

Silver panel



Black panel

mm inch



## Features

### 1. Measurement and management in units of minutes

Unlike conventional hour meters, the time can be measured and managed in minutes.

### 2. Reset button

The hour meters can be reset to zero for repeated measurement.

### 3. High-performance compact synchronous motor

The accurately turning motor is employed to provide for longer period of measurement.

### 4. Common for 50/60 Hz power frequency

A lever is used to select 50 Hz or 60 Hz. There is no need to rearrange the control panel and other signal destinations.

### 5. Dimensions as per DIN 43700 standard

The units are in the 48 × 48 DIN standard size. They can be fitted in panels and give refined metallic appearance.

### 6. Easier wiring

The flat terminals (#187) are quick and easy to connect.

### 7. Rotary indicator

The rotary indicator makes one turn every 2 seconds for monitoring.

### 8. Compliant with CE.

RoHS Directive compatibility information  
<http://www.nais-e.com/>

## Specifications

Rated operating voltage		12 V AC, 24 V AC, 48 V AC, 100 V AC, 110 V AC, 115 to 120 V AC, 200 V AC, 220 V AC, 240 V AC
Allowable operating voltage range		85 to 115% of rated operating voltage
Rated frequency		50/60 Hz (selectable by switch)
Counting range		0 to 9999.9 min
Minimum time display		0.1 min (6 sec)
Rated power consumption		Approx. 1.5 W
Insulation resistance (Initial value)		Min. 100 MΩ, Between live and dead metal parts (At 500 V DC)
Breakdown voltage (Initial value)		2,000 Vrms, Between live and dead metal parts
Max. temperature rise		55°C 131°F
Vibration resistance	Functional	10 to 55 Hz: 1 cycle/min double amplitude of 0.5 mm (10 min on 3 axes)
Shock resistance	Functional	
	Destructive	Min. 980 m/s <sup>2</sup> {100 G} (5 times on 3 axes)
Ambient temperature		-10 to +50°C +14 to +122°F
Ambient humidity		Max. 85% RH (non-condensing)
Weight		150 g 5.29 oz

## Product types

Type	Operating voltage	Part number		Operating voltage	Part number		Operating voltage	Part number	
		Silver panel	Black panel		Silver panel	Black panel		Silver panel	Black panel
TH50 series	100V AC	TH501S	TH501	24V AC	TH504S	TH504	115 to 120V AC	TH507S	TH507
	200V AC	TH502S	TH502	48V AC	TH505S	TH505	220V AC	TH508S	TH508
	12V AC	TH503S	TH503	110V AC	TH506S	TH506	240V AC	TH509S	TH509

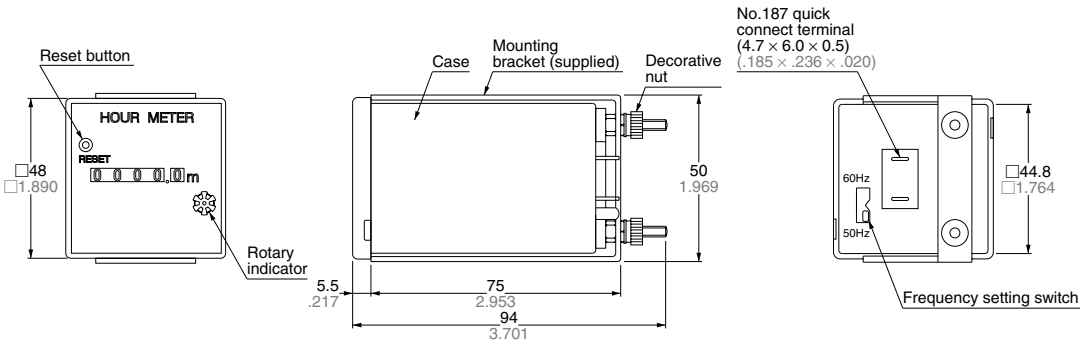
# Applicable standard

Safety standard	EN61010-1	Pollution Degree 2/Overvoltage Category II
EMC	(EMI)EN61000-6-4 Radiation interference electric field strength Noise terminal voltage (EMS)EN61000-6-2 Static discharge immunity  RF electromagnetic field immunity  EFT/B immunity Surge immunity Conductivity noise immunity Power frequency magnetic field immunity Voltage dip/Instantaneous stop/Voltage fluctuation immunity	EN55011 Group1 ClassA EN55011 Group1 ClassA  EN61000-4-2 4 kV contact 8 kV air EN61000-4-3 10 V/m AM modulation (80 MHz to 1 GHz) 10 V/m pulse modulation (895 MHz to 905 MHz) EN61000-4-4 2 kV (power supply line) EN61000-4-5 1 kV (power line) EN61000-4-6 10 V/m AM modulation (0.15 MHz to 80 MHz) EN61000-4-8 30 A/m (50 Hz) EN61000-4-11 10 ms, 30% (rated voltage) 100 ms, 60% (rated voltage) 1,000 ms, 60% (rated voltage) 5,000 ms, 95% (rated voltage)

# Dimensions

mm inch

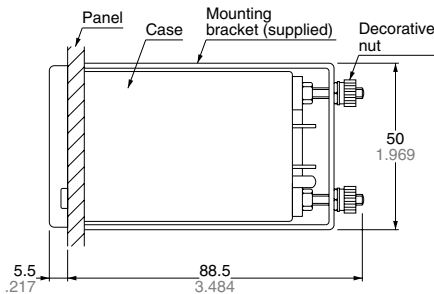
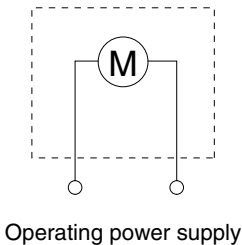
General tolerance:  $\pm 1.0 \pm .039$



# Wiring diagram

# Panel mounting

mm inch



## • Panel cutout dimensions

