



**TIMING RELAYS ETR4-70**



Powering Business Worldwide™

**Part no.** ETR4-70-A  
**Article no.** 031888

**Catalog No.** XTTR6A100H70B

**Delivery programme**

Product range  
 Basic function  
 Function

ETR4 timing relays  
 Timer relays  
 Multi-functional  
 On-delayed  
 Off-delayed  
 Fleeting contact on energization  
 Fleeting contact on de-energization  
 Flashing, pulse initiating  
 On- and Off-delayed  
 Pulse forming  
 Pulse generating  
 with connection for potentiometer  
 Changeover contact can be converted  
 to 2 timed contacts or 1 non-delayed  
 contact and 1 timed contact  
 2  
 0.05 s - 100 h  
 0.05 - 1 s  
 0.15 - 3 s  
 0.5 - 10 s  
 1.5 - 30 s  
 5 - 100 s  
 15 - 300 s  
 1.5 - 30 min  
 15 - 300 min  
 1.5 - 30 h  
 5 - 100 h

Number of changeover contacts  
 Time range  
 Time range

Rated operational current  
 AC-15  
 220 V 230 V 240 V  
 Voltage range

$I_e$   
 $U_{LN}$

A  
 V

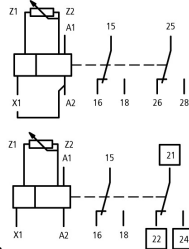
3  
 24 - 240 V AC, 50/60 Hz

Width  
 Conventional thermal current

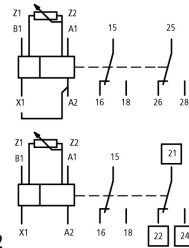
$I_{th}$

mm  
 A

22.5  
 6



Terminal marking according to EN 50042



Terminal marking according to EN 50042

**Approvals**

Product Standards  
 UL File No.  
 UL Category Control No.  
 CSA File No.  
 CSA Class No.  
 North America Certification  
 Degree of Protection  
 shipping classification

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



Germanischer Lloyd

**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	°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 <sub>imp</sub>	V AC	6000
Overvoltage category/pollution degree			III/2
Rated insulation voltage	U <sub>i</sub>	V AC	600
Rated operational voltage	U <sub>e</sub>	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 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 <sub>e</sub>	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 <sub>e</sub>	1.1
Rated operational current	I <sub>e</sub>	A	
AC--14			
440 V	I <sub>e</sub>	A	3
AC-15			
220 V (230 V)	I <sub>e</sub>	A	3
DC-11			
Note			Making and breaking conditions to DC13, time constant as stated
L/R max. 15 ms		A	
24 V	I <sub>e</sub>	A	1.5
L/R max. 50 ms		A	1.2
Conv. thermal current	I <sub>th</sub>	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		
Pick-up voltage	$x U_c$	
Min. pick-up voltage, AC operated	$x U_s$	
Pick-up voltage AC operated, max.	$x U_c$	0.85
Pick-up voltage DC operated, min.	$x U_c$	1.1
Max. pick-up voltage, DC operated	$x U_c$	0.7
	$x U_c$	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 ETIM 5.0

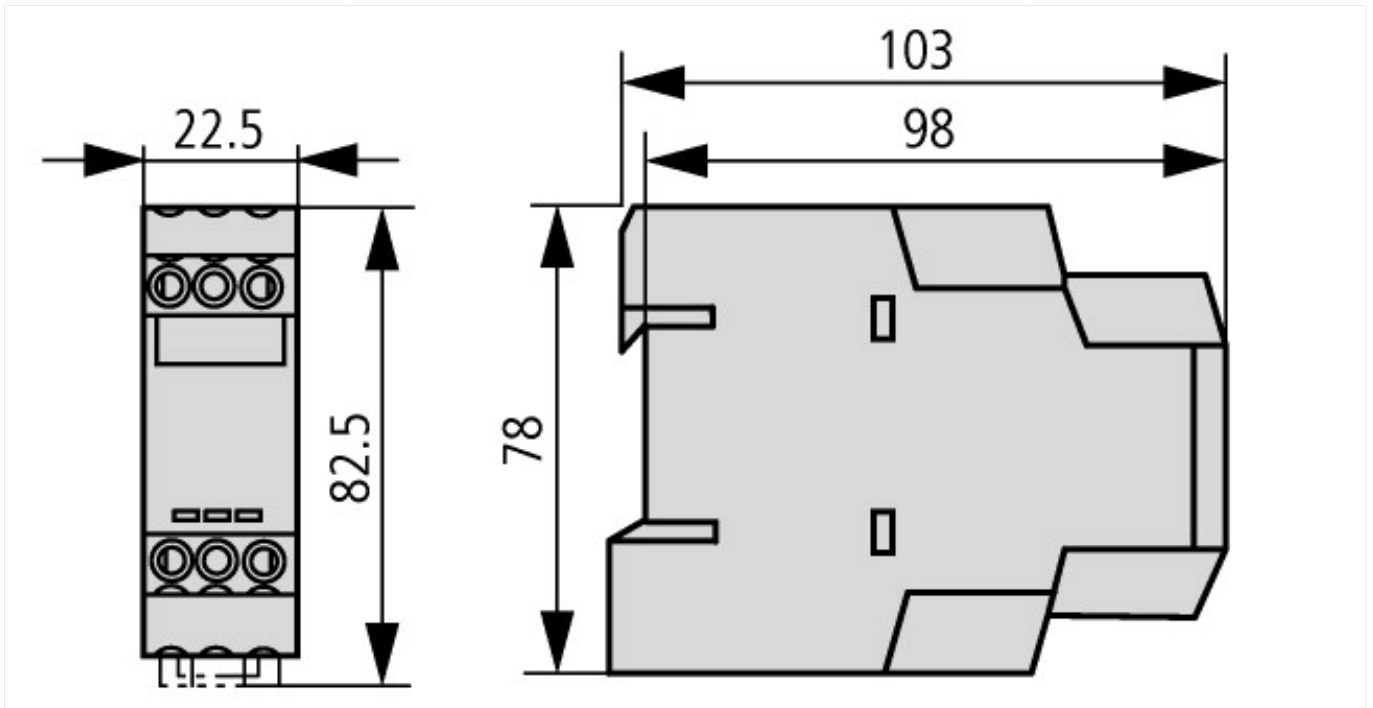
Relays (EG000019) / Timer relay (EC001439)		
Electric engineering, automation, process control engineering / Low-voltage switch technology / Relay and socket / Timed relay (ecl@ss8-27-37-16-05 [AKF092009])		
Type of electric connection		Screw connection
Function delay-on energization		Yes
Function delay on de-energization		Yes
Function floating contact on energization		Yes
Function floating contact on de-energization		Yes
Function star-delta		No
Function pulse shaping		Yes
Function flashing, starting with pause, fixed time		Yes
Function flashing, starting with pulse, fixed time		Yes
Clock function, starting with pause, variable		Yes
Clock function, starting with pulse, variable		Yes
With plug-in socket		No
Remote operation possible		Yes
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	0.05 - 360000
Number of outputs, undelayed, normally closed contact		0
Number of outputs, undelayed, normally open contact		0
Number of outputs, undelayed, change-over contact		2
Number of outputs, delayed, normally closed contact		0
Number of outputs, delayed, normally open contact		0

Number of outputs, delayed, change-over contact  
Outputs, reversible delayed/undelayed  
With semiconductor output  
Width  
Height  
Depth

mm  
mm  
mm

2  
Yes  
No  
23  
83  
103

## Dimensions



## Additional product information (links)

**IL04910002Z (AWA2527-1493) Multi-function relay**

IL04910002Z (AWA2527-1493) Multi-function relay

[ftp://ftp.moeller.net/DOCUMENTATION/AWA\\_INSTRUCTIONS/IL04910002Z2011\\_04.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL04910002Z2011_04.pdf)