



Features

1. IP66 waterproof construction

The front panel surface keeps water and dust out. Perfect for use in rough conditions.

2. Includes operation light (LED)

The operation LED illuminates so you can quickly verify operation status.

3. Compliant with UL, c-UL and CE.

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

Product type

Installation	Measurement time	Operation light	Rated voltage	Part No.
Panel installation	0 to 9999.9 hours	LED illuminates while operating.	12 V DC	TH833C
			24 V DC	TH834C

Note: Products are UL and c-UL certified as standard. (Suffix "U" is not required ON part numbers when ordering.)

Specifications

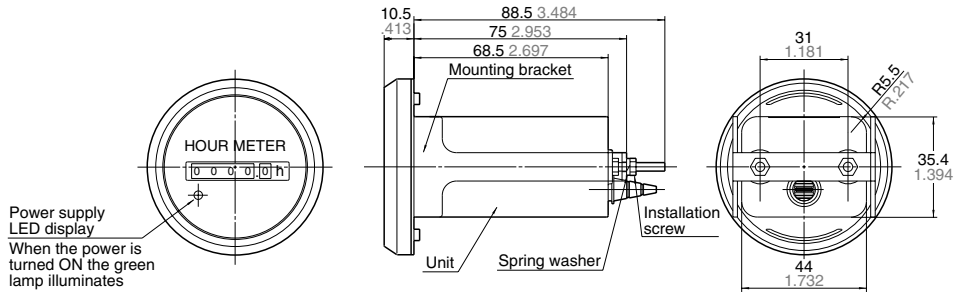
Item		Type	TH833C	TH834C
Rating	Rated voltage		12 V DC	24 V DC
	Usage voltage range		10.2 to 15.6 V DC	20.4 to 31.2 V DC
	Measurement time		0 to 9999.9 hours	
	Min. measurement time		0.1 hour (6 min.)	
	Power consumption		Approx. 1.5 W (With rated voltage applied at 25°C 77°F)	
Electrical characteristics	Insulation resistance (initial)		Min. 100 MΩ between charged and uncharged parts (measured at 500 V DC)	
	Breakdown voltage (initial)		Between charged and uncharged parts: 2,000 V AC for 1 minute.	
	Temperature rise		Max. 55°C 131°F (measured at rated voltage and resistance law)	
Mechanical characteristics	Functional vibration resistance		10 to 55 Hz (1 cycle/min.) Single amplitude: 0.35 mm (10 min. ON 3 axes)	
	Functional shock resistance		Min. 98 m/s ² (4 times ON 3 axes)	
	Destructive vibration resistance		Min. 980 m/s ² (5 times ON 3 axes)	
Usage conditions	Operation temperature		-20°C to +60°C -4°F to +140°F (Without due and frost)	
	Ambient humidity		35 to 85% RH (relative humidity) (non-condensing)	
	Power supply ripple		Approx. 48% or less (single phase, all-wave rectification)	
Protective construction			IP66 (front panel with a rubber gasket)	

Applicable standard

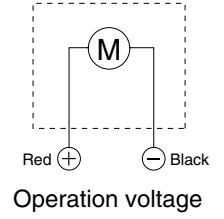
EMC	(EMI)EN61000-6-4 Radiation interference electric field strength	EN55011 Group1 ClassA
	Noise terminal voltage	EN55011 Group1 ClassA
	(EMS)EN61000-6-2 Static discharge immunity	EN61000-4-2 4 kV contact 8 kV air
	RF electromagnetic field immunity	EN61000-4-3 10 V/m AM modulation (80 MHz to 1 GHz)
	EFT/B immunity	EN61000-4-4 2 kV (power supply line)
	Conductivity noise immunity	EN61000-4-6 10 V/m AM modulation (0.15 MHz to 80 MHz)
Power frequency magnetic field immunity	EN61000-4-8 30 A/m (50 Hz)	

Dimensions and part names (unit: mm inch)

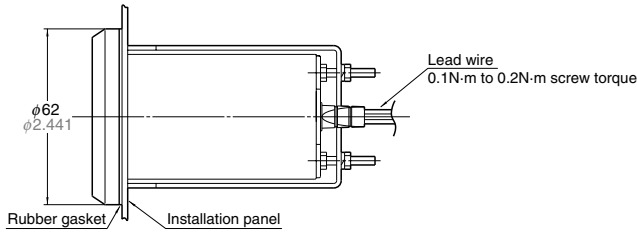
Tolerance: $\pm 1.0 \pm .039$



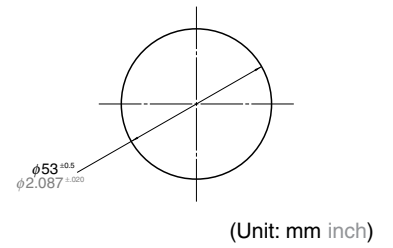
Wiring diagram



Panel installation diagram



Panel cutout dimensions



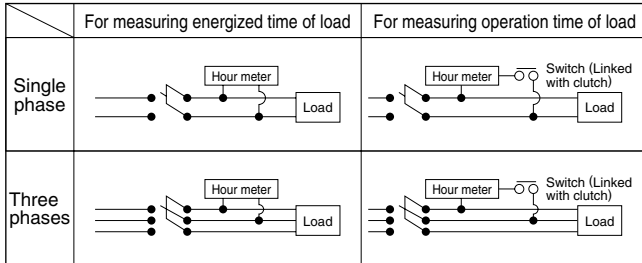
PRECAUTIONS IN USING THE HOUR METERS

1. Frequency setting

Frequency is specified for AC motor-driven hour meters. Before installing, be sure to check your local power frequency.

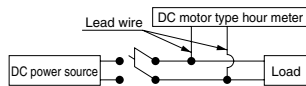
2. Connections

- TH13,23,14,24,40,50,63,64



Note) Make the connection with the accompanying flat connector first and then with the hour meter's terminal (#187). In such case, be sure to cover the connection with the accompanying insulating sleeve.

- TH70, TH8



Note) Solder the lead wires in position.

3. Safety precautions

Do not use the hour meters in the following places.

- Where ambient temperature is below -10° or above $+50^{\circ}\text{C}$
- In wet, dusty or gaseous environments
- Where exposed to vibrations and shocks
- Outdoors, or where exposed to rain or direct sunlight

4. Compliant with CE.

- LH2H

Ambient conditions:

Overvoltage category III, contamination factor 2, indoor use.

Ambient temperature and humidity -10 and $+55^{\circ}\text{C}$ and 35% to 85%RH respectively.

- TH13, 23, 14, 24, 40, 50, 63, 64

Ambient conditions:

Overvoltage category II, contamination factor 2, indoor use.

Ambient temperature and humidity -10 and $+50^{\circ}\text{C}$ and below 85%RH respectively.

5. Reset-type hour meter

- Precautions for use

If the number indications are off before use, press the reset button and confirm that all zeroes ("0") are displayed.

- Resetting caution

Exercise due caution as an insufficient amount of pressure on the reset button may result in abnormal readings.

6. Acquisition of CE marking

Please abide by the conditions below when using in applications that comply with EN 61010-1/IEC 61010-1

1) Ambient conditions

- Overvoltage category II, pollution level 2
- Indoor use
- Acceptable temperature and humidity range: -10 to $+55^{\circ}\text{C}$, 35 to 85%RH (with no condensation at 20°C)
- Under 2000 m elevation

2) Use the main unit in a location that matches the following conditions.

- There is minimal dust and no corrosive gas.
- There is no combustible or explosive gas.
- There is no mechanical vibration or impacts.
- There is no exposure to direct sunlight.
- Located away from large-volume electromagnetic switches and power lines with large electrical currents.

3) Connect a breaker that conforms to EN60947-1 or EN60947-3 to the voltage input section.

4) Applied voltage should be protected with an overcurrent protection device (example: T 1A, 250 V AC time lag fuse) that conforms to the EN/IEC standards. (Free voltage input type)