket       No         Rende operation possible       No         Suitable for rende control       No         Pluggable on aukliary contact block       No         Rated control supply voltage Us at AC 50HZ       No         Rated control supply voltage Us at AC 50HZ       No         Rated control supply voltage Us at AC 50HZ       No         Nominel current       No         Nominel current       No         Number of outputs, undelayed, normally closed contact       No         Number of outputs, delayed, normally closed contact       No         Number of outputs, delayed, normally closed contact       No         Number of outputs,	Function flashing, starting with pulse, fixed time		No
With plug-in socketNoRenote operation possibleNoSubble for mente controlNoPluggable on auxiliary contact blockNoRete control supply voltage Us at AC 50HZNoRete control supply voltage Us at AC 50HZNoNomen control supply voltage Us at AC 50HZNoVidage type for actuatingNoNomen control supply voltage Us at AC 50HZNoNumber of outputs, undelayed, normally cosed contactNoNumber of outputs, undelayed, normally cosed contactNoNumber of outputs, delayed, normaly cosed contactNoNumber of outputs, delayed, normaly cosed contactNoNumber of outputs, delayed, normaly cosed contactNoNumber of outputs	Clock function, starting with pause, variable		No
Rance operation possible         No           Suitable for remote control         No           Pluggable on axiliary contact block         No           Rate control supply voltage Us at AC 50HZ         V         400-400           Rate control supply voltage Us at AC 60HZ         V         400-400           Rate control supply voltage Us at AC 60HZ         V         400-400           Nominal current         V         6         7           Nomber of outputs, undelayed, normally closed contact         V         8         6           Number of outputs, undelayed, normally closed contact         V         8         6           Number of outputs, undelayed, normally closed contact         V         9         0           Number of outputs, delayed, normally closed contact         V         9         0           Number of outputs, delayed, normally closed contact         V         9         0           Number of outputs, delayed, normally closed contact         V         9         0           Number of outputs, delayed, normally closed contact         V         9         0           Number of outputs, delayed, normally closed contact         V         9         0           Suitable for JN mail (top hat rail mounting         V         No         No <tr< td=""><td>Clock function, starting with pulse, variable</td><td></td><td>No</td></tr<>	Clock function, starting with pulse, variable		No
Name         No           Plugable on auxiliary contact block         No           Rate dontrol supply voltage Us at AC 50HZ         Vo         400-400           Rate dontrol supply voltage Us at AC 60HZ         Vo         0-400           Rate dontrol supply voltage Us at AC 60HZ         Vo         0-400           Nominal current         Vo         0-400           Number of outputs, undelayed, normally closed contact         A         3-600           Number of outputs, undelayed, normally closed contact         Vo         9-00           Number of outputs, undelayed, normally closed contact         Yo         9-00           Number of outputs, delayed, normally closed contact         Yo         9-00           Number of outputs, delayed, normally closed contact         Yo         9-00           Number of outputs, delayed, normally closed contact         Yo         9-00           Number of outputs, delayed, normally closed contact         Yo         9-00           Number of outputs, delayed, normally closed contact         Yo         9-00           Number of outputs, delayed, normally closed contact         Yo         9-00           Number of outputs, delayed, change-over contact         Yo         9-00           Number of outputs, delayed, change-over contact         Yo         9-00	With plug-in socket		No
Piggable on auxiliary contact block         Me         Me           Rede control supply voltage Us at AC 50HZ         V         0x400           Rede control supply voltage Us at AC 60HZ         V         0x400           Rede control supply voltage Us at AC 60HZ         V         0x400           Rede control supply voltage Us at AC 60HZ         V         0x400           Number of autating         V         0x400           Number of outputs, undelayed, normally closed contact         V         0x400           Number of outputs, undelayed, normally closed contact         V         V           Number of outputs, undelayed, normally closed contact         V         V           Number of outputs, undelayed, normally closed contact         V         V           Number of outputs, delayed, normally closed contact         V         V           Number of outputs, delayed, normally closed contact         V         V           Number of outputs, delayed, normally closed contact         V         V           Number of outputs, delayed, normally closed contact         V         V           Number of outputs, delayed, normally closed contact         V         V           Number of outputs, delayed, normally closed contact         V         V           Number of outputs, delayed, normally closed contact	Remote operation possible		No
Rated control supply voltage Us at AC 50HZ       V       40 - 400         Rated control supply voltage Us at AC 60HZ       V       400 - 400         Rated control supply voltage Us at AC 60HZ       V       0         Notage type for actuating       V       0         Notinal current       AC       AC         Number of outputs, undelayed, normally closed contact       S       3         Number of outputs, undelayed, normally closed contact       M       1         Number of outputs, undelayed, normally closed contact       M       1         Number of outputs, undelayed, normally closed contact       M       1         Number of outputs, undelayed, normally closed contact       M       1         Number of outputs, delayed, normally closed contact       M       1         Number of outputs, delayed, normally closed contact       M       1         Number of outputs, delayed, normally closed contact       M       1         Number of outputs, delayed, normally closed contact       M       1         Number of outputs, delayed, normally closed contact       M       1         Number of outputs, delayed, normally closed contact       M       1         Number of outputs, delayed, normally closed contact       M       1         Number of outputs, delayed, normally	Suitable for remote control		No
Rate control supply voltage Us at AC 60HZ         Voltage V         400 400           Rate control supply voltage Us at DC         0         0           Voltage type for actuating         V         C           Nominal current         A         3           Time range         3         60           Number of outputs, undelayed, normally cosed contact         0         0           Number of outputs, undelayed, normally cosed contact         0         0           Number of outputs, delayed, normally cosed contact         0         0           Number of outputs, delayed, normally cosed contact         0         0           Number of outputs, delayed, change-over contact         0         0           Stable for JDN rail (toph	Pluggable on auxiliary contact block		No
Rated control supply voltage Us at DC         V         0         0           Voltage type for actuating         AC         AC           Nominal current         A         3         3         AC           Time range         3         3         AC	Rated control supply voltage Us at AC 50HZ	V	400 - 400
Voltage type for actuating         A         A           Nominal current         A         3           Time range         3         60           Number of outputs, undelayed, normally closed contact         F         0           Number of outputs, undelayed, normally closed contact         F         0           Number of outputs, undelayed, normally closed contact         F         0           Number of outputs, undelayed, change-over contact         F         0           Number of outputs, delayed, normally closed contact         F         0           Number of outputs, delayed, normally closed contact         F         0           Number of outputs, delayed, normally closed contact         F         0           Number of outputs, delayed, normally closed contact         F         0           Number of outputs, delayed, change-over contact         F         0           Number of outputs, delayed, change-over contact         F         0           Suitable for DIN rail (top hat rail) mounting         F         F           Suitable for forth mounting         F         No           With         F         No           With         F         No           With         F         No           With         M <td>Rated control supply voltage Us at AC 60HZ</td> <td>v</td> <td>400 - 400</td>	Rated control supply voltage Us at AC 60HZ	v	400 - 400
Nominal current         A         3           Time range         3         60           Number of outputs, undelayed, normally closed contact         9         0           Number of outputs, undelayed, normally closed contact         1         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, 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           Suitable for IDIN rail (top har rail) mounting         0         0           With         mmm         3         3  <	Rated control supply voltage Us at DC	v	0 - 0
Time range     and       Time range     3-60       Number of outputs, undelayed, normally closed contact     0       Number of outputs, undelayed, normally open contact     0       Number of outputs, undelayed, normally closed contact     0       Number of outputs, delayed, normally open contact     No       Number of outputs, delayed, normally open	Voltage type for actuating		AC
Number of outputs, undelayed, normally closed contact     I       Number of outputs, undelayed, normally open contact     I       Number of outputs, undelayed, change-over contact     I       Number of outputs, delayed, normally closed contact     I       Number of outputs, delayed, normally closed contact     I       Number of outputs, delayed, normally closed contact     I       Number of outputs, delayed, normally open contact     I       Number of outputs, delayed, normally open contact     I       Number of outputs, delayed, change-over contact     I       Number of outputs, delayed, normally open contact     I       Number of outputs, delayed, mormally open contact     I </td <td>Nominal current</td> <td>А</td> <td>3</td>	Nominal current	А	3
Number of outputs, undelayed, normally open contact       1         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, normally open contact       0         Number of outputs, delayed, normally open contact       0         Number of outputs, delayed, change-over contact       0         Number of outputs, delayed, change-over contact       0         Number of outputs, delayed, change-over contact       0         Number of outputs, delayed, normally open contact       0         Number of outputs, delayed, change-over contact       No         Suitable for DIN rail (top hat rail) mounting       Yes         Suitable for front mounting       Mm         Yidth       3         Height       mm	Time range	S	3 - 60
Number of outputs, undelayed, change-over contact     Image: Contact is a contact i	Number of outputs, undelayed, normally closed contact		0
Number of outputs, delayed, normally closed contact       Image: Sector Se	Number of outputs, undelayed, normally open contact		1
Number of outputs, delayed, normally open contactImage: Second contactImage: Second contactImage: Second contactNumber of outputs, delayed, change-over contactImage: Second contactImage: Second contactImage: Second contactOutputs, reversible delayed/undelayedImage: Second contactImage: Second contactImage: Second contactSuitable for DIN rail (top hat rail) mountingImage: Second contactImage: Second contactImage: Second contactWithImage: Second contactImage: Second contactImage: Second contactImage: Second contactHeightImage: Second contactImage: Second contactImage: Second contactImage: Second contact	Number of outputs, undelayed, change-over contact		0
Number of outputs, delayed, change-over contactModelDOutputs, reversible delayed/undelayedModelNoWith semiconductor outputModelModelSuitable for DIN rail (top hat rail) mountingModelModelSuitable for front mountingModelModelWith ModelModelModelWith ModelModelModelWi	Number of outputs, delayed, normally closed contact		0
Outputs, reversible delayed/undelayedImage: Second sec	Number of outputs, delayed, normally open contact		1
With semiconductor outputMoSuitable for DIN rail (top hat rail) mountingMoSuitable for front mountingMoWidthMoWidthMoBightMo<	Number of outputs, delayed, change-over contact		0
Suitable for DIN rail (top hat rail) mounting     Model       Suitable for front mounting     Model       Width     Mmm       Height     Mm	Outputs, reversible delayed/undelayed		No
Suitable for front mounting     Mo       Width     mm     3       Height     Mm     83	With semiconductor output		No
Width     mm     23       Height     mm     83	Suitable for DIN rail (top hat rail) mounting		Yes
Height mm 83	Suitable for front mounting		No
	Width	mm	23
Depth mm 103	Height	mm	83
	Depth	mm	103

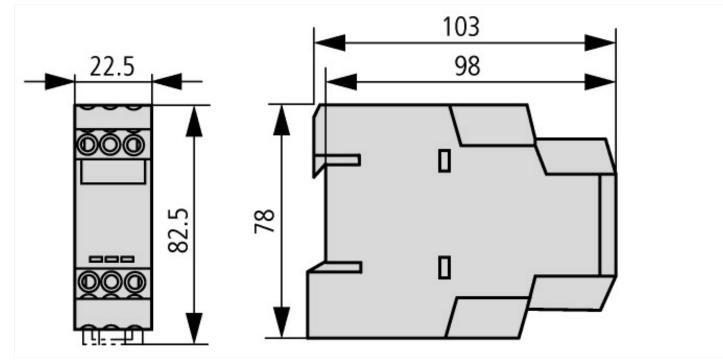
## **Characteristics**

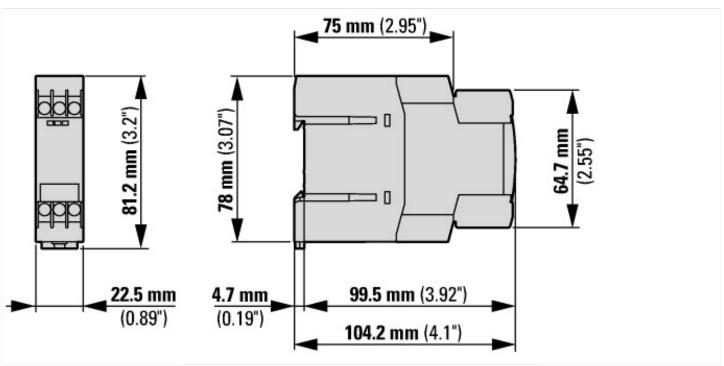
#### Flow diagram for timing functions

LED legend	
	Time not running, contact 15 – 18 closed
	Time running, contact 15 – 18 closed
	Time running, contact 15 – 18 not closed
1) A2/A1 linked 2) A2/A1 not linked	
51 Star-delta	



# Dimensions





Applies to release 001 and higher

## Assets (links)

Declaration of CE Conformity 00002787 Instruction Leaflets IL049003ZU2018\_05

# Additional product information (links)

#### IL049003ZU Timing relay

IL049003ZU Timing relay

ftp://ftp.moeller.net/DOCUMENTATION/AWA\_INSTRUCTIONS/IL049003ZU2019\_08.pdf