



## TIMING RELAY ETR4-51

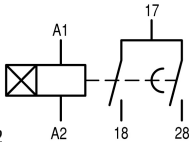
Part no.

ETR4-51-W

Article no.

031885

### 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	400 V AC, 50/60 Hz
Width		mm	22.5
Conventional thermal current	$I_{th}$	A	6
 <p>Terminal marking according to EN 50042</p>			

### 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)

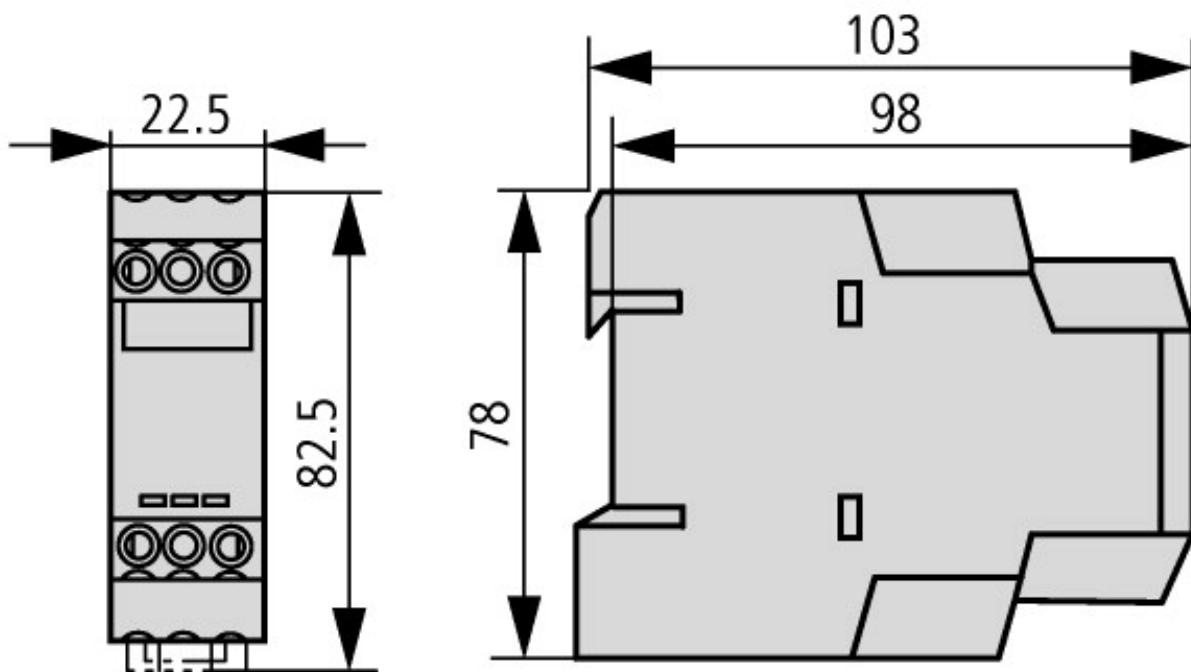
Solid or stranded		AWG	1 x (20 - 14)
<b>Contacts</b>			
Rated impulse withstand voltage	$U_{imp}$	V AC	6000
Overvoltage category/pollution degree			III/2
Rated insulation voltage	$U_i$	V AC	600
Rated operational voltage	$U_e$	V AC	440
Safe isolation to VDE 0106 Part 101 and Part 101/A1			
between coil 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	
220 V 230 V 240 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	
max. fuse		A gG/ gL	6
Max. fuse, break contacts		A gG/ gL	
Fuse		A gG/ gL	6
Max. overcurrent protective device, 220/230 V		Part no.	
Fuseless		Type	FAZ-B4/1-HI
<b>Magnet systems</b>			
Rated operational voltage	$U_e$	V	
AC			400
Rated frequency AC		Hz	47 - 63
Tolerance AC operated min.		x $U_c$	0.85
Tolerance AC operated max.		x $U_c$	1.1
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 <sub>c</sub>	1.1
Power consumption			
Pick-up AC		VA	0.5
Sealing AC		VA	0.5
Duty factor		% DF	100
Maximum operating frequency		Ops/ h	4000
Minimum command time			
AC		ms	50
Repetition accuracy (deviation)		%	$\pm 0.5$
Recovery time (after 100% time delay)		ms	70
Contact changeover time	t <sub>u</sub>	ms	50

## Technical data ETIM 4.0

Number of outputs, delayed, N/O			1
Remote access possible			No
Number of outputs, non-delayed, N/O			1
Function off-delayed			No
Outputs, reversible delayed/non-delayed			No
Type of electric connection			Screw connection
Number of outputs, non-delayed, N/C			0
Rated control voltage U <sub>s</sub> at DC		V	0
Clock function, starting with pulse, variable			No
Voltage type for actuation			AC
Function flashing, starting with pulse, fixed time			No
Function pulse shaping			No
Rated control voltage U <sub>s</sub> at AC 50HZ		V	400
Time range		s	60
Number of outputs, non-delayed, change-over contact			0
With semi-conductor output			No
Suitable only for remote control			No
Function flashing starting with pause, fixed time			No
Plug-in type on auxiliary contact block			No
Width		mm	23
With plug-in socket			No
Function fleeting contact on energization			No
Function star/delta			YES
Rated control voltage U <sub>s</sub> at AC 60HZ		V	400
Function fleeting contact on de-energization			No
Function on-delayed			No
Height		mm	83
Depth		mm	103
Function cyclic starting with pause, variable			No
Number of outputs, delayed, N/C			0
Number of outputs, delayed, changeover contact			0

## 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)