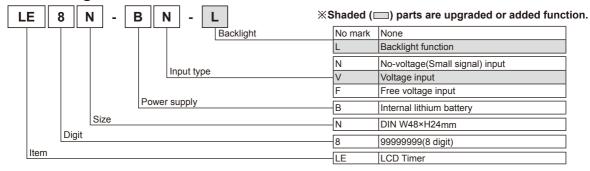
# DIN W48×H24mm, Indication only, LCD timer(hour meter) [LE8N Series]

## Ordering information



## Specifications

Model		LE8N-BN	LE8N-BN-L	LE8N-BV	LE8N-BV-L	LE8N-BF			
Appearance & Dimensions		Upgrade ( € c		IZEV PESET	S578				
Digit		8 digit(0 to 9999999	20)						
Digit size		W3.4 × H8.7mm	99)						
Display me	thod		type(character heig	ht size: 8 7mm)					
Operation r		Count up	type(character fielg	110 3120. 0.7111111)					
Power supp		Built-in battery	,						
Battery life		Approx. over 10 year	ars at 20°C			-			
Backlight po			24VDC±10%		24VDC±10%	T			
Input metho		No-voltage input	2.0202.070	Voltage input	2112021070	Free voltage input			
Count input	· -	Residual voltage: Max. 0.5VDC Short-circuit impedance: Max. 10kΩ Open-circuit impedance: Min. 750kΩ		"H" level voltage:	4.5-30VDC 0-2VDC	"H" level voltage: 24-240VAC/6-240VDC "L" level voltage: 0-2VAC/0-2.4VDC			
RESET inp	ut	No-voltage input		Voltage input		No-voltage input			
Min. signal	width	SIGNAL INPUT, RESET input: Min. 20ms							
Time specif	ication(TS1)	9999.59.59 (h.m.s), 99999.59.9 (h.m), 999999.59 (h.m)							
Time specif		9999.2 3.59 (d.h.m), 999942 3.9 (d.h), 99999999 (s)							
	ication(TS3)	9999h59.9 (h.m), 99999h59 (h.m), 999999.9h (h)							
Time error		±0.01%(time error, temperature error)							
External se	t switch	SW1 <sup>×1</sup> , SW2 <sup>×2</sup> , SW3 <sup>×3</sup>							
Insulation re		Min. 100MΩ(at 500VDC megger)							
Dielectric st		,	2,000VAC 60Hz for 1minute						
Vibration	Mechanical	0.75mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 1 hour							
5100011	Malfunction					ctions for 10 minutes			
Shock		300m/s <sup>2</sup> (approx. 30G) in each of X, Y, Z directions for 3 times							
Oriodic	Malfunction	100m/s <sup>2</sup> (approx. 10	100m/s²(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, storage: 35 to 85%RH									
Protection			oof rubber for front p						
Accessory		, ,	Rubber waterproof ri	ng					
Approval		( ( c <b>FN</b> u		_					
Weight <sup>※5</sup>		Approx. 96g(approx	c. 50g)						
※1: SW1 is	the front pane	el RESET key enable	e/disable set switch.	※2: SW2 is	the time range set s	witch.			

- X1: SW1 is the front panel RESET key enable/disable set switch.
- X3: SW3 is available to select time specification TS1, TS2, or TS3.
- \*\*4: No-voltage input, voltage input: between terminals and the case / Free voltage input: between the free voltage input terminal and the RESET input terminal, between terminals and the case
- \*Environment resistance is rated at no freezing or condensation.

Photo electric sensor

Tacho/ Speed/ Pulse meter

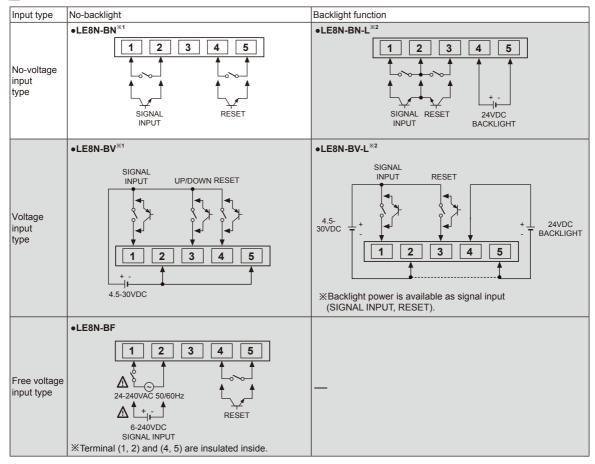
Display unit

mode powe supply

Stepper motor& Driver&Contro

Graphic/ Logic panel

Field network device



 $\times$ 1: Terminal 2 and 5 are connected inside. (Non-isolated)  $\times$ Use reliable contacts enough to flow 5 $\mu$ A current.

X2: Terminal (1, 2, 3) and (4, 5) are insulated inside.

# Digital LCD timer DIN W48×H48mm [LE3S Series]

## Specifications

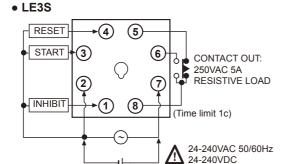
Model	LE3S	LE3SA	LE3SB		
Appearances & Dimensions	<b>(€ cAL</b> us	TIMER A B B D D D D D D D D D D D D D D D D D			
	[W48×H48×L67mm]				
Function	Multi time and operation	Multi time range, Power ON Delay	operation		
Display method	LCD display(character size: W4×H8	Bmm)			
Power supply	24-240VAC 50/60Hz / 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), A	Approx. 1.5W(240VDC)		
Reset time	Max. 200ms	Max. 100ms			

# Specifications

Model		LE3S	LE3SA	LE3SB				
Min.	START							
input	INHIBIT	Min. 20ms	_					
signal	RESET							
	START	No-voltage input						
Input	INHIBIT	Impedance at short-circuit: Max. 1kΩ	1kΩ					
	RESET	Residual voltage:Max. 0.5VDC Impedance at open-circuit: Min. 100kΩ						
Timing o	peration	Signal ON Start	Power ON Start					
	Contact type	Time limit SPDT(1c)	Time limit DPDT(2c)	Time limit SPDT(1c), Instantaneous SPDT(1c)				
output	Contact capacity	250VAC 5A resistive load	250VAC 3A resistive load					
Relay	Mechanical	Min. 10,000,000 operations						
life cycle	Electrical	Min. 100,000 operations (250VAC 5A resistive load)	Min. 100,000 operations (250VAC 3A resistive load)					
Output m	node	10 operation modes	Power ON Delay mode					
Environ-	Ambient temperature	-10 to 55°C, storage: -25 to 65°C						
ment	Ambient humidity	35 to 85%RH						
Accessor	ry	Bracket						
Repeat e	error	Max. ±0.01% ±0.05sec.						
SET erro	r	(for Power ON Start)	Max. ±0.01% ±0.05sec.					
Voltage e	error	Max. ±0.005% ±0.03sec.						
Tempera	ture error	(for Signal ON Start)						
Insulation	n resistance	100MΩ(at 500VDC megger)						
Dielectric	strength	2000VAC 50/60Hz for 1 minute						
Noise str	ength	±2kV the square wave noise(pulse width: 1μs) by the noise simulator						
\	Mechanical	0.75mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 1hour						
Vibration 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/s² (approx. 30G) in each of X,	Y, Z directions for 3 times					
SHOCK	Malfunction	100m/s² (approx. 10G) in each of X, Y, Z directions for 3 times						
Approval		( € c <b>PL</b> us						
Unit weig	jht	Approx. 100g	Approx. 105g					

XEnvironment resistance is rated at no freezing or condensation.

## Connections



SOURCE

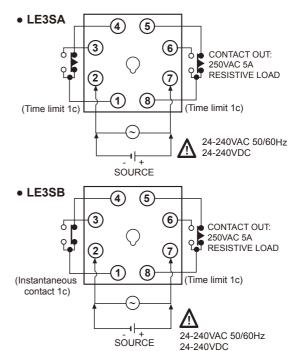


Photo electric sensor

optic sensor

Door/Area sensor Proximity sensor

Pressure

Rotary encoder

Connector/ Socket

Temp.

SSR/ Power controller

Counter

Timer

Panel

Tacho/ Speed/ Pulse meter

Display unit

Sensor controller

Switching mode power supply

Stepper motor& Driver&Controller

Graphic/ Logic panel

Field network device

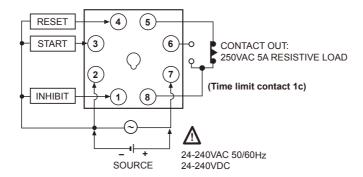
# DIN W48×H48mm Digital backlight LCD timer [LE4S Series]

# Specifications

	LE4SA LE4SA						
nces	(€ c <b>Al</b> us						
	[W48×H48×L70mm]						
	Multi time and Multi operation						
nethod	LCD display(Backlight)						
pply	24-240VAC 50/60Hz, 24-240VDC universal						
voltage range	90 to 110% of rated voltage						
nsumption	24-240VAC: Max. 4.5VA, 24-240VDC: Max. 2W	24-240VAC: Max. 4VA, 24-240VDC: Max. 1.6W					
ne	Max. 100ms						
START							
INHIBIT	1ms, 20ms(selectable)	_					
RESET							
START	No-voltage input						
INHIBIT		_					
RESET							
peration	·	Power ON Start					
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					
Mechanical	Min. 10,000,000 operations						
Electrical							
ode							
Ambient temperature	-						
Ambient humidity	35 to 85%RH						
,	Bracket						
rror							
ror	Max. ±0.01% ±0.05sec.(Power ON Start)	M = +0.049/ +0.05					
rror	Max. ±0.005% ±0.03sec.(Signal ON Start)	Max. ±0.01% ±0.05sec.					
ure error	1						
resistance	100MΩ(at 500VDC megger)						
strength	2000VAC 50/60Hz for 1 minute						
ength	±2kV the square wave noise(pulse width: 1µs) by the noise simulator						
Mechanical	0.75mm amplitude at frequency of 10 to 55Hz(for 1 m	nin.) in each of X, Y, Z directions for 1hour					
Malfunction	0.5mm amplitude at frequency of 10 to 55Hz(for 1 mi	n.) in each of X, Y, Z directions for 10 minutes					
Mechanical	300m/s² (approx. 30G) in each of X, Y, Z directions for						
Malfunction	100m/s² (approx. 10G) in each of X, Y, Z directions for	or 3 times					
,	(€ c <b>%)</b> ∪s						
ht	Approx. 98g						
	nethod pply evoltage range nsumption ne START INHIBIT RESET START INHIBIT RESET peration Contact type Contact capacity Mechanical Electrical ode Ambient temperature Ambient humidity fror fror fror fror fror fror fror fro	Multi time and Multi operation					

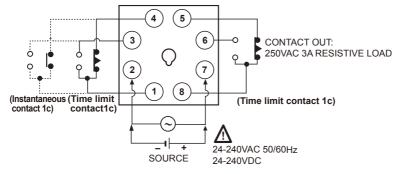
 $\ensuremath{\mathsf{XEnvironment}}$  resistance is rated at no freezing or condensation.

#### O LE4S



#### O LE4SA

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



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

#### • [从-△] mode

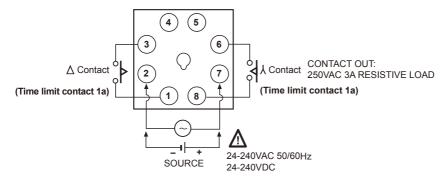


Photo electric sensor

Fiber optic sensor

Door/Area sensor

Proximity

Pressure

Rotary

controller

SSR/ Power controller

Counter

Timer

Panel

Tacho/ Speed/ Pulse meter

> Display unit

Sensor

Switching mode power supply

Stepper motor& Driver&Control

Graphic/ Logic panel

Field network device

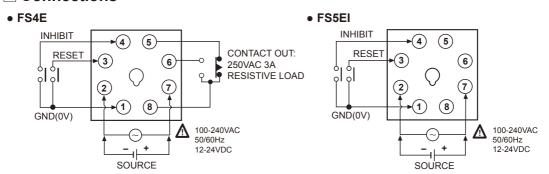
# DIN W48×H48mm 8 pin plug timer [FSE Series]

## Specifications

Model		FS4E	FS5EI				
Appearanc & Dimension		1234 1234					
		[W48×H48×L85mm]	I				
Function		Single preset Up/Down Timer	Up/Down indicator				
Character		W4×H8mm					
Power sup		100-240VAC 50 /60Hz, 12-24VAC/DC universal					
	oltage range	90 to 110% of rated voltage	T				
Power cons	umption	Approx. 4.5VA(240VAC 60Hz), Approx. 2.5W(24VDC)	Approx. 3.5VA(240VAC 60Hz), Approx. 2.2W(24VDC)				
Return time		Min. 500ms					
	RESET	Approx. 20ms					
signal width							
IInniit !	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 ope	ration	Power ON Start					
One-shot o	utput time	0.05 to 5sec.					
Control	Contact type	Time-limit SPDT(1c)	_				
output	Contact capacity	250VAC 3A at resistive load	_				
Relay	Mechanical	Min. 10,000,000 operations	_				
life cycle	Electrical	Min. 100,000 operations (250VAC 3A resisitive load)	_				
Memory pr	otection	10 years(When using non-volatile semiconductor men	nory)				
Repeat err	or						
SET error		Man, 10 040/ 10 05					
Voltage err	or	Max. ±0.01% ±0.05sec.					
Temperatu	re error	1					
Insulation r	esistance	100MΩ(at 500VDC megger)					
Dielectric s	trength	2000VAC 50/60Hz for 1 minute					
Noise	AC power	±2kV the square wave noise(pulse width: 1μs) by the noise simulator					
strength DC power		±500V the square wave noise(pulse width: 1µs) by the noise simulator					
V (1) (1)	Mechanical	0.75mm amplitude at frequency of 10 to 55Hz (for 1 min.) in each of X, Y, Z directions for 1hour					
Vibration Malfunction		0.5mm amplitude at frequency of 10 to 55Hz (for 1 min.) in each of X, Y, Z directions for 10 minutes					
Oh a ali	Mechanical	300m/s² (approx. 30G) in each of X, Y, Z directions for 3 times					
Shock Malfunction		100m/s² (approx. 10G) in each of X, Y, Z directions for 3 times					
Environ Ambient temperature		-10 to 55°C, storage: -25 to 65°C					
-ment	Ambient humidity	35 to 85%RH					
Accessory		Bracket					
Unit	AC power	Approx. 122g	Approx. 112g				
weight	DC power	Approx. 130g	Approx. 120g				
	<del>' '</del>						

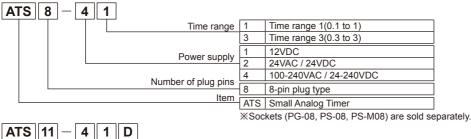
XEnvironment resistance is rated at no freezing or condensation.

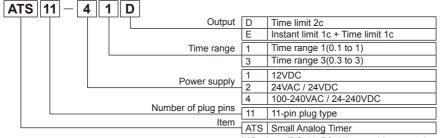
## Connections



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

## Ordering information





XSockets (PG-11, PS-11) are sold separately.

## Specifications

Appearances & Cimpus Ci									
Dimensions	ATS11-□1E ATS11-□3E								
[W38×H42×L75.5mm] [W38×H42×L75.5mm] [W38×H42×L75.5mm]									
Function Multi Function Timer									
Control time setting range   0.1sec to 10hour   0.3sec to 30hour   0.1sec to 10hour   0.1	ec to 30hour								
Power supply •100-240VAC 50/60Hz, 24-240VDC, universal •24VAC 50/60Hz, 24VDC, universal •12VDC	•100-240VAC 50/60Hz, 24-240VDC, universal •24VAC 50/60Hz, 24VDC, universal •12VDC								
Allowable voltage range 90 to 110% of rated voltage									
1•10(C)λ(()/Δ(* / Λ')/Δ * λ/-λλ(()/() (* * 'λ/) (* * 1•10(C)λ(()/Δ(* * 3 5)/Δ * λ/-λλ(()/() (* * 1 5)// (* 1 5)/ (* 1 5)// (*	*100-240VAC: 4.2VA, 24-240VDC: 2W *24VAC: 4.5VA, 24VDC: 2W *12VDC: 1.5W								
Return time Max. 100ms									
Min. input signal         START signal         Max. 50ms           width         RESET									
START   No-voltage input - Short-circuit impedance: Max. 1kΩ, Residual voltage: Max. 0.5V   Open-circuit impedance: Max. 100kΩ									
Time operation Power ON Start Signal ON Start	Signal ON Start								
Control output  Time limit DPDT(2c) or Instantaneous SPDT(1c)+Time limit SPDT(1c) Time limit SPDT (1c) Instant limit SPDT (1c) Instant limit SPDT (1c)									
Contact capacity 250VAC 3A resistive load									
Relay life Mechanical Min. 10,000,000 operations									
	Min. 100,000 operations (250VAC 3A resistive load)								

Photo electric sensor

Door/Area sensor

Timer

Tacho/ Speed/ Pulse meter

Display unit

Switching mode powe supply

Stepper motor& Driver&Contr

Graphic/ Logic panel

Field network device

## Selection Guide

## Specifications

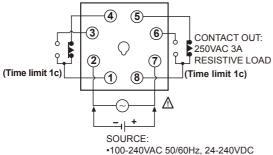
Model		ATS8-□1	ATS8-□3	ATS11-□1D	ATS11-□3D	ATS11-□1E	ATS11-⊟3E		
Repeat error Max. ±0.2% ±10ms									
Setting err	or	Max. ±5% ±50ms							
Voltage er	ror	Max. ±0.5%							
Temperatu	ire error	Max. ±2%		,					
Insulation	resistance	100MΩ(at 500VDC	megger)						
Dielectric	strength	2000VAC 50/60H	z for 1 min.						
Noise resi	stance	±2kV the square v	vave noise (pulse	width 1µs) by noi	se 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							
VIDIALIOII	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/s² (approx. 30G) in each of X, Y, Z directions 3 times							
SHOCK	Malfunction	100m/s² (approx. 10G) in each of X, Y, Z directions 3 times							
Ambient temperature		-10 to 55°C, storage: -25 to 65°C							
ment Ambient humidity 35 to 85%RH, storage: 35 to 85%RH									
Approval		<b>□ 17:</b> 3 )							
Accessory	r	Bracket							
Unit weigh	it	Approx. 72g	Approx. 72g						

XEnvironment resistance is rated at no freezing or condensation.

#### Connections

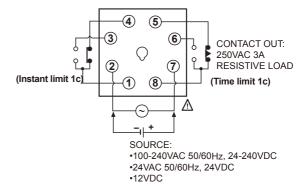
#### O ATS8

#### •When selectiong [A], [F] output operation mode

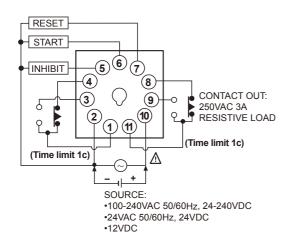


- - •24VAC 50/60Hz, 24VDC
  - •12VDC

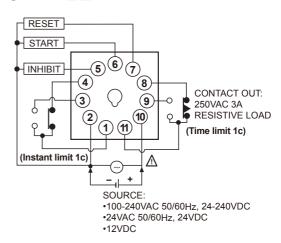
#### •When selecting [A1], [B], [F1], [I] output operation mode



#### 



#### 



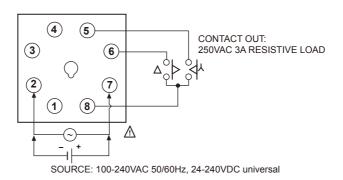
# Star-Delta Timer with Free power, compact size W38×H42mm [ATS8SD-4]

## Specifications

Model		ATS8SD-4					
Appearar & Dimension		( € c¶us					
Function		Star-Delta Timer					
Control tin	ne setting range	0.5sec to 100sec (max. time)					
Power su		100-240VAC 50/60Hz /24-240VDC universal					
Allowable	e voltage range	90 to 110% of rated voltage					
Power co	onsumption	100-240VAC: 3VA, 24-240VDC: 1.5W					
Return tii	me	Max. 100ms					
Time ope	eration	Power ON Start type					
Control	Contact type	λ contact: SPST(1a), Δ contact: SPST(1a)					
output	Contact capacity	250VAC 3A resistive load					
Relay life cycle	Mechanical Electrical	Min. 10,000,000 operations Min. 100,000 operations (250VAC 3A resistive load)					
Repeat e		Max. ±0.2% ±10ms					
人 setting		Max. ±5% ±50ms					
Voltage e		Max. ±0.5%					
	ture error	Max. ±2%					
<u> </u>	tching time error						
	n resistance	100MΩ (at 500VDC megger)					
Dielectric	strength	2000VAC 50/60Hz for 1 min.					
Noise res	sistance	±2kV the square wave noise (pulse width 1μs) by noise simulator					
	Mechanical	0.75mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 1 hour					
Vibration	Malfunction	0.5mm mplitude at frequency of 10 to 55HHz(for 1 min.) in each of X, Y, Z directions for 10 min.					
011	Mechanical	300m/s² (approx. 30G) in each of X, Y, Z directions 3 times					
Snock	Malfunction 100m/s² (approx. 10G) in each of X, Y, Z directions 3 times						
Environ-	Ambient temperature -10 to 55°C, storage: -25 to 65°C						
ment	Ambient humidity	35 to 85%RH, storage: 35 to 85%RH					
Approval		(€: 24, 3)					
Accessor	ry	Bracket					
Unit weig	jht	Approx. 72g					

 $\ensuremath{\mathbb{X}}\xspace$  Environment resistance is rated at no freezing or condensation.

#### Connections



Autonics 233

Photo electric sensor

Fiber optic sensor

Door/Area sensor

encoder

Connector/

Temp.

SSR/ Power controller

Counter

Timer

anel

Tacho/ Speed/ Pulse meter

Display unit

Sensor

Switching

Switching mode power supply

Stepper motor& Driver&Controller

Graphic/ Logic panel

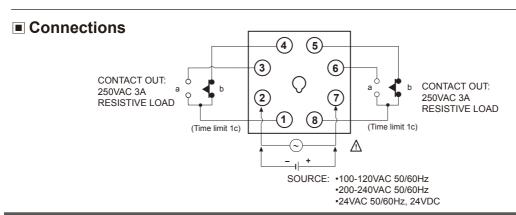
Field network device

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

## Specifications

Model		ATS8P-2S	ATS8P-5S	ATS8P-6S	ATS8P-2M	ATS8P-5M	ATS8P-6M			
Appearan	ices	CE c <b>PL</b> us		700						
&				1	Kit I					
Dimensio	ns									
		[W38×H42×L75.5mm	1]							
Function		Power OFF Delay	/							
Control tin	ne setting range	0.1sec to 10sec			0.1min to 10min					
		•100-120VAC 50/6	60Hz •200-240	VAC 50/60Hz	•24VAC 50/60Hz,	24VDC universal				
Power su	pply	24VAC 50/60Hz, 24VDC universal	200-240VAC 50/60Hz	100-120VAC 50/60Hz	24VAC 50/60Hz, 24VDC universal	200-240VAC 50/60Hz	100-120VAC 50/60Hz			
Allowable	voltage range	90 to 110% of rate	ed voltage							
Power co	nsumption	24VAC: 0.2VA, 24VDC: 0.2W	1.5VA	1.5VA	24VAC: 0.2VA, 24VDC: 0.2W	1.5VA	1.5VA			
TIme ope	ration	Power OFF Start	type							
Control	Contact type	Time limit DPDT(2	2c)							
output	Contact capacity	250VAC 3A resistive load								
Relay life	Mechanical	Min. 10,000,000 operations								
cycle	Electrical	Min. 100,000 oper	rations (250VAC 3A	resistive load)						
Repeat er	ror	Max. ±0.2% ±10ms								
Setting er	ror	Max. ±5% ±50ms								
Votage er	ror	Max. ±0.5%								
Temperat	ure error	Max. ±2%								
Insulation	resistance	100llΩ(at 500VDC megger)								
Dielectric	strength	2000VAC 50/60Hz for 1 min.								
Noise res	istance	±2kV the square wave noise (pulse width: 1μs) by noise simulator								
V (1) (1	Mechanical	0.75mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 1 hour								
Vibration	Malfunction	0.5mm mplitude at frequency of 10 to 55HHz(for 1 min.) in each of X, Y, Z directions for 10 min.								
0	Mechanical	300m/s <sup>2</sup> (approx. 30G) in each of X, Y, Z directions 3 times								
Shock	Malfunction	100m/s <sup>2</sup> (approx.	10G) in each of X,	Y, Z directions 3 tir	mes					
Environ- Ambient temperature		-10 to 55°C, storage: -25 to 65°C								
ment	Ambient humidity	35 to 85%RH, sto	rage: 35 to 85%RH							
Approval		(€ <b>;\$\</b> u								
Accessor	y	Bracket								
Unit weigl	ht	Approx. 80g			Approx. 85g					

XEnvironment resistance is rated at no freezing or condensation.



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

## Ordering information

TS	8	W	_	4		1	※Sockets	s (PG-08, PS-08, PS-M8, PG-11, PS-11) are sold separate
						Time range	1	Time range 1(0.1 to 1)
					3	Time range 3(0.3 to 3)		
	Power supply			ver cupply	1	12VDC		
					FOV	ver supply	2	24VAC / 24VDC
		_	_				4	100-240VAC / 24-240VDC
		Time operation				on	W	Twin(Flicker) operation
Number of plug pins				g pir	ns	8	8-pin plug type	
l							11	11-pin plug type
Item							ATS	Small Analog Timer

## Specifications

Model		ATS8W-□1	ATS11W-□1	ATS8W-□3	ATS11W-□3			
		<b>C</b> € c <b>FL</b> us						
Appearan & Dimension			10 10 10 10 10 10 10 10 10 10 10 10 10 1					
Function		[W38×H42×L75.5mm]  ON/OFF Flicker op	oration					
	e setting range	0.1sec to 10hour	eration	0.3sec to 30hour				
Power sur			Hz, 24-240VDC (universal)	•24VAC 50/60Hz, 24VDC (	universal) •12VDC			
	voltage range	90 to 110% of rated		244710 00/00112, 24400	universal) 12 v B O			
	nsumption		A, 24-240VDC: 2W •24VAC:	4.5VA 24VDC: 2W •12V	/DC: 1.5W			
Return tim	<u> </u>	Max. 100ms	1,21210000.200	1.0071, 21020. 200	. 1.011			
Time oper		Power ON Start type						
Control	Contact type	71		ne limit SPDT(1c) selectabl	e according to output operation mode			
output	Contact capacity	250VAC 3A resistive	. , ,	. ,				
Relay life	Mechanical	Min. 10,000,000 ope	erations					
cycle	Electrical	Min. 100,000 operat	ions(250VAC 3A resistive load)					
Repeat er	ror	Max. ±0.2% ±10ms						
Set error		Max. ±5% ±50ms						
Voltage er	rror	Max. ±0.5%						
Temperati	ure error	Max. ±2%						
Insulation	resistance	100MΩ (at 500VDC megger)						
Dielectric	strength	2000VAC 50/60Hz for 1 min.						
Noise resi	istance	±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						
VIDIALIOII	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		G) in each of X, Y, Z direction					
	Malfunction	nction 100m/s² (approx. 10G) in each of X, Y, Z directions 3 times						
Environ- ment  Ambient temperature temperature temperature -10 to 55°C, storage: -25 to 65°C								
	Ambient humidity	35 to 85%RH, stora	ge: 35 to 85%RH					
Approval		(€ c <b>FLL</b> us						
Accessory	/	Bracket						
Unit weigh	nt	Approx. 72g						

X Environment resistance is rated at no freezing or condensation.

Photo electric sensor

> Fiber optic

Door/Area sensor

Proximity

Pressure

Rotary

Connector/

controller

Power controller

Counter

Timer

Panel

Tacho/ Speed/ Pulse

Display unit

ensor

Switching mode power supply

Stepper motor& Driver&Controller

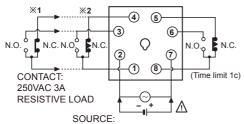
Graphic/

Graphic/ Logic panel

Field network device

#### O ATS8W

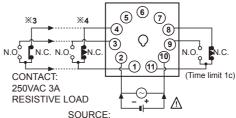
X1: When selecting [F2], [N2] output operation mode X2: When selecting [F1], [F3], [N1], [N3] output operation mode



- •100-240VAC 50/60Hz, 24-240VDC
- •24VAC 50/60Hz, 24VDC
- •12VDC

#### O ATS11W

X3: When selecting [F2], [N2] output operation mode X4: When selecting [F1], [F3], [N1], [N3] output operation mode

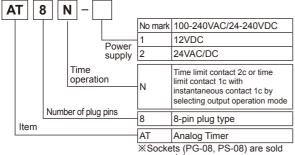


•100-240VAC 50/60Hz, 24-240VDC

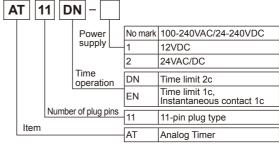
- •24VAC 50/60Hz, 24VDC
- •12VDC

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

## Ordering information



separately.



XSockets (PG-11, PS-11) are sold separately.

## Specifications

Model		AT8N-□	AT11EN-	AT11DN-□					
		C € c <b>Al</b> us	CE cRJus	C € c <b>PJ</b> us					
Appearances & Dimensions									
		[W48×H48×L65mm]	[W48×H48×L65mm]	[W48×H48×L65mm]					
Function	n	Multi function timer	Multi function timer						
Control	time setting range	0.05 sec. to 100 hour							
Power s	supply	• 100-240VAC 50/60Hz, 24-240VDC universal • 24VAC 50/60Hz, 24VDC universal • 12VDC							
Allowab	le 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 • 24VAC: 4VA, 24VDC: 1.5 • 1.							
Reset time		Max. 100ms							
Min. START									
input signal	INHIBIT	1—	Min. 50ms						
width	RESET								

# Selection Guide

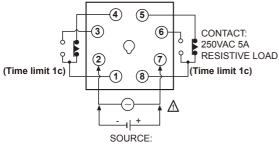
Model		AT8N-□	AT11EN-□	AT11DN-□
Input	START INHIBIT RESET	_		npedance: Max. 1kΩ ge: Max. 0.5V npedance: Min. 100kΩ
Timing o	peration	Power ON start type	Signal ON Start type	
Control output	Contact type	Time limit DPDT(2c), Time limit DPDT(1c)+ Instantaneous DPDT(1c) by selecting output operation mode	Time limit SPDT(1c), Instantaneous SPDT(1c)	Time limit DPDT(2c)
	Contact capacity	250VAC 5A resistive load		
Relay	Mechanical	Min. 10,000,000 operations		
life cycle Electrical		Min. 100,000 operations(250VAC 5A resistive load)		
Repeat 6	error	Max. ±0.2% ±10ms		
SET erro	or	Max. ±5% ±50ms		
Voltage	error	Max. ±0.5%		
Temperature error		Max. ±2%		
Insulatio	n resistance	Min. 100MΩ(at 500VDC megger)		
Dielectri	c strength	2000VAC 50/60Hz for 1 minute		
Environ	Ambient temperature	-10 to 55°C, storage: -25 to 65°C		
-ment	Ambient humidity	35 to 85%RH		
Approva	I	(€ : <b>P1</b> ∪s		
Accesso	ry	Bracket		
Unit weight		Approx. 90g		

X Environment resistance is rated at no freezing or condensation.

#### Connections

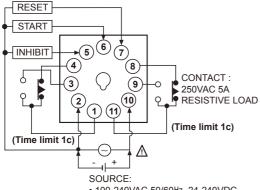
#### O AT8N

• [A], [F] mode



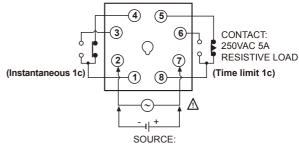
- 100-240VAC 50/60Hz, 24-240VDC
- 24VAC 50/60Hz, 24VDC
- 12VDC

#### O AT11DN



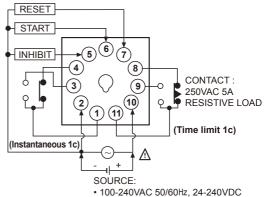
- 100-240VAC 50/60Hz, 24-240VDC
- 24VAC 50/60Hz, 24VDC
- 12VDC

• [A1], [B], [F1], [I] mode



- 100-240VAC 50/60Hz, 24-240VDC
- 24VAC 50/60Hz, 24VDC
- 12VDC

O AT11DEN



- 24VAC 50/60Hz, 24VDC
- 12VDC

Photo electric sensor

Door/Area sensor

SSR/ Power controller

Timer

Tacho/ Speed/ Pulse meter

Display unit

Sensor controller

Switching mode power supply

Stepper motor& Driver&Control

Graphic/ Logic panel

Field network device

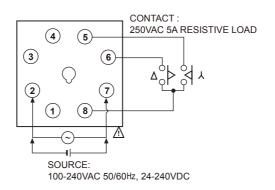
# DIN W48×H48mm Star-Delta timer [AT8SDN]

## Specifications

Model	-	AT8SDN		
		(€ c <b>PL</b> us		
Appearances & Dimensions		THE CONTRACT OF THE CONTRACT O		
		[W48×H48×L65mm]		
Function		Star-Delta timer		
<u> </u>	ime setting range	0.5 to 100 sec.		
Power s		100-240VAC 50/60Hz / 24-240VDC universal		
	e voltage range	90 to 110% of rated voltage		
Power co	onsumption	100-240VAC: 3.2VA, 24-240VDC: 1.5W		
Reset tir	ne	Max. 100ms		
Timing o	peration	Power ON start type		
Control	Contact type	从 contact: SPST(1a), Δ contact: SPST(1a)		
output	Contact capacity	250VAC 5A resistive load		
Relay	Mechanical	Min. 10,000,000 operations		
life cycle	Electrical	Min. 100,000 operations(250VAC 5A resistive load)		
life cycle Electrical Repeat error		Max. ±0.2 % ±10ms		
人Setting	error	Max. ±5% ±50ms		
Voltage	error	Max. ±0.5%		
Tempera	ature error	Max. ±2%		
, A-∆ Swi	tching time error	Max. ±25%		
Insulatio	n resistance	100MΩ(at 500VDC megger)		
Dielectri	c strength	2000VAC 50/60Hz for 1 minute		
Noise st	rength	±2kV the square wave noise(pulse width: 1μs) by the noise simulator		
\/ibratian	Mechanical	0.75mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 1 hours		
Vibration	Malfunction	0.5mm amplitude at frequency of 10 to 55Hz (for 1 min.) in each of X, Y, Z directions for 10 minutes		
Chaal	Mechanical	300m/s²(approx. 30G) in each of X, Y, Z directions for 3 times		
Shock	Malfunction	100m/s²(approx. 10G) in each of X, Y, Z directions for 3 times		
Environ	Ambient temperature	-10 to 55°C, storage: -25 to 65°C		
-ment	Ambient humidity	35 to 85%RH, storage: 35 to 85%RH		
7 tillbiolit lialliaity   00 to 00		20 <b>.//P</b> 3 → 20.		
Accessory		Bracket		
Unit wei	ght	Approx. 90g		

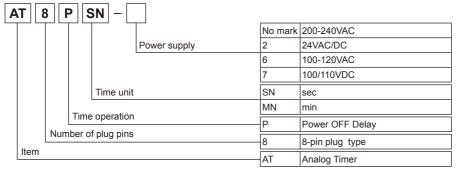
XEnvironment resistance is rated at no freezing or condensation.

## Connections



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

## Ordering information



XSockets (PG-08, PS-08) are sold separately.

## Specifications

Model		AT8PSN-	AT8PMN-	
Appearances & Dimensions		<b>( € c PN us</b>	C € c ₹Nus  [W48×H48×L65mm]	
Function		Power OFF Delay	[[VV40-1140-1200IIIII]	
	me setting range	0.05 to 10 sec.	0.05 to 10 min.	
Power su		• 100-120VAC 50/60Hz • 200-240VAC 50/60Hz • 100/110VDC • 24VAC 50/60Hz, 24VDC (universal)		
Allowable	e voltage range	90 to 110% of rated voltage		
Power consumption		• 100-120VAC: 1.5VA • 100/110VDC: 0.8W • 24VDC: 0.2VA, 24VDC 0.2W		
Timing op	peration	Power OFF start type		
Control	Contact type	Time limit DPDT(2c)		
output	Contact capacity	250VAC 3A resistive load		
Relay	Mechanical	Min.10,000,000 operations		
life cycle	Electrical	Min. 100,000 operations(250VAC 3A resistive load)		
Repeat e	rror	Max. ±0.2 % ±10ms		
Setting e	rror	Max. ±5% ±50ms		
Voltage e		Max. ±0.5%		
Temperat	ture error	Max. ±2%		
	resistance	100MΩ(at 500VDC megger)		
Dielectric		2000VAC 50/60Hz for 1 minute		
Noise str	ength	±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/s² (approx. 30G) in each of X, Y, Z directions 3 times		
CHOOK	Malfunction	100m/s² (approx. 10G) in each of X, Y, Z directions 3 times	nes	
Environ	Ambient temperature	-10 to 55°C, storage: -25 to 65°C		
-ment	Ambient humidity	35 to 85%RH		
Approval		( € c <b>FL</b> us		
Accessory		Bracket		
Unit weig	ht	Approx. 100g		

 $\ensuremath{\mathbb{X}}$ Environment resistance is rated at no freezing or condensation.

Photo electric sensor

Fiber optic sensor

Door/Area sensor

Proximity

Pressure

Rotary

Connector

Socket

Temp. controller

SSR/ Power controller

Counter

Timer

Panel

Tacho/ Speed/ Pulse meter

Display unit

Sensor

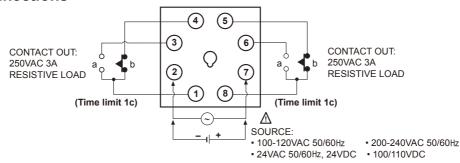
.....

Switching mode power supply

Stepper motor& Driver&Controlle

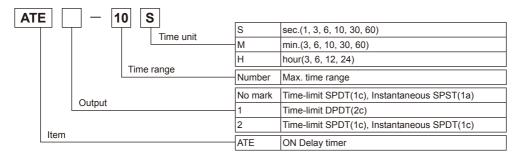
Graphic/ Logic panel

Field network device



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

## Ordering information



## Specifications

Model	ATE - □S □M □H	ATE1 - □S □M □H	ATE2 - S M H	
Appearances & Dimensions	Arten at 195	Addition Atti-XX	Astons 4112-315	
	[W48×H48×L79mm]	[W48×H48×L79mm]	[W48×H48×L79mm]	
Function	Power ON Delay			
Control time setting range	sec.(1, 3, 6, 10, 30, 60), min.(3, 6	5, 10, 30, 60), <b>hour</b> (3, 6, 12 ,24)		
Power supply	110/220VAC 50/60Hz	110VAC, 220VAC 50/60Hz, 12VD	C, 24VDC(option)	
Allowable voltage range	90 to 110% of rated voltage	90 to 110% of rated voltage		
Power consumption	Approx. 10VA(240VAC 60Hz), Approx. 2W(24VDC, 12VDC)			
Reset time	Max. 200ms	Max. 200ms		
Timing operation	Power ON start type			

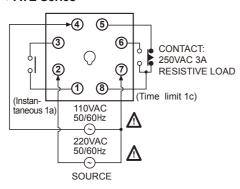
# **■** Specifications

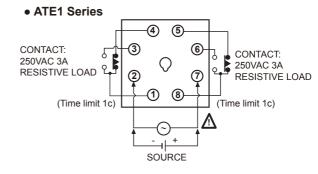
Model		ATE - S M	ATE1 - □S □M □H	ATE2 – □S □M □H	
Control output	Contact type	Time limit SPDT(1c), Instantaneous SPST(1a)	Time limit DPDT(2c)	Time limit SPDT(1c), Instantaneous SPDT(1c)	
	Contact capacity	250VAC 3A resistive load			
Relay life cycle	Mechanical	Min.10,000,000 operations			
	Electrical	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			
\	Mechanical	0.75mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 1 hours			
Vibration	Malfunction	0.5mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 10 minutes			
011	Mechanical	300m/s² (approx. 30G) in each of X, Y, Z directions for 3 times			
Shock	Malfunction	100m/s² (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			

XEnvironment resistance is rated at no freezing or condensation.

#### Connections

#### ATE Series





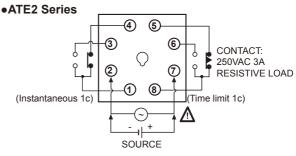


Photo electric sensor

Fiber optic

sensor

Proximity

Pressure sensor

Rotary

Connector/

Tomp

SSR/ Power controller

Counter

meter

Tacho/ Speed/ Pulse meter

> Display unit

Sensor controller

Switching mode power supply

Stepper motor& Driver&Controlle

Graphic/ Logic panel

Field network device

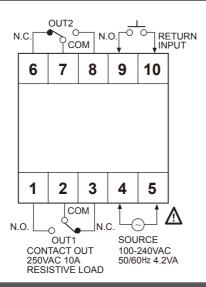
# W72×H72mm, Weekly/Yearly timer [LE7M-2]

## Specifications

Model		LE7M-2		
Appearances & Dimensions		[W72×H72×L60mm]		
Power sup	pply	100-240VAC 50/60Hz		
Allowable	voltage range	90 to 110% of rated voltage		
Power co	nsumption	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)		
Temperati	ure error	±0.01% ±0.05sec.(ratio by set time)		
Memory p	rotection	Over 5 years(at 25°C)		
	Contact type	SPDT(Single Pole Double Throw)		
Control Output	Contact capacity	250VAC 10A resistive load		
	Output number	Independent 2 output(1c × 2)		
Relay	Mechanical	Min. 5,000,000 operations(switching capacity: 30 times/min)		
life cycle	Electrical	Min. 50,000 operations <switching 10a(resistive="" 20="" 250vac="" capacity:="" load)="" min,="" times=""></switching>		
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	Ambient temperature	-10 to 55°C, storage: -25 to 65°C		
-ment	Ambient humidity	35 to 80%RH		
Unit weigh	nt	Approx. 272g		

XEnvironment resistance is rated at no freezing or condensation.

## Connections



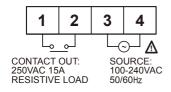
# W48×H48mm, Weekly/Yearly timer [LE365S-41]

# Specifications

Model		LE365S-41	
Appeara & Dimensio		CE cPLus	
		[W48×H48×L60mm]	
Power si	•••	100-240VAC 50/60Hz	$\dashv$
	e voltage range	90 to 110% of rated voltage	
	onsumption	2.4VA	
Timing p		48 steps for weekly, 24 steps for yearly	
Operation mode		ON/OFF mode, cycle mode, pulse mode	
Mounting	9	Panel flush, surface, DIN rail	
Time dev	viation	±15sec/month(25°C) (±4sec/week)	
Tempera	ture error	±0.01% ±0.05sec.	
Memory	protection	Over 5 years(at 25°C)	
	Contact type	SPST(Single Pole Single Throw)	
Control Output	Contact capacity	250VAC 15A resistive load	
Output	Output number	Independent 1 output(1a)	
Relay	Mechanical	Min. 5,000,000 operations(Switching capacity 30 times/minute)	
life cycle	Electrical	50,000 operations <switching 1="" 15a(resistive="" 20="" 250vac="" at="" capacity="" load)="" minute,="" times=""></switching>	
Insulatio	n resistance	Min. 100MΩ(at 500VDC megger)	
Dielectric strength		2000VAC 50/60Hz for 1minute	$\neg$
Noise sti	rength	±2kV the square wave noise(pulse width: 1μs) by the noise simulator	$\neg$
Environ	Ambient temperature	-10 to 55°C, storage: -25 to 65°C	
-ment	Ambient humidity	35 to 85%RH, storage: 35 to 85%RH	$\neg$
Unit weight		Approx. 110g	$\overline{}$

XEnvironment resistance is rated at no freezing or condensation.

## Connections



SSR/ Power controller Tacho/ Speed/ Pulse meter Display unit Switching mode power supply

> Stepper motor& Driver&Controller

Graphic/ Logic panel

Field network device

Photo electric sensor