



TIMING RELAY ETR4-51

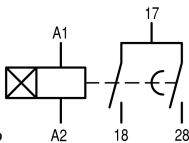
Part no.

ETR4-51-A

Article no.

031884

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
UL File No.
UL CCN
CSA File No.
CSA Class No.
NA Certification
Degree of Protection

IEC/EN 61812-1; IEC/EN 60947-5-1; UL 508; CSA-22.2 No. 14-05; CE marking
E29184
NKCR
12528
3211-03
UL listed, CSA certified
IEC: IP20, UL/CSA Type: -

General

Standards			Standard IEC/EN 61812 VDE 0435
Lifespan, mechanical			
AC operated	Operations	$\times 10^6$	30
DC operated	Operations	$\times 10^6$	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 ²	
Solid		mm ²	1 x (0.75 - 2.5) 2 x (0.75 - 1.5)
Flexible with ferrule		mm ²	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 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 φ = 0.3 400 V		A	48
AC-15 cos φ = 0.3 220 V		A	50
DC-11 L/R - 40 ms		x I _e	1.1
Breaking capacity			
AC-14 cos φ = 0.3 440 V		A	3
AC-15 cos φ = 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

Magnet systems

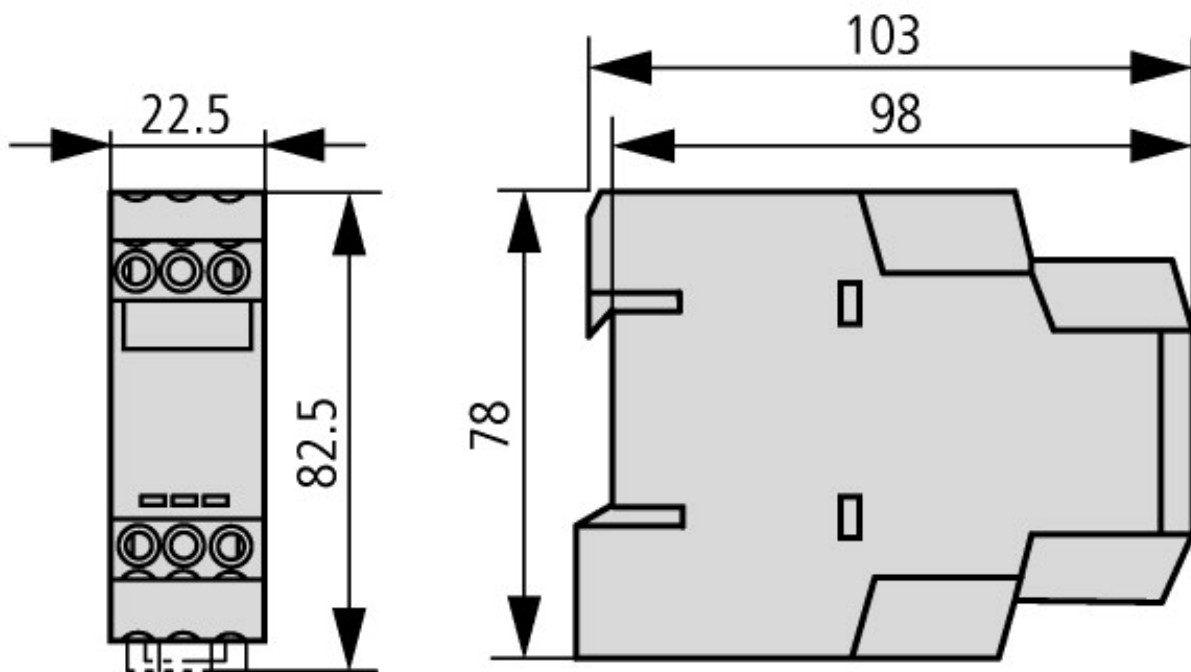
Voltage tolerance		x U _c	
Pick-up voltage		x U _s	

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)		%	± 0.5
Recovery time (after 100% time delay)		ms	70
Contact changeover time	t _u	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 _s at DC		V	240
Clock function, starting with pulse, variable			No
Voltage type for actuation			AC/DC
Function flashing, starting with pulse, fixed time			No
Function pulse shaping			No
Rated control voltage U _s at AC 50HZ		V	240
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 _s at AC 60HZ		V	240
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