

Product Features



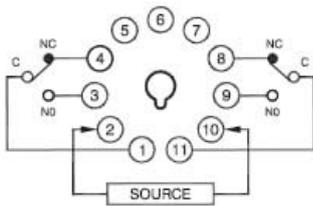
- Din sized enclosure for Panel / Flush mounting having front protective cover for safety.
- Timer and base available for Track (Din rail) / Screw mounting (except H3D1).
- Large transparent knob with lock is provided for precise time setting and protect from unintentional change of time setting.
- LED indication for timing in progress
- **H1DA-X** : Accepts any voltage from 12V AC/DC to 240V AC / 220V DC as signal between command contacts for timing initiation.
- **H1D1-X, H3D1**: Multifunction-On-Delay / Interval / Equal Cyclic-On / Equal Cyclic-Off programmable.

Specifications

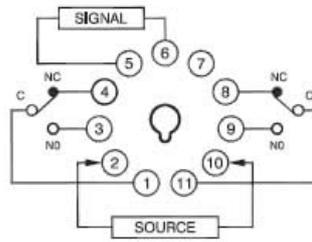
Model	H1D1-X (CSA)	H1DA-X (CSA)	H3D1
Function	On-Delay / Interval / Cyclic On-Off / Cyclic Off-On	Signal Off-Delay	On-Delay / Interval / Cyclic On-Off / Cyclic Off-On
Rated supply voltage	24V to 240V AC, 24V to 220V DC		
Operating voltage range	-10% to +10% of rated voltage		
Rated frequency	50Hz \pm 5%		
Power consumption	AC approx.3VA / 1W, DC approx. 2W	AC approx.5VA / 1W, DC approx. 3W	AC approx.3VA / 1W, DC approx. 2W
Allowable ripple (for DC supply)	3% maximum		
Control relay output	2 c/o rated for 5A@250V AC / 28V DC, resistive load		
Start signal	N.A	12V AC to 240V AC (50Hz), 12V DC to 220V DC for 150msec minimum	N.A
Time range	0.3secs to 60mins.	0.6secs to 60mins.	0.3secs to 60mins.
Range selection	3s, 6s, 30s, 60s, 3m, 6m, 30m, 60m	6s, 60s, 6m, 60m	3s, 6s, 30s, 60s, 3m, 6m, 30m, 60m
Setting accuracy	\pm 10% max. w.r.t full scale \pm 100msec		
Repeat accuracy	\pm 1% max. \pm 100msec		
Recovery time	100msec minimum		
Variation due to voltage change	\pm 2% max \pm 100msec		
Variation due to temp. change	\pm 5% max \pm 100msec		
Variation due to frequency change	\pm 2% max \pm 100msec		
Ambient temperature	Operation: -10°C to +55°C, Storage: -25°C to 80°C		
Humidity	Max. 85% RH @ 40°C		
Service life (under no load)	10 ⁶ operations minimum		
Electrical life (under full load)	10 ⁵ operations minimum		
Rated frequency of operation	1800 \pm 5% operations per hour maximum		
Insulation resistance	>100Mohms @ 500V DC		
Di-electrical strength	1. 1.5KV AC (rms), 50Hz for 1minute. (Between input terminals and enclosure). 2. 1.5KV AC (rms), 50Hz for 1minute. (Between relay contact terminals and enclosure). 3. 1.5KV AC (rms), 50Hz for 1minute. (Between input terminals and relay contact terminals). 4. 1.0KV AC (rms), 50Hz for 10-30sec. Between non-continuous contacts of the relay)		1. 2.5KV AC, 50Hz for 1minute. (Between current carrying and non-current carrying parts). 2. 1.5KV AC, 50Hz for 1minute. (Between contacts and control circuit). 3. 1.0KV AC, 50Hz for 1minute. (Between non-continuous contacts of the relay).
Electrical connection	11 pin plug-in type		Screw type terminals with self lifting clamps
Dimension (over-all)	48 x 48 x 94mm (W x H x D)		
Dimension (cut-out)	46 x 46mm		

Connections

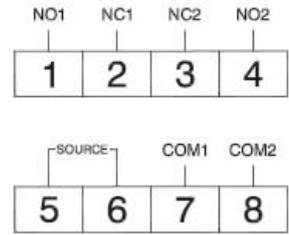
H1D1-X (CSA)



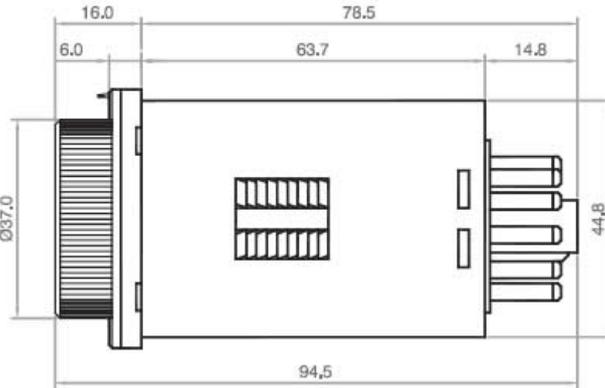
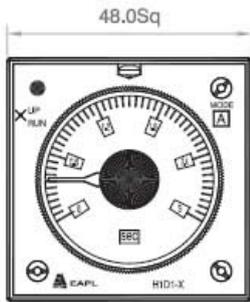
H1DA-X (CSA)



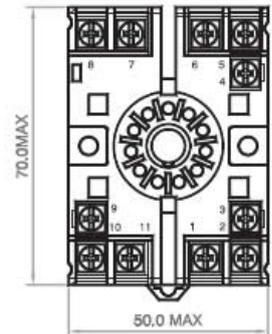
H3D1



Dimensions

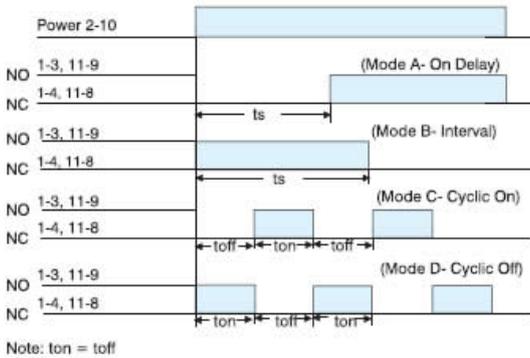


NOTE : ALL DIMENSIONS ARE IN mm.

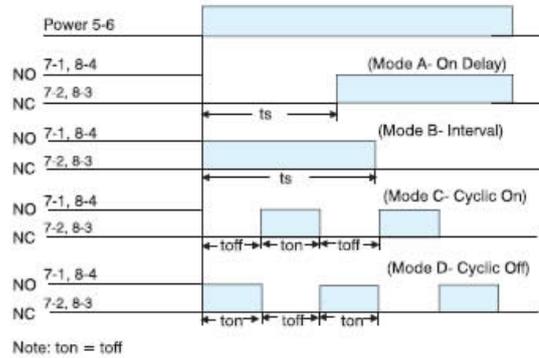


Timing Diagram

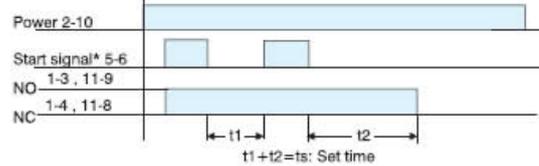
H1D1-X (CSA)



H3D1



H1DA-X (CSA)



*Start signal: Min.150msec

Accessories

- Protective Cover: The protective cover shields the front panel, particularly the timer setting section from dust and dirt. It also prevents the set value from being altered due to accidental contact with time setting knob.
- Side anchor for panel mounting.
- Knob lock / Screw driver.
- Base

Hints On Correct Use

- Properly insert the timer pins into the base slots taking into consideration the wedge in the timer and notch in the base.
- While selecting the time range ensure proper positioning of SEC / MIN within the window cutout.
- Ensure proper alignment of full range with respect to markings on the scale.

Caution

- Do not change the time range & set time while the timer is in operation.
 - Switch off the power while changing the time range & set time.
 - Application of voltage other than the specified one, will permanently damage the timer.
 - Use 2.5mm² U-type lugs with sleeve.
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