

DIN W48×H24mm, Indication only, LCD timer(hour meter) [LE8N Series]

Ordering information

LE	8	N	-	B	N	-	L	
								Backlight
								Input type
								Power supply
								Size
								Digit
								Item

※Shaded () parts are upgraded or added function.

No mark	None
L	Backlight function
N	No-voltage(Small signal) input
V	Voltage input
F	Free voltage input
B	Internal lithium battery
N	DIN W48×H24mm
8	99999999(8 digit)
LE	LCD Timer

■ Connections

Input type	No-backlight	Backlight function
No-voltage input type	•LE8N-BN ※1 	•LE8N-BN-L ※2
Voltage input type	•LE8N-BV ※1 	•LE8N-BV-L ※2 <p>※Backlight power is available as signal input (SIGNAL INPUT, RESET).</p>
Free voltage input type	•LE8N-BF <p>※Terminal (1, 2) and (4, 5) are insulated inside.</p>	

※1: Terminal 2 and 5 are connected inside. (Non-isolated)

※Use reliable contacts enough to flow 5μA current.


※2: Terminal (1, 2, 3) and (4, 5) are insulated inside.

Digital LCD timer DIN W48×H48mm [LE3S Series]

■ Specifications

Model	LE3S	LE3SA	LE3SB
Appearances & Dimensions	<p>[W48×H48×L67mm]</p>		
Function	Multi time and operation		Multi time range, Power ON Delay operation
Display method	LCD display(character size: W4×H8mm)		
Power supply	24-240VAC 50/60Hz / 24-240VDC universal		
Allowable voltage range	90 to 110% of rated voltage		
Power consumption	Approx. 2.5VA(240VAC 50/60Hz), Approx. 1W(240VDC)		Approx. 3.3VA(240VAC 50/60Hz), Approx. 1.5W(240VDC)
Reset time	Max. 200ms		Max. 100ms

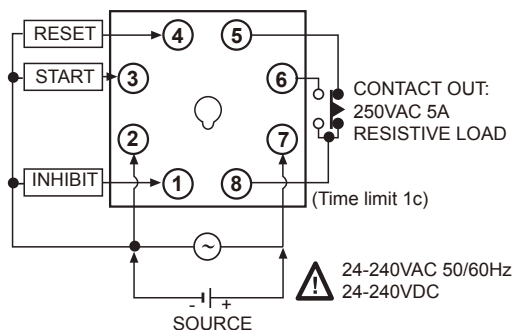
Specifications

Model		LE3S	LE3SA	LE3SB
Min. input signal	START	Min. 20ms	—	
	INHIBIT			
	RESET			
Input	START	• No-voltage input Impedance at short-circuit: Max. 1kΩ Residual voltage:Max. 0.5VDC Impedance at open-circuit: Min. 100kΩ	—	
	INHIBIT			
	RESET			
Timing operation		Signal ON Start	Power ON Start	
Control output	Contact type	Time limit SPDT(1c)	Time limit DPDT(2c)	Time limit SPDT(1c), Instantaneous SPDT(1c)
	Contact capacity	250VAC 5A resistive load	250VAC 3A resistive load	
Relay life cycle	Mechanical	Min. 10,000,000 operations		
	Electrical	Min. 100,000 operations (250VAC 5A resistive load)	Min. 100,000 operations (250VAC 3A resistive load)	
Output mode		10 operation modes	Power ON Delay mode	
Environment	Ambient temperature	-10 to 55°C, storage: -25 to 65°C		
	Ambient humidity			
Accessory		Bracket		
Repeat error		Max. ±0.01% ±0.05sec. (for Power ON Start) Max. ±0.005% ±0.03sec. (for Signal ON Start)	Max. ±0.01% ±0.05sec.	
SET error				
Voltage error				
Temperature error				
Insulation resistance		100MΩ(at 500VDC megger)		
Dielectric strength		2000VAC 50/60Hz for 1 minute		
Noise strength		±2kV the square wave noise(pulse width: 1μs) by the noise simulator		
Vibration	Mechanical	0.75mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 1hour		
	Malfunction	0.5mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 10 minutes		
Shock	Mechanical	300m/s ² (approx. 30G) in each of X, Y, Z directions for 3 times		
	Malfunction	100m/s ² (approx. 10G) in each of X, Y, Z directions for 3 times		
Approval		CE  US		
Unit weight		Approx. 100g	Approx. 105g	

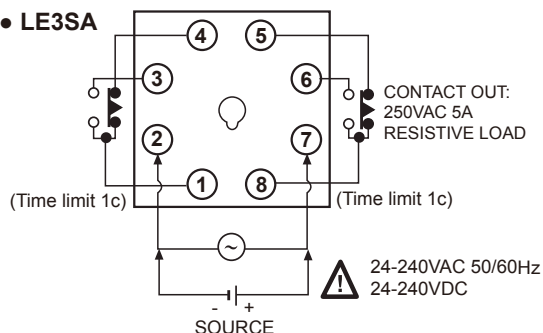
※Environment resistance is rated at no freezing or condensation.

Connections

• LE3S



• LE3SA



• LE3SB

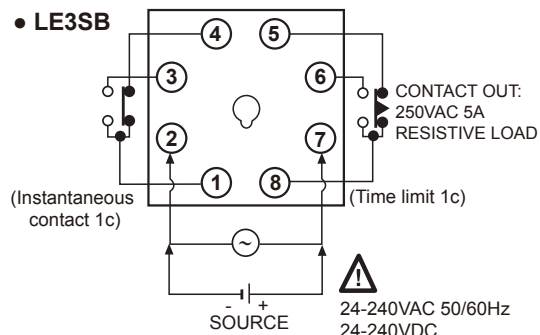





Photo electric sensor
Fiber optic sensor
Door/Area sensor
Proximity sensor
Pressure sensor
Rotary encoder
Connector/Socket
Temp. controller
SSR/Power controller
Counter
Timer
Panel meter
Tacho/Speed/Pulse meter
Display unit
Sensor controller
Switching mode power supply
Stepper motor& Driver&Controller
Graphic/Logic panel
Field network device

DIN W48×H48mm Digital backlight LCD timer [LE4S Series]

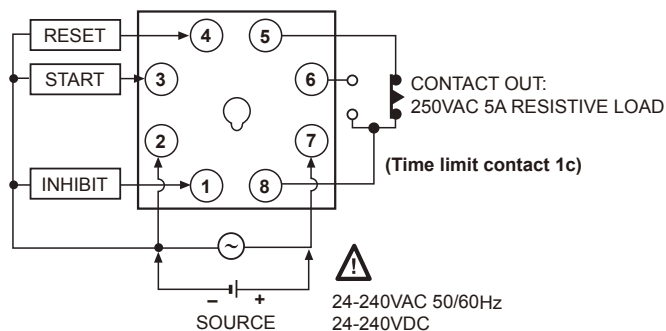
■ Specifications

Model		LE4S	LE4SA
Appearances & Dimensions		<div></div> <div>[W48×H48×L70mm]</div>	
Function		Multi time and Multi operation	
Display method		LCD display(Backlight)	
Power supply		24-240VAC 50/60Hz, 24-240VDC universal	
Allowable voltage range		90 to 110% of rated voltage	
Power consumption		24-240VAC: Max. 4.5VA, 24-240VDC: Max. 2W	24-240VAC: Max. 4VA, 24-240VDC: Max. 1.6W
Return time		Max. 100ms	
Min. input signal	START	1ms, 20ms(selectable)	—
	INHIBIT		
	RESET		
Input	START	• No-voltage input Impedance at short-circuit: Max. 1kΩ, Residual voltage: Max. 0.5V, Impedance at open-circuit: Min. 100kΩ	—
	INHIBIT		
	RESET		
Timing operation		Signal ON Start	Power ON Start
Control output	Contact type	Time limit SPDT(1c)	Selectable Time limit DPDT(2c), Time limit SPDT(1c)+ Instantaneous SPDT(1c) (depends on operation mode)
	Contact capacity	250VAC 5A resistive load	250VAC 3A resistive load
Relay life cycle	Mechanical	Min. 10,000,000 operations	
	Electrical	Min. 100,000 operations (at rated contact capacity)	
Output mode		10 operation modes	8 operation modes
Environ- -ment	Ambient temperature	-10 to 55°C, storage: -25 to 65°C	
	Ambient humidity	35 to 85%RH	
Accessory		Bracket	
Repeat error		Max. ±0.01% ±0.05sec.(Power ON Start) Max. ±0.005% ±0.03sec.(Signal ON Start)	Max. ±0.01% ±0.05sec.
Setting error			
Voltage error			
Temperature error			
Insulation resistance		100MΩ(at 500VDC megger)	
Dielectric strength		2000VAC 50/60Hz for 1 minute	
Noise strength		±2kV the square wave noise(pulse width: 1μs) by the noise simulator	
Vibration	Mechanical	0.75mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 1hour	
	Malfunction	0.5mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 10 minutes	
Shock	Mechanical	300m/s ² (approx. 30G) in each of X, Y, Z directions for 3 times	
	Malfunction	100m/s ² (approx. 10G) in each of X, Y, Z directions for 3 times	
Approval			
Unit weight		Approx. 98g	

※Environment resistance is rated at no freezing or condensation.

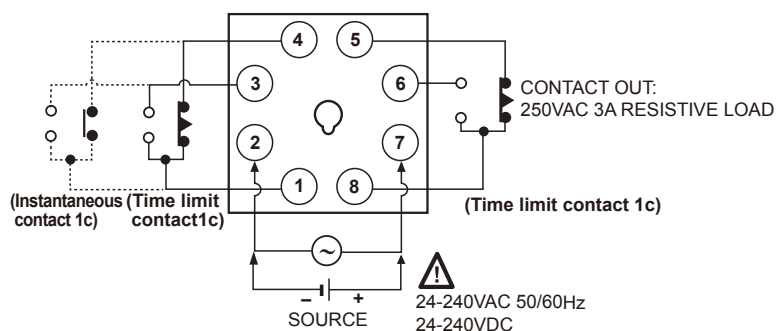
■ Connections

○ LE4S



○ LE4SA

- [ON.D] [ON.D.II] [FK] [FKI] [INT] [T] [T.I] mode



※Time limit contact 1c + Instantaneous contact 1c or Time limit contact 2c (Selectable)
([T] [T.I]: Time limit 2c only.)

- [λ - Δ] mode

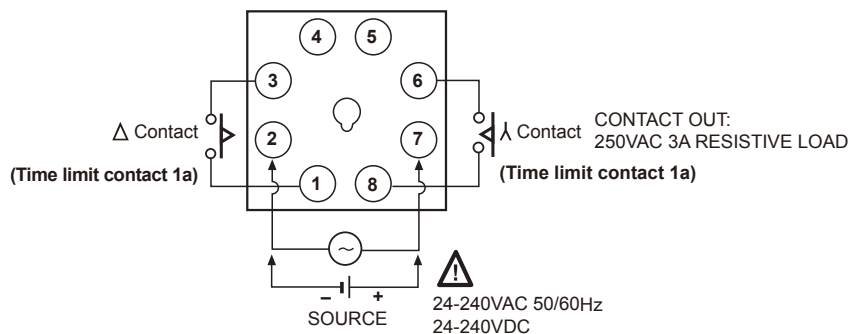



Photo electric sensor
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Rotary encoder
Connector/Socket
Temp. controller
SSR/Power controller
Counter
Timer
Panel meter
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Display unit
Sensor controller
Switching mode power supply
Stepper motor& Driver&Controller
Graphic/ Logic panel
Field network device

DIN W48×H48mm 8 pin plug timer [FSE Series]

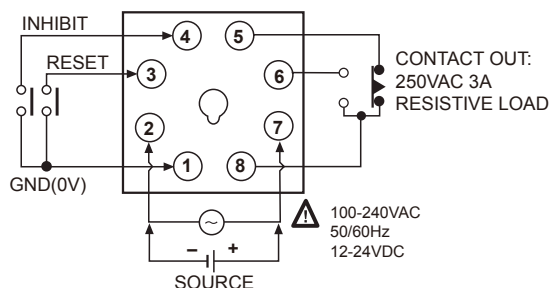
Specifications

Model	FS4E	FS5EI
Appearances & Dimensions	 [W48×H48×L85mm]	
Function	Single preset Up/Down Timer	Up/Down indicator
Character size	W4×H8mm	
Power supply	100-240VAC 50 /60Hz, 12-24VAC/DC universal	
Allowable voltage range	90 to 110% of rated voltage	
Power consumption	Approx. 4.5VA(240VAC 60Hz), Approx. 2.5W(24VDC)	Approx. 3.5VA(240VAC 60Hz), Approx. 2.2W(24VDC)
Return time	Min. 500ms	
Min. input signal width	RESET INHIBIT	Approx. 20ms
Input	RESET INHIBIT	No-voltage input - Impedance at short-circuit: Max. 470Ω, Residual voltage at short-circuit: Max. 1VDC Impedance at open circuit: Min. 100kΩ
Timing operation	Power ON Start	
One-shot output time	0.05 to 5sec.	
Control output	Contact type	Time-limit SPDT(1c)
	Contact capacity	250VAC 3A at resistive load
Relay life cycle	Mechanical	Min. 10,000,000 operations
	Electrical	Min. 100,000 operations (250VAC 3A resistive load)
Memory protection	10 years(When using non-volatile semiconductor memory)	
Repeat error	Max. ±0.01% ±0.05sec.	
SET error		
Voltage error		
Temperature error		
Insulation resistance	100MΩ(at 500VDC megger)	
Dielectric strength	2000VAC 50/60Hz for 1 minute	
Noise strength	AC power	±2kV the square wave noise(pulse width: 1μs) by the noise simulator
	DC power	±500V the square wave noise(pulse width: 1μs) by the noise simulator
Vibration	Mechanical	0.75mm amplitude at frequency of 10 to 55Hz (for 1 min.) in each of X, Y, Z directions for 1hour
	Malfunction	0.5mm amplitude at frequency of 10 to 55Hz (for 1 min.) in each of X, Y, Z directions for 10 minutes
Shock	Mechanical	300m/s ² (approx. 30G) in each of X, Y, Z directions for 3 times
	Malfunction	100m/s ² (approx. 10G) in each of X, Y, Z directions for 3 times
Environment	Ambient temperature	-10 to 55°C, storage: -25 to 65°C
	Ambient humidity	35 to 85%RH
Accessory	Bracket	
Unit weight	AC power	Approx. 122g
	DC power	Approx. 130g

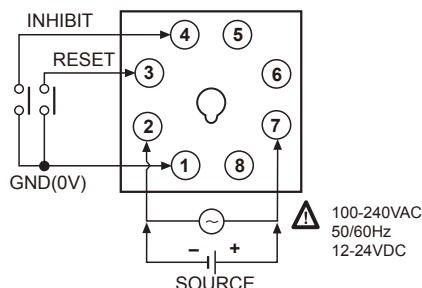
※Environment resistance is rated at no freezing or condensation.

Connections

• FS4E



• FS5EI



Multi Function Timer with Free power, Compact size W38×H42mm [ATS Series]

Ordering information

ATS	8	—	4	1	
					Time range
				1	Time range 1(0.1 to 1)
				3	Time range 3(0.3 to 3)
				1	12VDC
				2	24VAC / 24VDC
				4	100-240VAC / 24-240VDC
				8	8-pin plug type
				ATS	Small Analog Timer
※Sockets (PG-08, PS-08, PS-M08) are sold separately.					
ATS	11	—	4	1	D
					Output
				D	Time limit 2c
				E	Instant limit 1c + Time limit 1c
				1	Time range 1(0.1 to 1)
				3	Time range 3(0.3 to 3)
				1	12VDC
				2	24VAC / 24VDC
				4	100-240VAC / 24-240VDC
				11	11-pin plug type
				ATS	Small Analog Timer
※Sockets (PG-11, PS-11) are sold separately.					

Specifications




Model	ATS8-□1	ATS8-□3	ATS11-□1D	ATS11-□3D	ATS11-□1E	ATS11-□3E
Appearances & Dimensions	 [W38×H42×L75.5mm]		 [W38×H42×L75.5mm]		 [W38×H42×L75.5mm]	
	Function					
Control time setting range	0.1sec to 10hour		0.3sec to 30hour		0.1sec to 10hour	
Power supply	•100-240VAC 50/60Hz, 24-240VDC, universal •24VAC 50/60Hz, 24VDC, universal •12VDC					
Allowable voltage range	90 to 110% of rated voltage					
Power consumption	•100-240VAC: 4.2VA, 24-240VDC: 2W •24VAC: 4.5VA, 24VDC: 2W •12VDC: 1.5W		•100-240VAC: 3.5VA, 24-240VDC: 1.5W •24VAC: 4VA, 24VDC :1.5W •12VDC: 1W		•100-240VAC: 4.2VA, 24-240VDC: 2W •24VAC: 4.5VA, 24VDC: 2W •12VDC: 1.5W	
Return time	Max. 100ms					
Min. input signal width	START	—	Max. 50ms			
	INHIBIT					
	RESET					
Input	START	—	No-voltage input - Short-circuit impedance: Max. 1kΩ, Residual voltage: Max. 0.5V Open-circuit impedance: Max. 100kΩ			
	INHIBIT					
	RESET					
Time operation	Power ON Start		Signal ON Start			
Control output	Contact type	Time limit DPDT(2c) or Instantaneous SPDT(1c)+Time limit SPDT(1c) selectable by output operation mode			Time limit SPDT (1c), Instant limit SPDT (1c)	
	Contact capacity	250VAC 3A resistive load				
Relay life cycle	Mechanical	Min. 10,000,000 operations				
	Electrical	Min. 100,000 operations (250VAC 3A resistive load)				

Photo electric sensor

Fiber optic sensor

Door/Area sensor

Proximity sensor

Pressure sensor

Rotary encoder

Connector/Socket

Temp. controller

SSR/ Power controller

Counter

Timer

Panel meter

Tacho/ Speed/ Pulse meter

Display unit

Sensor controller


Switching mode power supply

Stepper motor& Driver&Controller

Graphic/ Logic panel

Field network device

Specifications

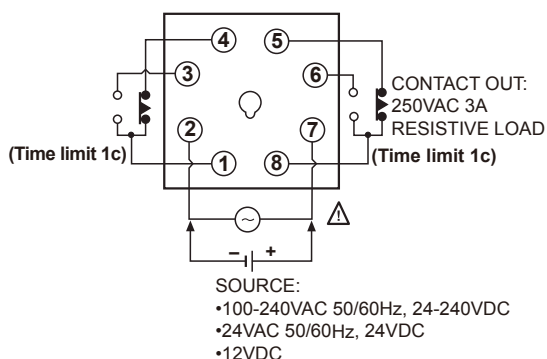
Model		ATS8-□1	ATS8-□3	ATS11-□1D	ATS11-□3D	ATS11-□1E	ATS11-□3E
Repeat error		Max. ±0.2% ±10ms					
Setting error		Max. ±5% ±50ms					
Voltage error		Max. ±0.5%					
Temperature error		Max. ±2%					
Insulation resistance		100MΩ(at 500VDC megger)					
Dielectric strength		2000VAC 50/60Hz for 1 min.					
Noise resistance		±2kV the square wave noise (pulse width 1μs) by noise simulator					
Vibration	Mechanical	0.75mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 1 hour					
	Malfunction	0.5mm mplitude at frequency of 10 to 55HHz(for 1 min.) in each of X, Y, Z directions for 10 min.					
Shock	Mechanical	300m/s ² (approx. 30G) in each of X, Y, Z directions 3 times					
	Malfunction	100m/s ² (approx. 10G) in each of X, Y, Z directions 3 times					
Environ- ment	Ambient temperature	-10 to 55°C, storage: -25 to 65°C					
	Ambient humidity	35 to 85%RH, storage: 35 to 85%RH					
Approval							
Accessory		Bracket					
Unit weight		Approx. 72g					

※Environment resistance is rated at no freezing or condensation.

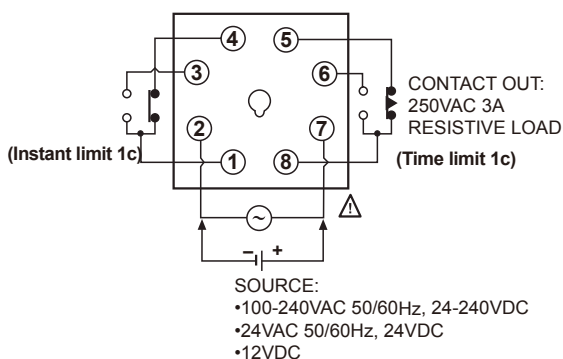
Connections

○ ATS8

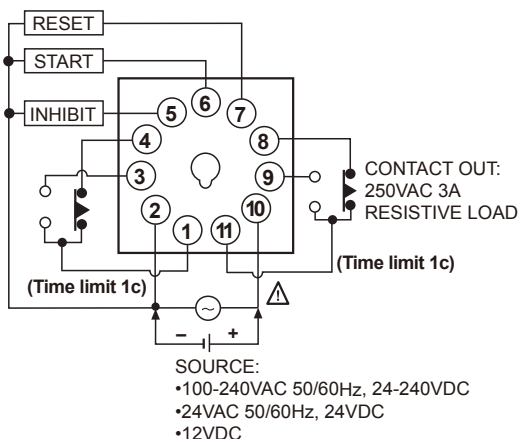
●When selecting [A], [F]
output operation mode



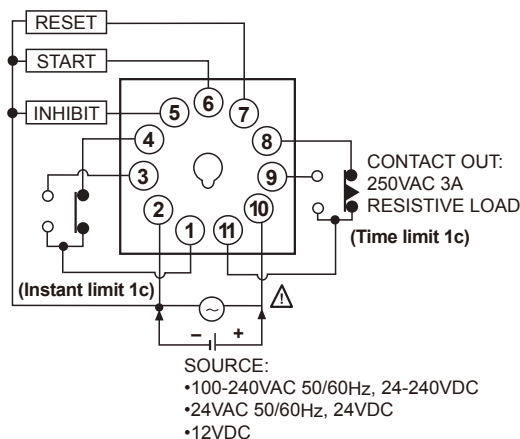
●When selecting [A1], [B], [F1], [I]
output operation mode



○ ATS11-□□D





○ ATS11-□□E



Star-Delta Timer with Free power, compact size W38×H42mm [ATS8SD-4]

Specifications

Model	ATS8SD-4	
Appearances & Dimensions	<div>   </div> <p>[W38×H42×L75.5mm]</p>	
Function	Star-Delta Timer	
Control time setting range	0.5sec to 100sec (max. time)	
Power supply	100-240VAC 50/60Hz /24-240VDC universal	
Allowable voltage range	90 to 110% of rated voltage	
Power consumption	100-240VAC: 3VA, 24-240VDC: 1.5W	
Return time	Max. 100ms	
Time operation	Power ON Start type	
Control output	Contact type	λ contact: SPST(1a), Δ contact: SPST(1a)
	Contact capacity	250VAC 3A resistive load
Relay life cycle	Mechanical	Min. 10,000,000 operations
	Electrical	Min. 100,000 operations (250VAC 3A resistive load)
Repeat error	Max. ±0.2% ±10ms	
λ setting error	Max. ±5% ±50ms	
Voltage error	Max. ±0.5%	
Temperature error	Max. ±2%	
λ-Δ switching time error	Max. ±25%	
Insulation resistance	100MΩ (at 500VDC megger)	
Dielectric strength	2000VAC 50/60Hz for 1 min.	
Noise resistance	±2kV the square wave noise (pulse width 1μs) by noise simulator	
Vibration	Mechanical	0.75mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 1 hour
	Malfunction	0.5mm mplitude at frequency of 10 to 55HHz(for 1 min.) in each of X, Y, Z directions for 10 min.
Shock	Mechanical	300m/s ² (approx. 30G) in each of X, Y, Z directions 3 times
	Malfunction	100m/s ² (approx. 10G) in each of X, Y, Z directions 3 times
Environ-ment	Ambient temperature	-10 to 55°C, storage: -25 to 65°C
	Ambient humidity	35 to 85%RH, storage: 35 to 85%RH
Approval	CE c UL US	
Accessory	Bracket	
Unit weight	Approx. 72g	

※Environment resistance is rated at no freezing or condensation.

Connections

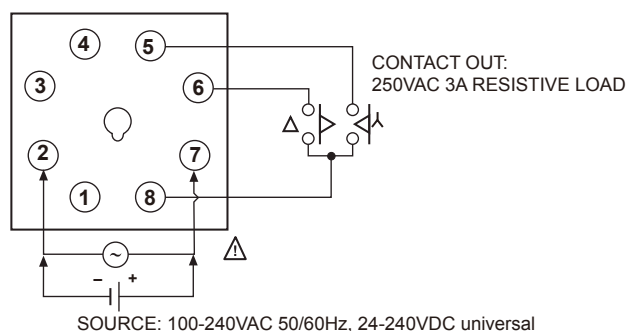





Photo electric sensor
Fiber optic sensor
Door/Area sensor
Proximity sensor
Pressure sensor
Rotary encoder
Connector/Socket
Temp. controller
SSR/ Power controller
Counter
Timer
Panel meter
Tacho/ Speed/ Pulse meter
Display unit
Sensor controller
Switching mode power supply
Stepper motor& Driver&Controller
Graphic/ Logic panel
Field network device

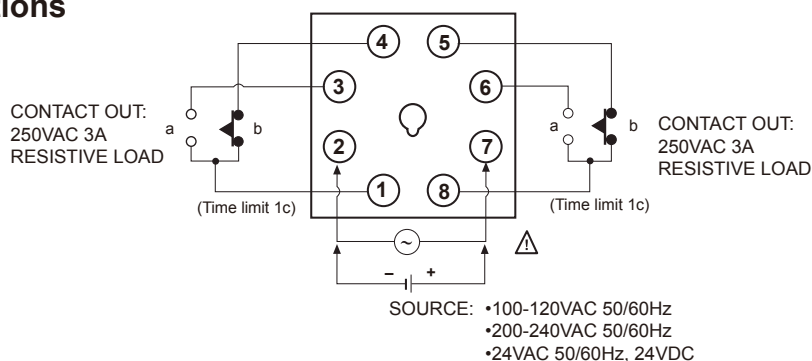
Power-OFF Delay Timer, compact size W38×H42mm [ATS8P Series]

Specifications

Model	ATS8P-2S	ATS8P-5S	ATS8P-6S	ATS8P-2M	ATS8P-5M	ATS8P-6M
Appearances & Dimensions	<div><div></div><div></div></div> <div>[W38×H42×L75.5mm]</div>					
	Function Power OFF Delay					
Control time setting range	0.1sec to 10sec			0.1min to 10min		
Power supply	•100-120VAC 50/60Hz 24VAC 50/60Hz, 24VDC universal		•200-240VAC 50/60Hz	•24VAC 50/60Hz, 24VDC universal		
Allowable voltage range	90 to 110% of rated voltage					
Power consumption	24VAC: 0.2VA, 24VDC: 0.2W	1.5VA	1.5VA	24VAC: 0.2VA, 24VDC: 0.2W	1.5VA	1.5VA
Time operation Power OFF Start type						
Control output	Contact type	Time limit DPDT(2c)				
	Contact capacity	250VAC 3A resistive load				
Relay life cycle	Mechanical	Min. 10,000,000 operations				
	Electrical	Min. 100,000 operations (250VAC 3A resistive load)				
Repeat error	Max. ±0.2% ±10ms					
Setting error	Max. ±5% ±50ms					
Votage error	Max. ±0.5%					
Temperature error	Max. ±2%					
Insulation resistance	100MΩ(at 500VDC megger)					
Dielectric strength	2000VAC 50/60Hz for 1 min.					
Noise resistance	±2KV the square wave noise (pulse width: 1μs) by noise simulator					
Vibration	Mechanical	0.75mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 1 hour				
	Malfunction	0.5mm mplitude at frequency of 10 to 55HHz(for 1 min.) in each of X, Y, Z directions for 10 min.				
Shock	Mechanical	300m/s ² (approx. 30G) in each of X, Y, Z directions 3 times				
	Malfunction	100m/s ² (approx. 10G) in each of X, Y, Z directions 3 times				
Environ- ment	Ambient temperature	-10 to 55°C, storage: -25 to 65°C				
	Ambient humidity	35 to 85%RH, storage: 35 to 85%RH				
Approval						
Accessory	Bracket					
Unit weight	Approx. 80g			Approx. 85g		

※Environment resistance is rated at no freezing or condensation.

Connections






Twin Timer with free power, compact size W38×H42mm [ATS8W/ATS11W Series]

Ordering information

ATS	8	W	—	4	1	※Sockets (PG-08, PS-08, PS-M8, PG-11, PS-11) are sold separately.
						Time range
						1 Time range 1(0.1 to 1)
						3 Time range 3(0.3 to 3)
						Power supply
						1 12VDC
						2 24VAC / 24VDC
						4 100-240VAC / 24-240VDC
						Time operation
						W Twin(Flicker) operation
						Number of plug pins
						8 8-pin plug type
						11 11-pin plug type
						Item
						ATS Small Analog Timer

Specifications

Model	ATS8W-□1	ATS11W-□1	ATS8W-□3	ATS11W-□3
Appearances & Dimensions	<div></div> <div></div> <div>[W38×H42×L75.5mm]</div>			
	Function ON/OFF Flicker operation			
Control time setting range		0.1sec to 10hour		
Power supply		•100-240VAC 50/60Hz, 24-240VDC (universal) •24VAC 50/60Hz, 24VDC (universal) •12VDC		
Allowable voltage range		90 to 110% of rated voltage		
Power consumption		•100-240VAC: 4.2VA, 24-240VDC: 2W •24VAC: 4.5VA, 24VDC: 2W •12VDC: 1.5W		
Return time		Max. 100ms		
Time operation		Power ON Start type		
Control output	Contact type	Time limit DPDT(2c), Instantaneous SPDT(1c)+Time limit SPDT(1c) selectable according to output operation mode		
	Contact capacity	250VAC 3A resistive load		
Relay life cycle	Mechanical	Min. 10,000,000 operations		
	Electrical	Min. 100,000 operations(250VAC 3A resistive load)		
Repeat error		Max. ±0.2% ±10ms		
Set error		Max. ±5% ±50ms		
Voltage error		Max. ±0.5%		
Temperature error		Max. ±2%		
Insulation resistance		100MΩ (at 500VDC megger)		
Dielectric strength		2000VAC 50/60Hz for 1 min.		
Noise resistance		±2kV the square wave noise (pulse width 1μs) by noise simulator		
Vibration	Mechanical	0.75mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 1 hour		
	Malfunction	0.5mm mplitude at frequency of 10 to 55HHz(for 1 min.) in each of X, Y, Z directions for 10 min.		
Shock	Mechanical	300m/s ² (approx. 30G) in each of X, Y, Z directions 3 times		
	Malfunction	100m/s ² (approx. 10G) in each of X, Y, Z directions 3 times		
Environment	Ambient temperature	-10 to 55°C, storage: -25 to 65°C		
	Ambient humidity	35 to 85%RH, storage: 35 to 85%RH		
Approval				
Accessory		Bracket		
Unit weight		Approx. 72g		

※Environment resistance is rated at no freezing or condensation.

Photo electric sensor

Fiber optic sensor

Door/Area sensor

Proximity sensor

Pressure sensor

Rotary encoder

Connector/Socket

Temp. controller

SSR/Power controller

Counter

Timer

Panel meter

Tacho/Speed/ Pulse meter

Display unit

Sensor controller

Switching mode power supply

Stepper motor& Driver&Controller

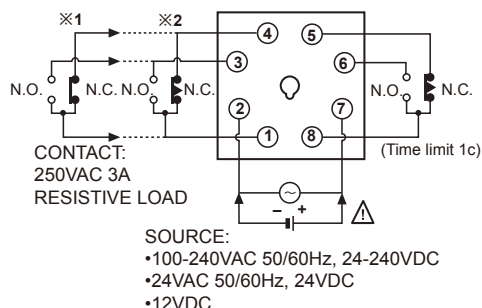
Graphic/Logic panel

Field network device

Connections

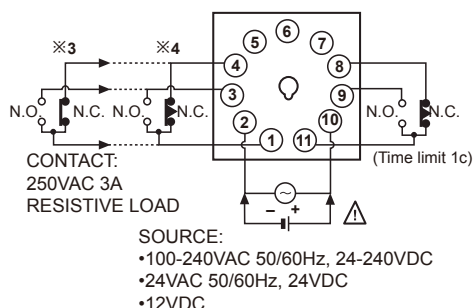
ATS8W

- ※1: When selecting [F2], [N2] output operation mode
 ※2: When selecting [F1], [F3], [N1], [N3] output operation mode



ATS11W

- ※3: When selecting [F2], [N2] output operation mode
 ※4: When selecting [F1], [F3], [N1], [N3] output operation mode



DIN W48×H48mm, Universal voltage multi-function timer [ATN Series]

Ordering information

AT	8	N	-	
Item				
Power supply	No mark	100-240VAC/24-240VDC		
	1	12VDC		
	2	24VAC/DC		
Time operation	N	Time limit contact 2c or time limit contact 1c with instantaneous contact 1c by selecting output operation mode		
Number of plug pins	8	8-pin plug type		
	AT	Analog Timer		

※Sockets (PG-08, PS-08) are sold separately.

AT	11	DN	-	
Item				
Power supply	No mark	100-240VAC/24-240VDC		
	1	12VDC		
	2	24VAC/DC		
Time operation	DN	Time limit 2c		
	EN	Time limit 1c, Instantaneous contact 1c		
Number of plug pins	11	11-pin plug type		
	AT	Analog Timer		


※Sockets (PG-11, PS-11) are sold separately.

Specifications

Model	AT8N-□	AT11EN-□	AT11DN-□
Appearances & Dimensions	<p>[W48×H48×L65mm]</p>	<p>[W48×H48×L65mm]</p>	<p>[W48×H48×L65mm]</p>
Function	Multi function timer		
Control time setting range	0.05 sec. to 100 hour		
Power supply	• 100-240VAC 50/60Hz, 24-240VDC universal • 24VAC 50/60Hz, 24VDC universal • 12VDC		
Allowable voltage range	90 to 110% of rated voltage		
Power consumption	• 100-240VAC: 4.3VA, 24-240VDC: 2W • 24VAC: 4.5VA, 24VDC: 2W • 12VDC: 1.5W		• 100-240VAC: 3.5VA, 24-240VDC: 1.5W • 24VAC: 4VA, 24VDC: 1.5 • 12VDC: 1W
Reset time	Max. 100ms		
Min. input signal width	START	Min. 50ms	
	INHIBIT		
	RESET		

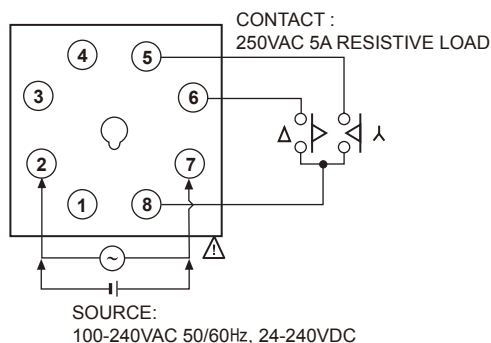
DIN W48×H48mm Star-Delta timer [AT8SDN]

■ Specifications

Model	AT8SDN	
Appearances & Dimensions	 [W48×H48×L65mm]	
Function	Star-Delta timer	
Control time setting range	0.5 to 100 sec.	
Power supply	100-240VAC 50/60Hz / 24-240VDC universal	
Allowable voltage range	90 to 110% of rated voltage	
Power consumption	100-240VAC: 3.2VA, 24-240VDC: 1.5W	
Reset time	Max. 100ms	
Timing operation	Power ON start type	
Control output	Contact type	Λ contact: SPST(1a), Δ contact: SPST(1a)
	Contact capacity	250VAC 5A resistive load
Relay life cycle	Mechanical	Min. 10,000,000 operations
	Electrical	Min. 100,000 operations(250VAC 5A resistive load)
Repeat error	Max. ±0.2 % ±10ms	
ΛSetting error	Max. ±5% ±50ms	
Voltage error	Max. ±0.5%	
Temperature error	Max. ±2%	
Λ-Δ Switching time error	Max. ±25%	
Insulation resistance	100MΩ(at 500VDC megger)	
Dielectric strength	2000VAC 50/60Hz for 1 minute	
Noise strength	±2kV the square wave noise(pulse width: 1μs) by the noise simulator	
Vibration	Mechanical	0.75mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 1 hours
	Malfunction	0.5mm amplitude at frequency of 10 to 55Hz (for 1 min.) in each of X, Y, Z directions for 10 minutes
Shock	Mechanical	300m/s ² (approx. 30G) in each of X, Y, Z directions for 3 times
	Malfunction	100m/s ² (approx. 10G) in each of X, Y, Z directions for 3 times
Environ- -ment	Ambient temperature	-10 to 55°C, storage: -25 to 65°C
	Ambient humidity	35 to 85%RH, storage: 35 to 85%RH
Approval	CE c UL US	
Accessory	Bracket	
Unit weight	Approx. 90g	

※Environment resistance is rated at no freezing or condensation.

■ Connections






DIN W48×H48mm Solid-state, Power OFF Delay timer [AT8PSN/AT8PMN]

Ordering information

AT	8	P	SN	—	
					Power supply
					Time unit
					Time operation
					Number of plug pins
					Item
					No mark
					2
					6
					7
					SN
					MN
					P
					8
					AT
					200-240VAC
					24VAC/DC
					100-120VAC
					100/110VDC
					sec
					min
					Power OFF Delay
					8-pin plug type
					Analog Timer

※Sockets (PG-08, PS-08) are sold separately.

Specifications

Model		AT8PSN-□	AT8PMN-□
Appearances & Dimensions			
	[W48×H48×L65mm]		[W48×H48×L65mm]
Function		Power OFF Delay	
Control time setting range		0.05 to 10 sec.	0.05 to 10 min.
Power supply		• 100-120VAC 50/60Hz • 200-240VAC 50/60Hz • 100/110VDC • 24VAC 50/60Hz, 24VDC (universal)	
Allowable voltage range		90 to 110% of rated voltage	
Power consumption		• 100-120VAC: 1.5VA • 200-240VAC: 1.5VA • 100/110VDC: 0.8W • 24VDC: 0.2VA, 24VDC 0.2W	
Timing operation		Power OFF start type	
Control output	Contact type	Time limit DPDT(2c)	
	Contact capacity	250VAC 3A resistive load	
Relay life cycle	Mechanical	Min.10,000,000 operations	
	Electrical	Min. 100,000 operations(250VAC 3A resistive load)	
Repeat error		Max. ±0.2 % ±10ms	
Setting error		Max. ±5% ±50ms	
Voltage error		Max. ±0.5%	
Temperature error		Max. ±2%	
Insulation resistance		100MΩ(at 500VDC megger)	
Dielectric strength		2000VAC 50/60Hz for 1 minute	
Noise strength		±2kV the square wave noise(pulse width: 1μs) by the noise simulator	
Vibration	Mechanical	0.75mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 1 hours	
	Malfunction	0.5mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 10 minutes	
Shock	Mechanical	300m/s ² (approx. 30G) in each of X, Y, Z directions 3 times	
	Malfunction	100m/s ² (approx. 10G) in each of X, Y, Z directions 3 times	
Environ-ment	Ambient temperature	-10 to 55°C, storage: -25 to 65°C	
	Ambient humidity	35 to 85%RH	
Approval			
Accessory		Bracket	
Unit weight		Approx. 100g	

※Environment resistance is rated at no freezing or condensation.

Photo electric sensor

Fiber optic sensor

Door/Area sensor

Proximity sensor

Pressure sensor

Rotary encoder

Connector/Socket

Temp. controller

SSR/ Power controller

Counter

Timer

Panel meter

Tacho/ Speed/ Pulse meter

Display unit

Sensor controller

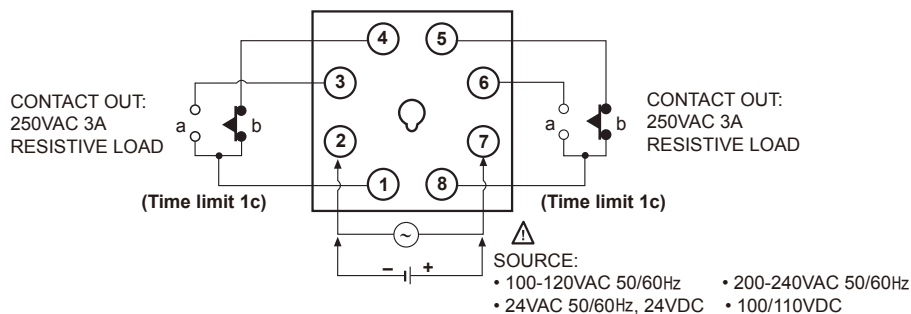
Switching mode power supply

Stepper motor& Driver&Controller

Graphic/ Logic panel

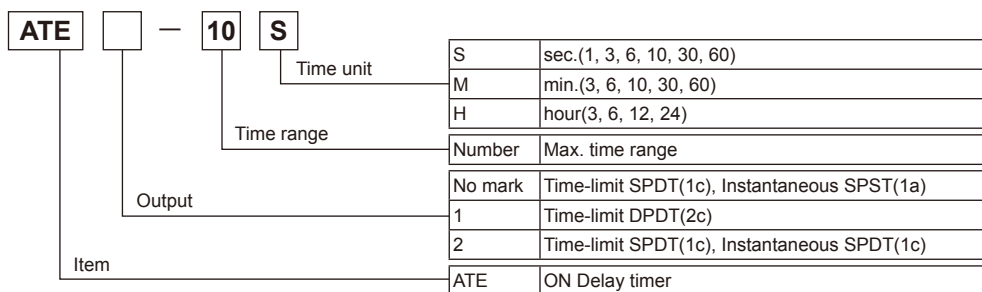
Field network device

■ Connections






DIN W48×H48mm Solid state ON Delay timer [ATE Series]

■ Ordering information



■ Specifications

Model	ATE – <div><input type="checkbox"/>S <input type="checkbox"/>M <input type="checkbox"/>H</div>	ATE1 – <div><input type="checkbox"/>S <input type="checkbox"/>M <input type="checkbox"/>H</div>	ATE2 – <div><input type="checkbox"/>S <input type="checkbox"/>M <input type="checkbox"/>H</div>
Appearances & Dimensions	<div></div> <div>[W48×H48×L79mm]</div>	<div></div> <div>[W48×H48×L79mm]</div>	<div></div> <div>[W48×H48×L79mm]</div>
Function	Power ON Delay		
Control time setting range	sec.(1, 3, 6, 10, 30, 60), min.(3, 6, 10, 30, 60), hour(3, 6, 12 ,24)		
Power supply	110/220VAC 50/60Hz	110VAC, 220VAC 50/60Hz, 12VDC, 24VDC(option)	
Allowable voltage range	90 to 110% of rated voltage		
Power consumption	Approx. 10VA(240VAC 60Hz), Approx. 2W(24VDC, 12VDC)		
Reset time	Max. 200ms		
Timing operation	Power ON start type		

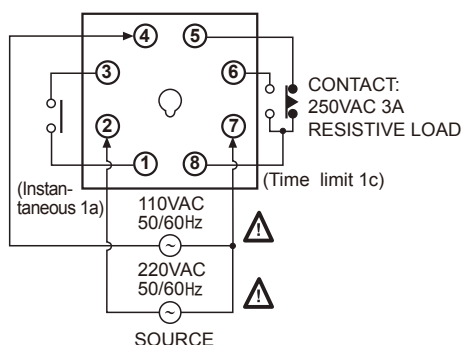
Specifications

Model		ATE – <input type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> H	ATE1 – <input type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> H	ATE2 – <input type="checkbox"/> S <input type="checkbox"/> M <input type="checkbox"/> H
Control output	Contact type	Time limit SPDT(1c), Instantaneous SPST(1a)		Time limit SPDT(1c), Instantaneous SPDT(1c)
	Contact capacity	250VAC 3A resistive load		
Relay life cycle	Mechanical	Min.10,000,000 operations		
	Electrical	Min. 100,000 operations(250VAC 3A resistive load)		
Repeat error		Max. ±0.3%		
SET error		Max. ±5% ±0.05sec.		
Voltage error		Max. ±0.5%		
Temperature error		Max. ±2%		
Insulation resistance		100MΩ(at 500VDC megger)		
Dielectric strength		2000VAC 50/60Hz for 1 minute		
Noise strength		±2kV the square wave noise(pulse width: 1μs) by the noise simulator		
Vibration	Mechanical	0.75mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 1 hours		
	Malfunction	0.5mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 10 minutes		
Shock	Mechanical	300m/s ² (approx. 30G) in each of X, Y, Z directions for 3 times		
	Malfunction	100m/s ² (approx. 10G) in each of X, Y, Z directions for 3 times		
Environ-ment	Ambient temperature	-10 to 55°C, storage: -25 to 65°C		
	Ambient humidity	35 to 80%RH		
Unit weight		Approx. 75g		

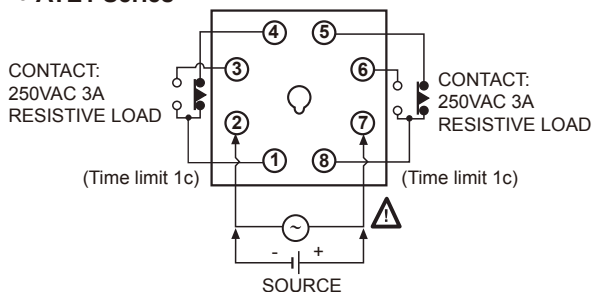
※Environment resistance is rated at no freezing or condensation.

Connections

• ATE Series



• ATE1 Series



• ATE2 Series

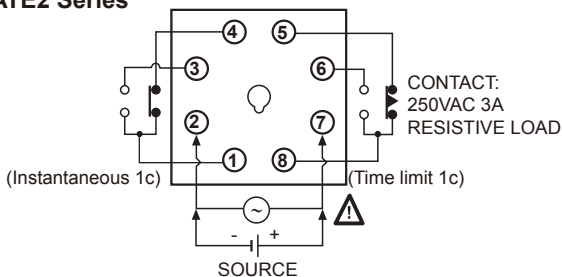


Photo electric sensor

Fiber optic sensor

Door/Area sensor

Proximity sensor

Pressure sensor

Rotary encoder

Connector/Socket

Temp. controller

SSR/Power controller

Counter

Timer

Panel meter

Tacho/Speed/ Pulse meter

Display unit

Sensor controller

Switching mode power supply


Stepper motor& Driver&Controller

Graphic/Logic panel

Field network device

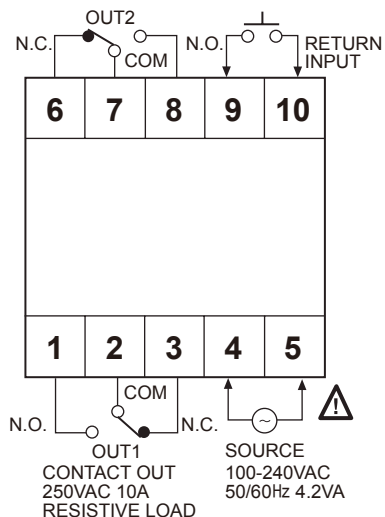
W72×H72mm, Weekly/Yearly timer [LE7M-2]

Specifications

Model	LE7M-2	
Appearances & Dimensions	 [W72×H72×L60mm]	
Power supply	100-240VAC 50/60Hz	
Allowable voltage range	90 to 110% of rated voltage	
Power consumption	Max. 4.2VA	
RETURN input	Short-circuit or open by switch or relay	
Timing program	48 steps for weekly, 24 steps for yearly	
Operation mode	ON/OFF mode, cycle mode, pulse mode	
Mounting	Front panel, surface, DIN rail	
Time deviation	±15sec./month(ambient temperature: 25°C) (±4sec. /week)	
Temperature error	±0.01% ±0.05sec.(ratio by set time)	
Memory protection	Over 5 years(at 25°C)	
Control Output	Contact type	SPDT(Single Pole Double Throw)
	Contact capacity	250VAC 10A resistive load
	Output number	Independent 2 output(1c × 2)
Relay life cycle	Mechanical	Min. 5,000,000 operations(switching capacity: 30 times/min)
	Electrical	Min. 50,000 operations<switching capacity: 20 times/min, 250VAC 10A(resistive load)>
Insulation resistance	Min. 100MΩ(at 500VDC megger)	
Dielectric strength	2000VAC 50/60Hz for 1minute	
Noise strength	±2kV the square wave noise(pulse width: 1μs) by the noise simulator	
Environ -ment	Ambient temperature	-10 to 55°C, storage: -25 to 65°C
	Ambient humidity	35 to 80%RH
Unit weight	Approx. 272g	


※Environment resistance is rated at no freezing or condensation.

Connections



W48×H48mm, Weekly/Yearly timer [LE365S-41]

■ Specifications

Model		LE365S-41
Appearances & Dimensions		
		[W48×H48×L60mm]
Power supply		100-240VAC 50/60Hz
Allowable voltage range		90 to 110% of rated voltage
Power consumption		2.4VA
Timing program		48 steps for weekly, 24 steps for yearly
Operation mode		ON/OFF mode, cycle mode, pulse mode
Mounting		Panel flush, surface, DIN rail
Time deviation		±15sec/month(25°C) (±4sec/week)
Temperature error		±0.01% ±0.05sec.
Memory protection		Over 5 years(at 25°C)
Control Output	Contact type	SPST(Single Pole Single Throw)
	Contact capacity	250VAC 15A resistive load
	Output number	Independent 1 output(1a)
Relay life cycle	Mechanical	Min. 5,000,000 operations(Switching capacity 30 times/minute)
	Electrical	50,000 operations<Switching capacity 20 times/1 minute, at 250VAC 15A(resistive load)>
Insulation resistance		Min. 100MΩ(at 500VDC megger)
Dielectric strength		2000VAC 50/60Hz for 1minute
Noise strength		±2kV the square wave noise(pulse width: 1μs) by the noise simulator
Environ- -ment	Ambient temperature	-10 to 55°C, storage: -25 to 65°C
	Ambient humidity	35 to 85%RH, storage: 35 to 85%RH
Unit weight		Approx. 110g

※Environment resistance is rated at no freezing or condensation.

■ Connections

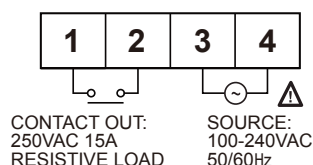


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Fiber
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sensor

Door/Area
sensor

Proximity
sensor

Pressure
sensor

Rotary
encoder

Connector/
Socket

Temp.
controller

SSR/
Power
controller

Counter

Timer

Panel
meter

Tacho/
Speed/ Pulse
meter

Display
unit

Sensor
controller

Switching
mode power
supply

Stepper
motor&
Driver&Controller

Graphic/
Logic
panel

Field
network
device