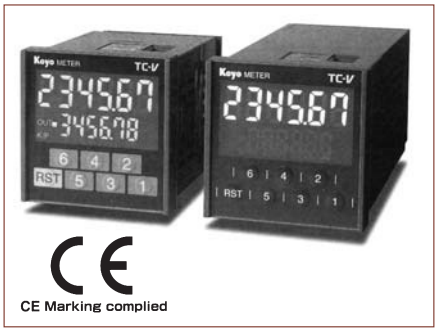
DIGITAL TACHOMETER

TC-V Series



This tachometer is provided with a large display that is easy to read in a small DIN 48 body.

Bright character display is with a large red LED and a character height of 10mm, which makes it easy to read from a distance and at an angle.

In addition, a green LED is used for preset values to differentiate from measurement values.

Setting of preset values to 0 settings with individual setting keys for digits has the feel of digital switches, and operation is simple.

Basic function settings are made with digital switches; detailed settings are selected with digit keys, so operation is easy.

Merits

Key protection to lock keys individually
Key protection can be set for individual keys to prevent a malfunction or tampering.

Battery-less memory retention
EEPROM is used to retain values in memory, so there is no need for battery maintenance.

Removable terminals
Maintenance has been reduced via terminals that can be removed. After wiring, the terminal cover provides a safe surface for worry-free use.

Free power source for the AC type
The source voltage for the Ac type covers from AC85-264V; the power source cannot be selected.

IP65 protective structure
The front cover panel uses sheet keys, so operation with wet or dirty hands can be done worry-free. A front cover is also provided as an option to enhance the protective structure.

Designed in compliance with CE and UL

Prescaling
Prescaling that can convert the speed and flow for the speed of revolution into units of time for the workload is provided.

Stable display
Time settings can be made during measurement to stabilize the display when high speeds are used. You can choose 0.2 / 0.5 / 1.0 / 2.0s.

High-speed response
The measurement input for this class complies with high speeds at 20kcps.

High precision
Cycle measurement is used in measurement format to obtain a high degree of precision at low speeds.

Revolution halt is already at 0
Halt determination times that are already displayed as 0 after revolution halt can be selected from 0.2 / 0.5 / 1.0 / 2.0 / 6.0s.

Equipped with output
A single preset type is also offered. It complies with revolution control.

With zero halt
Unneeded 0s for higher digits are not displayed.

List of Models

Category	Model Number	Number of Digits	Source Voltage	Sensor Source Voltage DC24V 60mA	Price
Digital tachometer with single preset	TC-V6S	6	AC	●	
	TC-V6S-C		DC		
Digital tachometer for dedicatd display	TC-V6		AC	●	
	TC-V6-C		DC		

Accessories: Installation Frame

Model Number System

TC-V6□-□

- **C** : DC power / Blank: AC power
- **S** : Single preset / Blank: Dedicated display
- **6** : 6-digit
- Series Name

DIGITAL TACHOMETER

General Specifications

Item	Specification		
	AC Power		DC Power
Source Voltage	AC100~240V		DC12~24V
Permitted Power Fluctuation	AC85~264V		DC10~26.4V
Power Consumption	Approx. 11 VA		Approx. 4W
Sensor Power	DC24 V (20-28V) 60mA (Less than 10%p-p ripple)		-
Memory Backup Upon Power Failure	EEPROM (Writing Up to 100,000 times) Memory Duration 10 years		
Ambient Temperature	-10~50°C		
Storage Temperature	-20~70°C (with no freezing)		
Ambient Humidity	35~85%RH (with no dewing)		
Withstand Voltage	AC 2kV for one minute (for AC input, 0 V, and relay interconnection) (for DC input, 0 V, and relay interconnection only)		
Vibration Resistance	Durable	Displacement amplitude 0.5 mm Frequency 10-55 Hz along 3 axes	
	No Malfunction	Displacement amplitude 0.35 mm Frequency 10-55 Hz along 3 axes	
Impact Resistance	Durable	490 m/s² 11 ms along 3 axes	
	No Malfunction	98 m/s² 11 ms along 3 axes	
Noise Resistance	AC Power ±1.5kV between terminals (pulse width 1 of μs and rise time 1 of ns)		DC Power ±1.0kV between terminals (pulse width 1 of μs and rise time 1 of ns)
Protective Structure	IP65 (front panel only)		
Weight	Aprrox. 150 g		Aprrox. 110 g
Terminals	Conforming Wiring	0.25~1.65mm²	
	Conforming Crimped Contact	R1.25-3	
	Permitted Torque	0.5Nm	

Performance Specification

Item	Specification
Category	Tachometer
Setting	Single with alarm output / without (separate model number)
Number of Digits	6 digits
Display	Display of settings: red LED, Character height 10 mm, Preset settings: green LED, Character height: 7 mm
Operational Format	Cycle measurement
Set Items	Speed of revolution only
Basic Setting Range	10~999999 rpm (when prescaling is 1)
Prescaling	M x 10^{-n}=10^{-9}~999999 $1 \leqq M \leqq 999999$, $0 \leqq n \leqq 9$
Measurement Precision	±0.013% excluding selection of low-speed input (10 Hz) (±0.1% during low-seed input)
Setting Duration	0.2 / 0.5 / 1.0 / 2.0s
Input	Input logic: Negative logic (no-load input) / Positive logic (load input)
	Input resistance: Positive logic 15 kΩ Negative logic 3.3 kΩ (AC Power) / 1.8 kΩ (DC Power)
	Input voltage: "L" 0~3V "H" 7~30V
Setting Input Response	Max. signal amplitude 5 ms
External Reset	No-volt output: NPN open collector output
*Output	24V 100mA Withstand pressure 35V Residual voltage less than 1.5V
	Relay output: 1 transformer relay AC220V 2A (resistance load)
*Output Mode	Compared output / Retained output
Key Protection	Setting of arbitrary keys possible
Installation	Exclusively for embedding (terminal block connection)

* means that items do not apply to devices for designated display.