



Market Leading Digital Timer

Compact, Easy to Read and Use

A digital timer made to meet the market's needs! This top of the line multi-function, multi-range timer has 8 selectable operating modes. Available with pin or screw terminals, it has a 2-color backlit LCD display, waterproof front panel, four signal inputs, and relay or solid-state outputs.

Key Features

- Screw Terminal and Pin Type are both Standard
- Changeable Panel Cover
- Conforms with EMC and Low Voltage Directives
- EE-PROM Power Failure Memory
- Bright and Easy to Read Display
- Simple Operation - Seesaw buttons make setting and operation easy
- Short Body of only 64.5 mm (2.54 in) or 70.1 mm (2.76 in)
- Conforms to IP66's Weather Resistance Standards

LT4H Models

You may sort models by clicking the arrows in the appropriate column. If you are searching for a particular model but can't find it, give our [model search](#) utility a try. All downloads have moved to our separate [downloads center](#).

Click one of the links below to view all related models. Models will appear below the links.

- [Timers](#)
- [Accessories](#)

Currently viewing: LT4H Timers

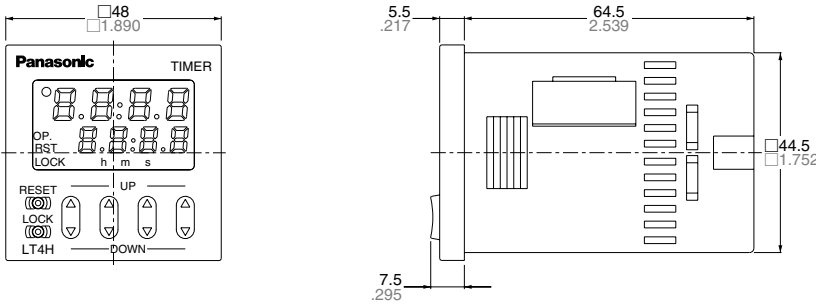
Model Name	Operation Mode	Time Range	Terminal Type	Control Output Current/voltage	Mounting Method	Mounting Parts	Operating Voltage	Min. Power Off Time (ms)
Sort ▲ ▼	Sort ▲ ▼	Sort ▲ ▼	Sort ▲ ▼	Sort ▲ ▼	Sort ▲ ▼	Sort ▲ ▼	Sort ▲ ▼	Sort ▲ ▼
LT48W-T-DC12V	7 Modes (ON-OFF-POWER-PULSE-SIGNAL-FLICKER-TOTALIZING)	0.001 s to 9999h (11 selectable ranges)	8 pins / Transistor output	100 mA / 30 V DC	Flush mount / DIN rail - adapter-	Terminal block, cap block, mounting frame, fitting sockets, protective cover	12 V DC	500
LT4H8-AC240V	8 Modes(ON-OFF-POWER-PULSE-SIGNAL-FLICKER-TOTALIZING)	0.001 s to 999.9 h switchable	8 pins / Relay output	5 A / 250 V AC	Flush mount / DIN rail - adapter-	Terminal block, cap block, mounting frame, fitting sockets, protective cover	100 to 240 V AC	500
LT4H-AC240V	8 Modes(ON-OFF-POWER-PULSE-SIGNAL-FLICKER-TOTALIZING)	0.001 s to 999.9 h switchable	11 pins / Relay output	5 A / 250 V AC	Flush mount / DIN rail - adapter-	Terminal block, cap block, mounting frame, fitting sockets, protective cover	100 to 240 V AC	500
LT4H-AC240VS	8 Modes(ON-OFF-POWER-PULSE-SIGNAL-FLICKER-TOTALIZING)	0.001 s to 999.9 h switchable	Screw terminal / Relay output	5 A / 250 V AC	Flush mount / DIN rail - adapter-	Terminal block, cap block, mounting frame, fitting sockets, protective cover	100 to 240 V AC	500
LT4H-AC24V	8 Modes(ON-OFF-POWER-PULSE-SIGNAL-FLICKER-TOTALIZING)	0.001 s to 999.9 h switchable	11 pins / Relay output	5 A / 250 V AC	Flush mount / DIN rail - adapter-	Terminal block, cap block, mounting frame, fitting sockets, protective cover	24 V AC	500
LT4H-DC24V	8 Modes(ON-OFF-POWER-PULSE-SIGNAL-FLICKER-TOTALIZING)	0.001 s to 999.9 h switchable	11 pins / Relay output	5 A / 250 V AC	Flush mount / DIN rail - adapter-	Terminal block, cap block, mounting frame, fitting sockets, protective cover	24 V DC	500

Dimensions

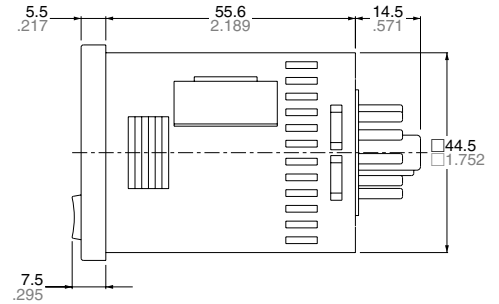
• LT4H digital timer

(units: mm inch)
Tolerance: ±1.0 ±.039

Screw terminal type
(Flush mount)



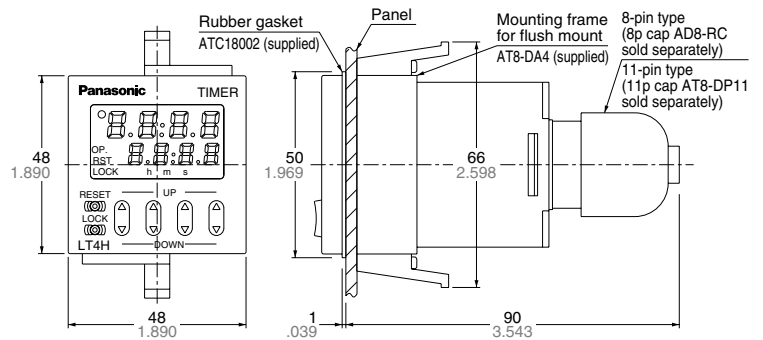
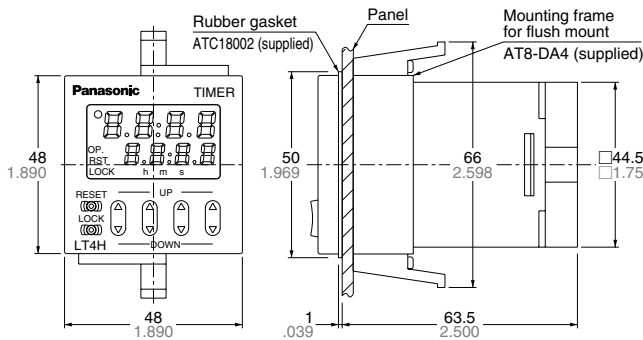
Pin type
(Flush mount/Surface mount)



• Dimensions for embedded installation (with adapter installed)

Screw terminal type

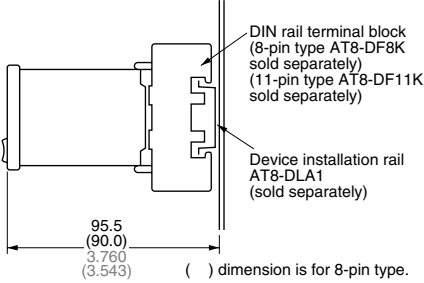
Pin type



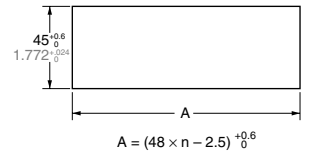
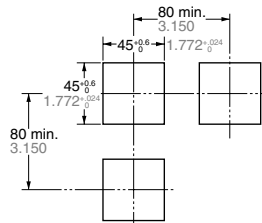
• Dimensions for front panel installations

• Installation panel cut-out dimensions

• For connected installations



The standard panel cut-out dimensions are shown below. Use the mounting frame (AT8-DA4) and rubber gasket (ATC18002).



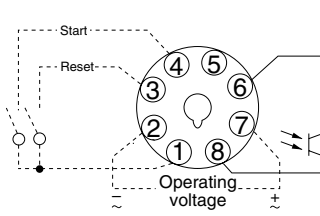
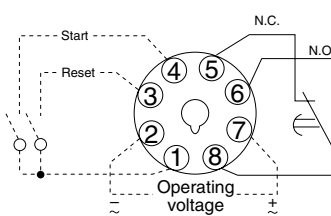
Note) 1: The installation panel thickness should be between 1 and 5 mm .039 and .197 inch.
2: For connected installations, the waterproofing ability between the unit and installation panel is lost.

Terminal layouts and Wiring diagrams

• 8-pin type

Relay output type

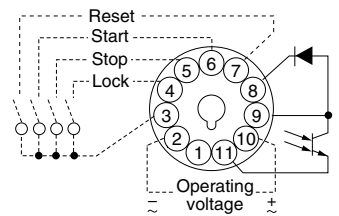
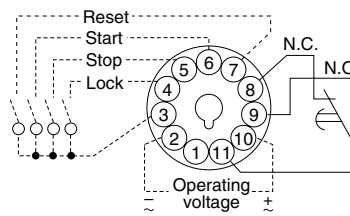
Transistor output type



• 11-pin type

Relay output type

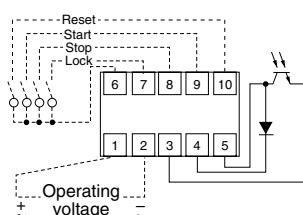
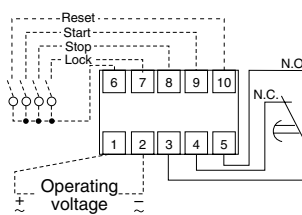
Transistor output type



• Screw terminal type

Relay output type

Transistor output type



Note) For connecting the output leads of the transistor output type, refer to 5) Transistor output on page 48.

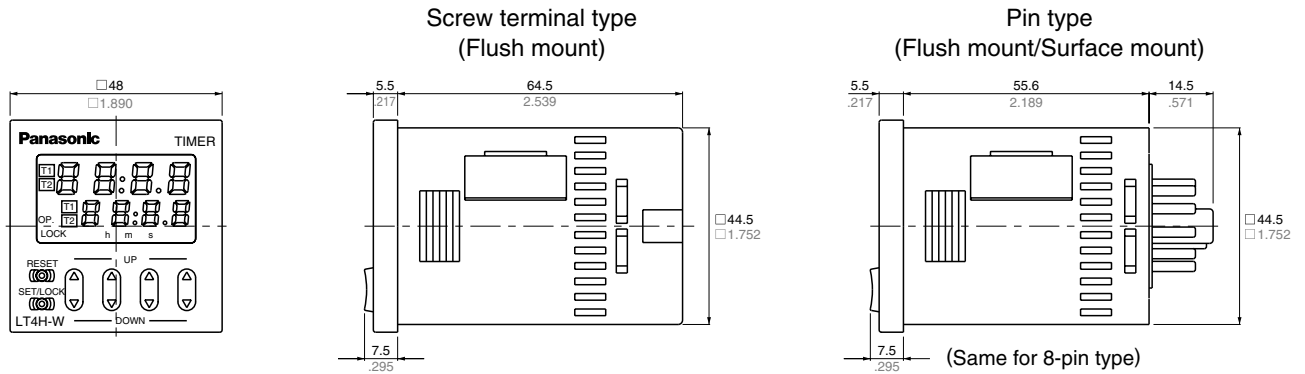
Applicable standard

Safety standard	EN61812-1	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	EN55011 Group1 ClassA EN55011 Group1 ClassA
	RF electromagnetic field immunity	EN61000-4-2 4 kV contact 8 kV air
EMC	EFT/B immunity	EN61000-4-3 10 V/m AM modulation (80 MHz to 1 GHz) 10 V/m pulse modulation (895 MHz to 905 MHz)
	Surge immunity Conductivity noise immunity Power frequency magnetic field immunity Voltage dip/Instantaneous stop/Voltage fluctuation immunity	EN61000-4-4 2 kV (power supply line) 1 kV (signal 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)

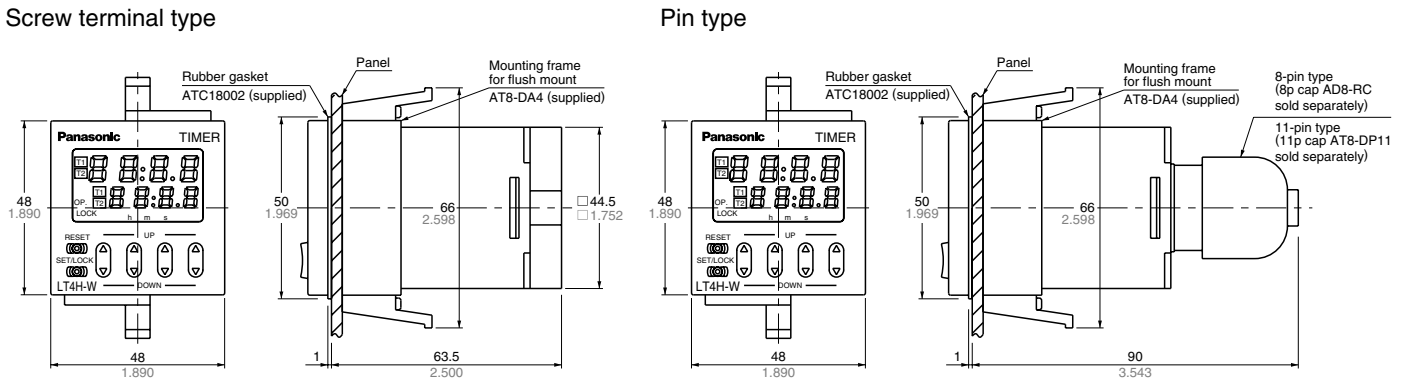
Dimensions

(units: mm inch)
Tolerance: ±1.0 ±.039

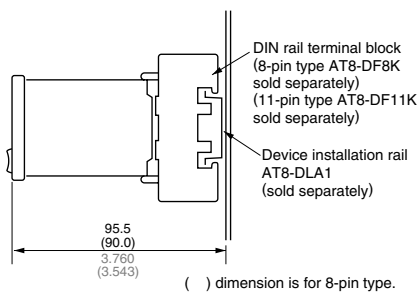
• LT4H-W digital timer



• Dimensions for flush mount (with adapter installed)

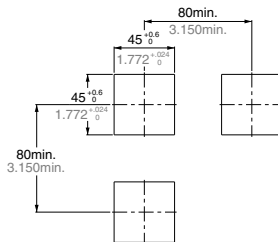


• Dimensions for front panel installations

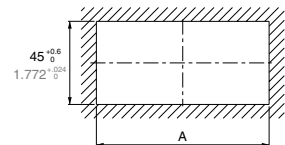


• Installation panel cut-out dimensions

The standard panel cut-out dimensions are shown below. Use the mounting frame (AT8-DA4) and rubber gasket (ATC18002).



• For connected installations



When n timers are continuously installed, the dimension (A) is calculated according to the following formula (n: the number of the timers to be installed):

$$A = (48 \times n - 2.5)^{+0.6}_{-0.5} \quad A = (1.890 \times n - .098)^{+0.024}_{-0.020}$$

Note) 1: The installation panel thickness should be between 1 and 5 mm (.039 and .197 inch).

2: For connected installations, the waterproofing ability between the unit and installation panel is lost.

Specifications

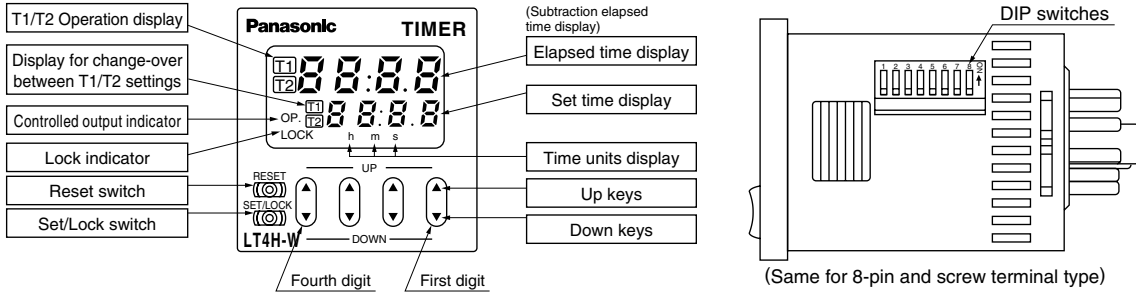
Item	Type	Relay output type		Transistor output type	
		AC type AC/DC type	DC type	AC type AC/DC type	DC type
Rating	Rated operating voltage	100 to 240 V AC, 24 V AC, 24 V AC/DC	12 to 24 V DC	100 to 240 V AC, 24 V AC, 24 V AC/DC	12 to 24 V DC
	Rated frequency	50/60 Hz common	—	50/60 Hz common	—
	Rated power consumption	Max. 10 V A	Max. 3 W	Max. 10 V A	Max. 3 W
	Rated control capacity	5 A, 250 V AC (resistive load)		100 mA, 30 V DC	
	Time range	9.999 s, 99.99 s, 999.9 s, 9999 s, 99 min 59 s, 999.9 min, 99 h 59 min, 999.9 h (selected by DIP switch)			
	Time counting direction	Addition (UP)/Subtraction (DOWN) (2 directions selectable by DIP switch)			
	Operation mode	A (Power ON delay 1), A2 (Power ON delay 2), B (Signal ON delay), C (Signal OFF delay), D (Pulse one-shot), E (Pulse ON delay), F (Signal Flicker), G (Totalizing ON delay) (selectable by DIP switch)			
	Start/Reset/Stop input	Min. input signal width: 1 ms, 20 ms (2 directions by selected by DIP switch) (The 8-pin type does not have a stop input.)			
	Lock input	Min. input signal width: 20 ms (The 8-pin type does not have a lock input.)			
	Input signal	Open collector input Input impedance: Max. 1 kΩ; Residual voltage: Max. 2 V Open impedance: 100kΩ or less, Max. energized voltage: 40V DC			
	Indication	7-segment LCD (LT4H, LT4H-L common), Elapsed value (backlight red LED), Setting value (backlight yellow LED)			
Power failure memory method	EEP-ROM (Min. 10 ⁵ overwriting)				
Time accuracy (max.)	Operating time fluctuation	± (0.005 % + 50 ms) in case of power on start ± (0.005 % + 20 ms) in case of input signal start		[Operating voltage: 85 to 110% Temperature: -10 to +55°C +14 to +131°F Min. input signal width: 1ms]	
	Temperature error				
	Voltage error				
	Setting error				
Contact	Contact arrangement	Timed-out 1 Form C	Timed-out 1 Form A (Open collector)		
	Contact resistance (Initial value)	100 mΩ (at 1 A 6 V DC)	—		
	Contact material	Ag alloy/Au flash	—		
Life	Mechanical (contact)	Min. 2 × 10 ⁷ ope. (Except for switch operation parts)		—	
	Electrical (contact)	1.0 × 10 ⁵ ope. (At rated control voltage)		Min. 10 ⁷ ope. (At rated control voltage)	
Electrical	Allowable operating voltage range	85 to 110 % of rated operating voltage			
	Breakdown voltage (Initial value)	2,000 Vrms for 1 min: Between live and dead metal parts (11-pin) 2,000 Vrms for 1 min: Between input and output 1,000 Vrms for 1 min: Between contacts		2,000 Vrms for 1 min: Between live and dead metal parts (Pin type) 2,000 Vrms for 1 min: Between input and output	
	Insulation resistance (Initial value)	Between live and dead metal parts Min. 100 MΩ: Between input and output (At 500V DC)		Min. 100 MΩ: Between live and dead metal parts Between input and output (At 500V DC)	
	Operating voltage reset time	Max. 0.5 s			
	Temperature rise	Max. 65° C (under the flow of nominal operating current at nominal voltage)		—	
Mechanical	Vibration resistance	Functional	10 to 55 Hz: 1 cycle/min single amplitude of 0.35 mm .014 inch (10 min on 3 axes)		
		Destructive	10 to 55 Hz: 1 cycle/min single amplitude of 0.75 mm .030 inch (1 h on 3 axes)		
	Shock resistance	Functional	Min. 98 m 321.522 ft./s ² (4 times on 3 axes)		
		Destructive	Min. 294 m 964.567 ft./s ² (5 times on 3 axes)		
Operating conditions	Ambient temperature	-10° C to 55° C +14° F to +131° F			
	Ambient humidity	Max. 85 % RH (non-condensing)			
	Air pressure	860 to 1,060 h Pa			
	Ripple rate	—	20 % or less	—	20 % or less
Connection	8-pin/11-pin/screw terminal				
Protective construction	IP66 (front panel with rubber gasket)				

Applicable standard

Safety standard	EN61812-1	Pollution Degree 2/Overvoltage Category II
EMC	(EMI)EN61000-6-4 Radiation interference electric field strength	EN55011 Group1 ClassA EN55011 Group1 ClassA
	Noise terminal voltage (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) 10 V/m pulse modulation (895 MHz to 905 MHz)
	EFT/B immunity	EN61000-4-4 2 kV (power supply line) 1 kV (signal line)
	Surge immunity	EN61000-4-5 1 kV (power 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)
	Voltage dip/Instantaneous stop/Voltage fluctuation immunity	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)

LT4H-W

Part names



Specifications

Item	Type	Relay output type		Transistor output type	
		AC type	DC type	AC type	DC type
Rating	Rated operating voltage	100 to 240 V AC, 24 V AC	12 to 24 V DC	100 to 240V AC, 24V AC	12 to 24 V DC
	Rated frequency	50/60 Hz common	—	50/60 Hz common	—
	Rated power consumption	Max. 10 V A	Max. 3 W	Max. 10 V A	Max. 3 W
	Rated control capacity	5 A, 250 V AC		100 mA, 30 V DC	
	Time range	99.99s, 999.9s, 9999s, 99min59s, 999.9min, 99h59min, 999.9h, 9999h (selected by DIP switch)			
	Time counting direction	Addition (UP)/Subtraction (DOWN) (2 directions selectable by DIP switch)			
	Operation mode	Pulse input: Delayed one shot, OFF-start flicker or ON-start flicker Integrating input: Delayed one shot, OFF-start flicker or ON-start flicker			
	Start/Reset/Stop input	Min. input signal width: 1 ms, 20 ms (2 directions by selected by DIP switch) (The 8 pin type does not have a stop input.)			
	Lock input	Min. input signal width: 20 ms (The 8-pin type does not have a lock input.)			
	Input signal	Open collector input Input impedance: Max. 1 kΩ; Residual voltage: Max. 2V Open impedance: 100 kΩ or less, Max. energized voltage: 40 V DC			
Indication	7-segment LCD, Elapsed value (backlight red LED), Setting value (backlight yellow LED)				
Power failure memory method	EEP-ROM (Min. 10 ⁵ overwriting)				
Time accuracy (max.)	Operating time fluctuation	$\pm (0.005\% + 50 \text{ ms})$ in case of power on start $\pm (0.005\% + 20 \text{ ms})$ in case of input signal start [Operating voltage: 85% to 110% Temperature: -10°C to +55°C +14°F to +131°F Min. input signal width: 1ms]			
	Temperature error				
	Voltage error				
	Setting error				
Contact	Contact arrangement	Timed-out 1 Form C		Timed-out 1 Form A (Open collector)	
	Contact resistance (Initial value)	100 mΩ (at 1 A 6 V DC)		—	
	Contact material	Ag alloy/Au flash		—	
Life	Mechanical (contact)	Min. 2 × 10 ⁷ ope. (Except for switch operation parts)		—	
	Electrical (contact)	Min. 10 ⁶ ope. (At rated control voltage)		Min. 10 ⁷ ope. (At rated control voltage)	
Electrical	Allowable operating voltage range	85 to 110 % of rated operating voltage			
	Breakdown voltage (Initial value)	2,000 Vrms for 1 min: Between live and dead metal parts (11-pin type only) 2,000 Vrms for 1 min: Between input and output 1,000 Vrms for 1 min: Between contacts		2,000 Vrms for 1 min: Between live and dead metal parts (Pin type only) 2,000 Vrms for 1 min: Between input and output	
	Insulation resistance (Initial value)	Min. 100 MΩ: Between live and dead metal parts Between input and output (At 500V DC) Between contacts		Min. 100 MΩ: Between live and dead metal parts Between input and output (At 500V DC)	
	Operating voltage reset time	Max. 0.5 s			
	Temperature rise	Max 65° C (under the flow of nominal operating current at nominal voltage)		—	
Mechanical	Vibration resistance	Functional	10 to 55 Hz: 1 cycle/ min single amplitude of 0.35 mm .014 inch (10 min on 3 axes)		
		Destructive	10 to 55 Hz: 1 cycle/ min single amplitude of 0.75 mm .030 inch (1 h on 3 axes)		
	Shock resistance	Functional	Min. 98 m 321.522 ft./s ² (4 times on 3 axes)		
		Destructive	Min. 294 m 964.567 ft./s ² (5 times on 3 axes)		
Operating conditions	Ambient temperature	-10° C to 55° C +14° F to +131° F			
	Ambient humidity	Max. 85 % RH (non-condensing)			
	Air pressure	860 to 1,060 h Pa			
	Ripple rate	—	20 % or less	—	20 % or less
Connection	8-pin/11-pin/screw terminal				
Protective construction	IP66 (front panel with rubber gasket)				