



## TIMING RELAY ETR4-51

**Part no.** ETR4-51-A  
**Article no.** 031884



Powering Business Worldwide™

**Catalog No.** XTTR6A60S51B

### Delivery programme

Product range				ETR4 timing relays
Basic function				Timer relays
Function				Star-delta switching Changeover contact with a changeover time of 50 ms
Number of changeover contacts				1
Time range				3 - 60 s
Time range				3 - 60 s
Rated operational current				
AC-11				
400 V	$I_e$	A		3
AC-15				
220 V 230 V 240 V	$I_e$	A		3
380 V 400 V 415 V	$I_e$	A		3
Voltage range	$U_{LN}$	V		24 - 240 V AC, 50/60 Hz 24 - 240 V DC
Width		mm		22.5
Conventional thermal current	$I_{th}$	A		6
Terminal marking according to EN 50042				

### Approvals

Product Standards	IEC/EN 61812-1; IEC/EN 60947-5-1; UL 508; CSA-22.2 No. 14-05; CE marking
UL File No.	E29184
UL Category Control No.	NKCR
CSA File No.	12528
CSA Class No.	3211-03
North America Certification	UL listed, CSA certified
Degree of Protection	IEC: IP20, UL/CSA Type: -

### General

Standards			Standard IEC/EN 61812 VDE 0435
Lifespan, mechanical			
AC operated	Operations	$x 10^6$	30
DC operated	Operations	$x 10^6$	30
Climatic proofing			Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
Ambient temperature		°C	
Ambient temperature, storage		°C	- 45 - + 60
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>	
Solid		mm <sup>2</sup>	1 x (0.75 - 2.5) 2 x (0.75 - 1.5)
Flexible with ferrule		mm <sup>2</sup>	1 x (0.75 - 2.5) 2 x (0.75 - 1.5)
Solid or stranded		AWG	1 x (20 - 14)

## Contacts

Rated impulse withstand voltage	$U_{imp}$	V AC	6000
Overvoltage category/pollution degree			III/2
Rated insulation voltage	$U_i$	V AC	600
Rated operational voltage	$U_e$	V AC	440
Safe isolation to EN 61140			
between coil and auxiliary contacts		V AC	250
between the auxiliary contacts		V AC	250
Making capacity			
AC-14 $\cos \varphi = 0.3$ 400 V		A	48
AC-15 $\cos \varphi = 0.3$ 220 V		A	50
DC-11 L/R - 40 ms		x $I_e$	1.1
Breaking capacity			
AC-14 $\cos \varphi = 0.3$ 440 V		A	3
AC-15 $\cos \varphi = 0.3$ 220 V		A	3
DC-11 L/R - 40 ms		x $I_e$	1.1
Rated operational current	$I_e$	A	
AC--14			
440 V	$I_e$	A	3
AC-15			
220 V (230 V)	$I_e$	A	3
DC-11			
Note			Making and breaking conditions to DC13, time constant as stated
L/R max. 15 ms		A	
24 V	$I_e$	A	1.5
L/R max. 50 ms		A	1.2
Conv. thermal current	$I_{th}$	A	6
Short-circuit rating without welding			
Note			When supplied directly from mains or transformer > 1000 VA
Max. fuse, make contacts		A gG/ gL	6
Max. fuse, break contacts		A gG/ gL	6
Max. overcurrent protective device, 220/230 V		Type	FAZ-B4/1-HI

## Magnet systems

Voltage tolerance		x $U_c$	
Pick-up voltage		x $U_s$	
Min. pick-up voltage, AC operated		x $U_c$	0.85
Pick-up voltage AC operated, max.		x $U_c$	1.1
Pick-up voltage DC operated, min.		x $U_c$	0.7
Max. pick-up voltage, DC operated		x $U_c$	1.1
Power consumption			
Pick-up AC		VA	2

Sealing AC		VA	2
Pick-up DC		W	1.8
Sealing DC		W	1.8
Duty factor		% DF	100
Maximum operating frequency		Ops/ h	4000
Minimum command time			
AC		ms	50
DC		ms	30
Repetition accuracy (deviation)		%	$\pm 0.5$
Recovery time (after 100% time delay)		ms	70
Contact changeover time	$t_u$	ms	50

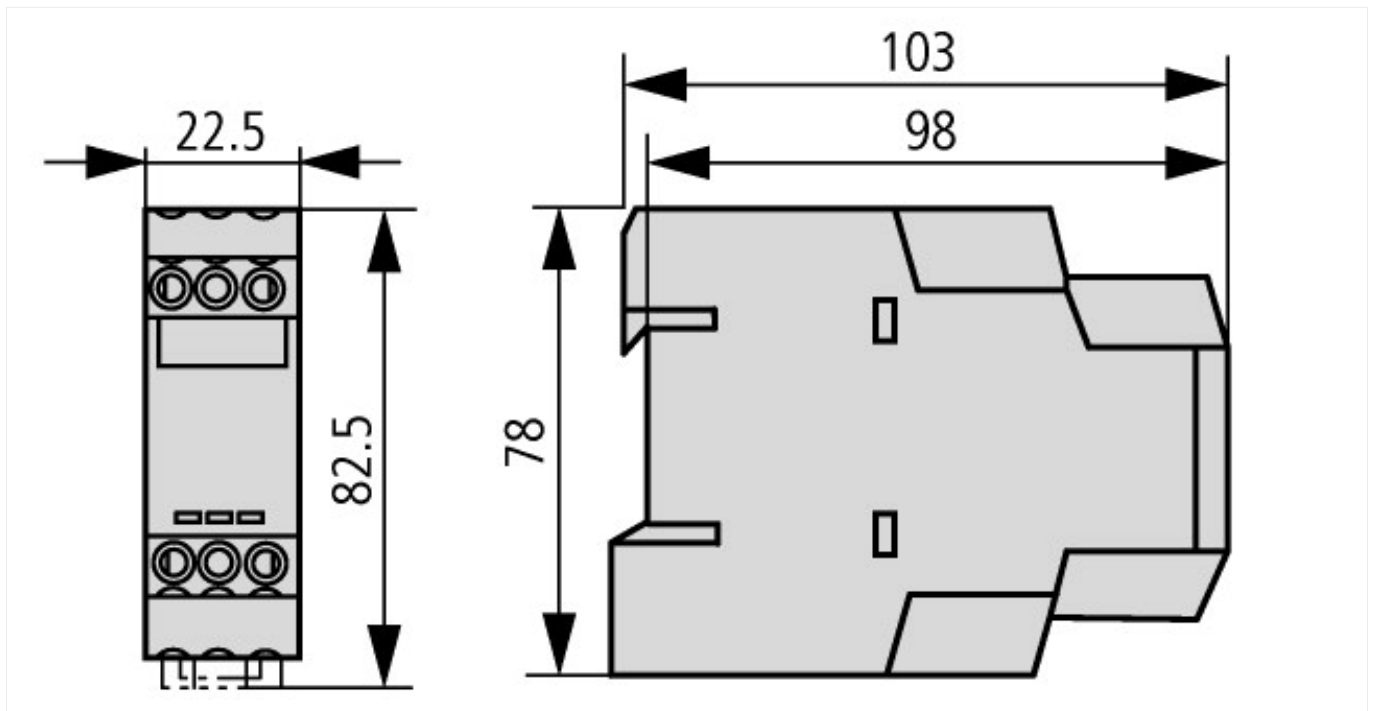
## Technical data ETIM 5.0

Relays (EG000019) / Timer relay (EC001439)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Relay and socket / Timed relay (ecl@ss8-27-37-16-05 [AKF092009])

Type of electric connection			Screw connection
Function delay-on energization			No
Function delay on de-energization			No
Function floating contact on energization			No
Function floating contact on de-energization			No
Function star-delta			Yes
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 only for remote control			No
Pluggable on auxiliary contact block			No
Rated control supply voltage $U_s$ at AC 50HZ		V	24 - 240
Rated control supply voltage $U_s$ at AC 60HZ		V	24 - 240
Rated control supply voltage $U_s$ at DC		V	24 - 240
Voltage type for actuating			AC/DC
Time range		s	3 - 60
Number of outputs, undelayed, normally closed contact			0
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			1
Number of outputs, delayed, change-over contact			0
Outputs, reversible delayed/undelayed			No
With semiconductor output			No
Width		mm	23
Height		mm	83
Depth		mm	103

## Dimensions



## Additional product information (links)

IL04910001Z (AWA2527-1485) Timing relay, star-delta relay, multifunction relay

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[ftp://ftp.moeller.net/DOCUMENTATION/AWA\\_INSTRUCTIONS/IL04910001Z2011\\_04.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL04910001Z2011_04.pdf)