

Type: **ETR4-51-A**

Article No.: **031884**

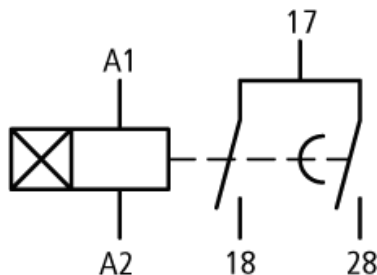
Sales text **TIMING RELAY ETR4-51**



Ordering information

Description			Star-delta timing relays
Rated operational current AC-15			
230 V	I_e	A	3
400 V	I_e	A	3
Conventional thermal current	I_{th}	A	6
Time range			3 – 60 s
Function			Fixed 51, star-delta

Terminal marking according to EN 50042



Notes concerning the product group

Permissible
cable length

Connection to
B1, Z1/Z2

Cable
unscreened,
with cable
cross-section
0.5 – 1.5 mm²

Two-core
cable 250 m

Two-core
cable in the
same cable
duct with
50 m
mains cable,
50/60 Hz

Accessories Page

Time functions → Engineering

Sealable
shroud → [010482](#)

Potentiometer → [229491](#)

Screw adapter → [095853](#)

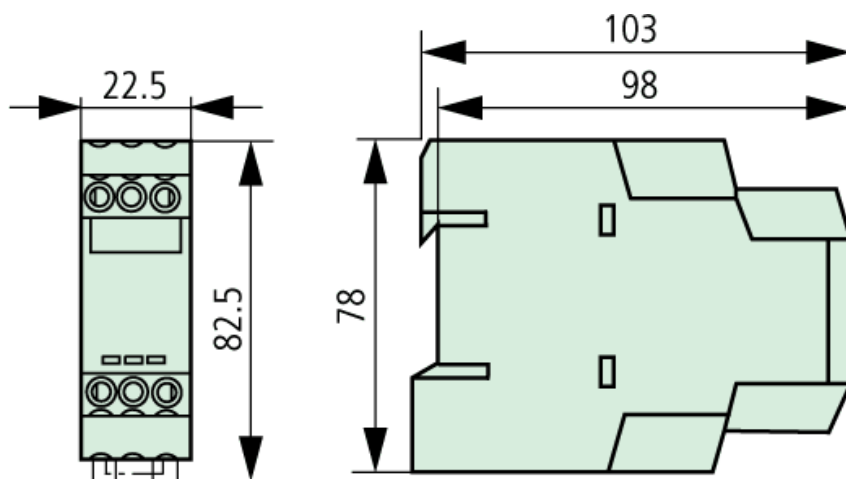
General

Standards			IEC/EN 60947, VDE 0660, UL, CSA IEC/EN 60255, VDE 0435
Lifespan, mechanical			
AC operated	Operations	× 10 ⁶	30
DC operated	Operations	× 10 ⁶	30
Climatic proofing			Damp heat, constant, to IEC 60068-2-78; Damp heat, cyclic, to IEC 60068-2-30
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			
Make contact		g	4
Degree of protection			
Terminals			IP 20
Weight		kg	0,1

Terminal capacities			
Solid		mm ²	1 × (0.75 – 2.5) 2 × (0.75 – 1.5)
Flexible with ferrule		mm ²	1 × (0.75 – 2.5) 2 × (0.75 – 1.5)
Solid or stranded		AWG	1 × (16 – 14)
Contacts			
Rated impulse withstand voltage	U_{imp}	V AC	6000
Overvoltage category/pollution degree			III/3
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 $\cos = 0.3$ 440 V		A	48
AC–15 $\cos = 0.3$ 220 V		A	50
DC–11 L/R – 40 ms		× I_e	1,1
Breaking capacity			
AC–14 $\cos = 0.3$ 440 V		A	3
AC–15 $\cos = 0.3$ 220 V		A	3
DC–11 L/R – 40 ms		× I_e	1,1
Rated operational current			
AC—14			
440 V	I_e	A	3
AC–15			
220 V	I_e	A	3
DC–11			
L/R max. 15 ms			
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			
Max. fuse, make contacts		A gG/gL	6
Max. fuse, break contacts		A gG/gL	6
		Type	FAZ–B4/1–HI

max. overcurrent protective device, 220/230 V			
Magnet systems			
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
Notes			
Notes			Making and breaking conditions to DC-13, time constant as stated When supplied directly from mains or transformer > 1000 VA Not DILET...-W ETR4-51: 50 ms

Dimensions



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