



## TIMING RELAYS ETR4-70

**Part no.** ETR4-70-A

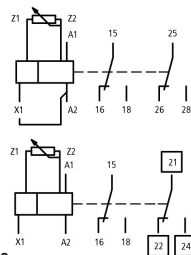
**Article no.** 031888



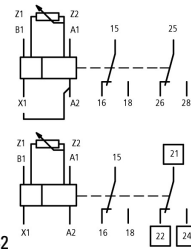
Powering Business Worldwide™

### Program

Range			ETR4 timing relay, 22.5 mm wide
Basic function			Timer relays
Function			Multi-functional On-delayed Off-delayed Fleeting contact on energization Fleeting contact on de-energization Flashing On- and Off-delayed Pulse forming Pulse generating
			with connection for potentiometer, and two changeover contacts that can be converted to two timed contacts or one non-delayed contact and one timed contact
Conventional thermal current	$I_{th}$	A	6
Time range			0.05 s - 100 h
Voltage range	$U_{LN}$	V	24 ... 240 V AC, 50/60 Hz 24 – 240 V DC



Terminal marking according to EN 50042



Terminal marking according to EN 50042

### Approbationen

UL approval	Yes
CSA approval	Yes
Product Standards	IEC/EN 60947-...; UL 508; CSA-22.2 No. 14-05; CE marking
UL File No.	E29184
UL CCN	NKCR
CSA File No.	12528
CSA Class No.	3211-03
NA 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 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 $\cos \varphi = 0.3$ 440 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

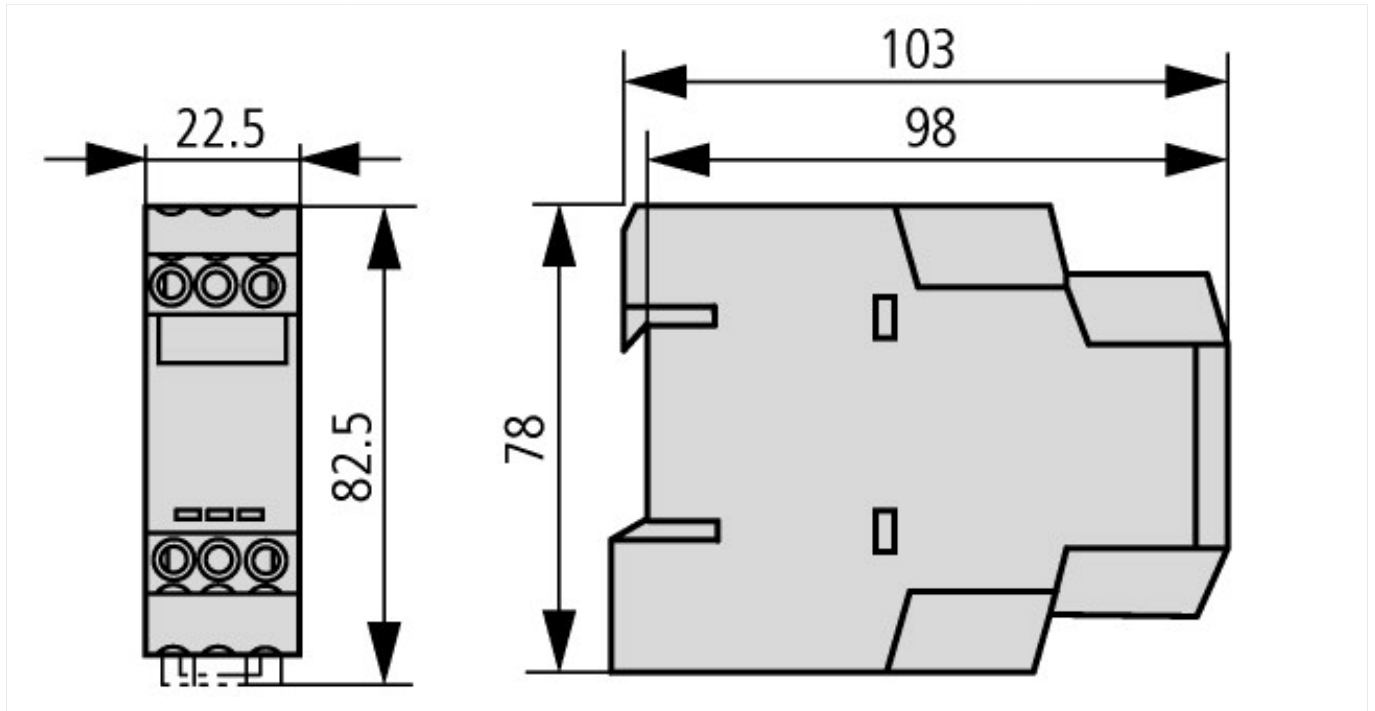
Voltage tolerance		x $U_c$	
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Pick-up voltage		$x U_s$	
Min. pick-up voltage, AC operated		$x U_c$	0.85
Pick-up voltage AC operated, max.		$x U_c$	1.1
Pick-up voltage DC operated, min.		$x U_c$	0.7
Max. pick-up voltage, DC operated		$x U_c$	1.1
Power 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)		%	$\leq 0.5$
Recovery time (after 100% time delay)		ms	70
Contact changeover time	$t_u$	ms	4

#### Technical data according to ETIM 4.0

Number of outputs, delayed, N/O			0
Remote access possible			YES
Number of outputs, non-delayed, N/O			0
Function off-delayed			YES
Outputs, reversible delayed/non-delayed			YES
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			YES
Voltage type for actuation			AC/DC
Function flashing, starting with pulse, fixed time			YES
Function pulse shaping			YES
Rated control voltage $U_s$ at AC 50HZ		V	240
Time range		s	360000
Number of outputs, non-delayed, change-over contact			2
With semi-conductor output			No
Suitable only for remote control			No
Function flashing starting with pause, fixed time			YES
Plug-in type on auxiliary contact block			No
Width		mm	23
With plug-in socket			No
Function fleeting contact on energization			YES
Function star/delta			No
Rated control voltage $U_s$ at AC 60HZ		V	240
Function fleeting contact on de-energization			YES
Function on-delayed			YES
Height		mm	83
Depth		mm	103
Function cyclic starting with pause, variable			YES
Number of outputs, delayed, N/C			0
Number of outputs, delayed, changeover contact			2

## Dimensions



## Additional product information (links)

AWA2527-1493 (IL04910002Z) Multi-function relay

[ftp://ftp.moeller.net/DOCUMENTATION/AWA\\_INSTRUCTIONS/14930202.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/14930202.pdf)