Time Delay Relays
TMM175-23 Series

On / Off Delay Timer

Description

The TMM175-23-1 and TMM175-23-4 combines accurate and precise timing circuitry with a wide timing range (0.3 s - 30 h). It's compact size is easy to install and is suitable for Din-Rail and Base Mounting.

The TMM175-23-1 On-delay timer is a time-delay relay used to delay the activation of an output after the input signal is applied. When the input is turned on, the timer waits for a pre-set delay time before activating the output. This type of timer is commonly used in industrial applications to ensure devices or processes start with a time gap, such as in motor control or starting up machinery, where immediate activation might cause damage or require a controlled start-up process.

The TMM175-23-4 Signal Off-delay timer is a type of timer that keeps the output active for a set period after the input signal is turned off. Once the input is deactivated, the timer continues to keep the output on for the predetermined delay time before turning it off. This timer is commonly used in applications where devices or processes need to remain operational for a brief period after the signal is removed, such as in cooling systems that need to run for a while after equipment is shut down.

Features

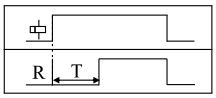
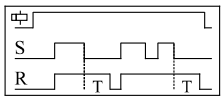
- **Compact 17.5 mm wide**
- **Dual voltage range for both AC and DC supplies**
- **Functions: ON / OFF Delay**
- **Wide Time Range: 0.3 s - 30 h**
- **LED indications for power and relay status**
- **Low power consumption**
- **Compliant to IEC61812-1**

Ordering Information

PART NUMBER	DESCRIPTION
TMM175-23-1	240 Vac, 24 Vac / Vdc, ON Delay Timer, 1 C/O
TMM175-23-4	240 Vac, 24 Vac / Vdc, Signal OFF Delay Timer, 1 C/O

Revised: 05/15/2025

Specifications

Part. No.	TMM175-23-1	TMM175-23-4
Timer Description	ON-Delay Timer	Signal OFF-Delay Timer
Mode	ON-Delay	Signal OFF-Delay
Functional Diagram		
Supply Voltage (⏚)	240 Vac, 24 Vac/ Vdc	
Supply Variation	-20% to +10% of supply	-15% to +10% of supply
Frequency	50 / 60 Hz ± 3 Hz	
Power Consumption (Max.)	8 VA at 240 Vac	7 VA at 240 Vac
Timing Range	0.3 s to 30 h	
Reset Time	100 ms (Max)	
Setting Accuracy	±5% of full scale	
Repeat Accuracy	±1%	
Output:		
Relay Output	1 C/O	
Contact Rating	5 A at 240 Vac / 28 Vdc (Resistive)	
Electrical Life	$1x10^5$ operations	
Mechanical Life	$5x10^6$ operations	
Utilization Category:		
AC-15	Rated Voltage (Ue): 120 / 240 V, Rated Current (Ie): 3.0 / 1.5 A	
DC-13	Rated Voltage (Ue): 24 / 125 / 250 V, Rated Current (Ie): 2.0 / 0.22 / 0.1 A	
Operating Temperature	-10 °C to +55 °C	-15 °C to +60 °C
Storage Temperature	-20 °C to +80 °C	
Humidity (Non Condensing)	95% (Rh)	
LED Indication	Green LED → Power ON Red LED → Relay ON	
Enclosure	Flame Retardant UL94-VO	
Dimensions (WxHxD) (in mm)	17.5 x 58.5 x 89.8	
Weight (unpacked)	65 g	85 g
Mounting	Base / DIN-rail	
Degree of Protection	IP20 for Terminals, IP40 for Housing	

Certification & Standards

CE	Low Voltage Directive – 2014 / 35 / EU EMC Directive – 2014 / 30 / EU
RoHs	RoHS Directive 2011 / 65 / EU, Delegated Directive 2015 / 863 / EU
cULus	UL508

EMI/EMC

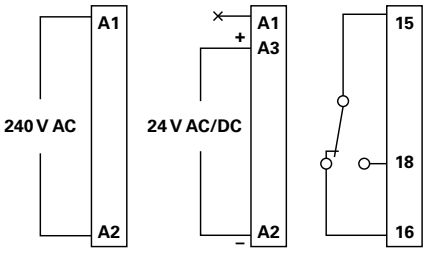
	TMM175-23-1	TMM175-23-4
Harmonic Current Emissions	IEC 61000-3-2	IEC 61000-3-2
ESD	IEC 61000-4-2	IEC 61000-4-2
Radiated Susceptibility	IEC 61000-4-3	IEC 61000-4-3
Electrical Fast Transient	IEC 61000-4-4	IEC 61000-4-4
Surge	IEC 61000-4-5	IEC 61000-4-5
Conducted Susceptibility	IEC 61000-4-6	IEC 61000-4-6
Voltage Dips & Interruptions (AC)	IEC 61000-4-11	IEC 61000-4-11
Voltage Dips & Interruptions (DC)	IEC 61000-4-29	IEC 61000-4-29
Conducted Emission	CISPR 14-1	CISPR 11
Radiated Emission	CISPR 14-1	CISPR 11

Environmental

Cold Heat	IEC 60068-2-1
Dry Heat	IEC 60068-2-2
Vibration	IEC 60068-2-6
Repetitive Shock	IEC 60068-2-27
Non-Repetitive Shock	IEC 60068-2-27

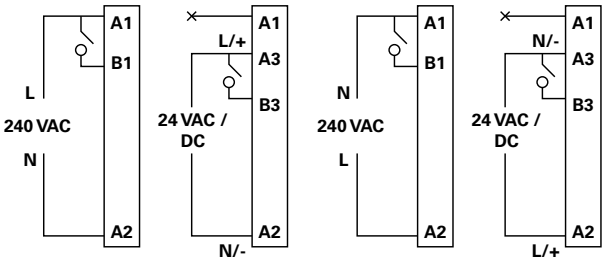
Wiring Diagrams

TMM175-23-1



Do not apply more than 27 Vac / Vdc to A3 Terminals

TMM175-23-4



Do not apply more than 27 Vac / Vdc to A3 Terminals

Dimensions (Millimeters)