



Electronic Timers

ETS D1
On Delay Timer



P1 STS1
On Delay Timer (Secs.)



P1 STM1
On Delay Timer (Mins.)



ETA D1
Multi Range / Multi Voltage



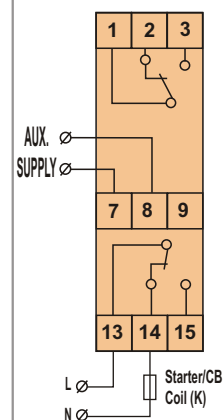
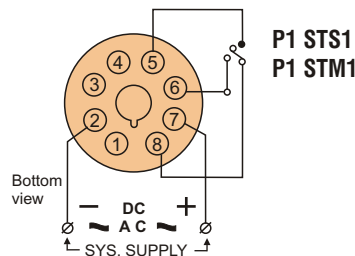
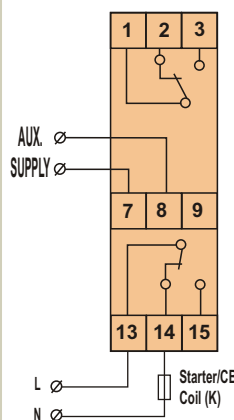
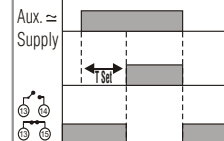
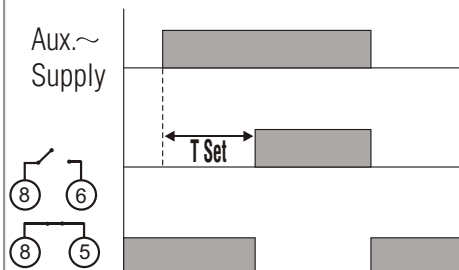
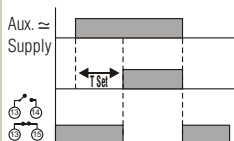
For time-delayed operations in electrical panels or the machines Minilec timers come in smaller time ranges (3-30, 6 - 60 Sec.) The 8 pin Plug in versions offer 0-10, 0-30, 0- 60 Secs. or Mins. Ranges with single voltage & single relay contact. After applying Aux. voltage & after set time delay the timers operate a relay output to control the connected load.

Timers with multiple time ranges (0.7 Sec. - 30 Min. or 0.1 Sec. - 72 Hrs.) are also available in Multi Voltage or single voltage options Time ranges can be selected by DIP switches. Time setting scale has calibrated universally. The Multi Function timers with Multi Range & Multi Voltage features make them versatile. After energizing, the relay output operates to control the connected load with ON Delay, Cyclic ON & Cyclic OFF, interval delay functions.

For Instant load operation followed by delayed operation in SPMs, Presses, AC Units a separate special application timer is best suited.

Supply Voltage Auxiliary	110 / 240 / 380 / 415 V AC ± 20%, 12 / 24 V DC ±20%	110 / 230 / 380 / V AC 415 V ±10%, 50/60 Hz 12/24 V DC	110 / 230 / 380 / V AC 415 V ±10%, 50/60 Hz 12/24 V DC	24-240 V AC / DC -20% + 10%
Output Contacts	1 CO (2 CO)	1 CO	1 CO	1 CO (2 CO)
Time Range	0.3 - 3, 1 - 10, 3 - 30, 6 - 60, 18 - 180 (secs. or mins.)	0-3, 0-10, 0-30, 0-60 secs.	0-3, 0-10, 0-30, 0-60 mins	0.7 secs. - 30 mins. (4 ranges)
Operating Modes	On Delay	On Delay	On Delay	On Delay
Weight	300 gms.	175 gms.	175 gms.	160 gms.
Dimensions (mm)				
Overall (L x W x D)	76 x 30.5 x 120	50 x 40 x 80	50 x 40 x 80	76 x 30.5 x 117.5
Mounting (L x W)	68 centre to centre	8 - pin plug-in	8 - pin plug-in	68 centre to centre

Wherever not specified Contact Rating : 5A @ 230 V AC (resistive)



Ordering Information

- Product Family Name
- Model Name
- Auxiliary Supply Voltage
- Output Relay 1 CO or 2 CO
- Rime Range
- Application

Electronic Timers

ETB D1

On Delay Timer
(fixed setting) /
Multi Range



ETF D1

On Delay Timer
(fixed setting)



EIT D1

Interval Timer



ETO D1

Multi-Function /
Multi Range /
Multi Voltage



P2 MTG1

Multi-Function Timer /
Multi Range

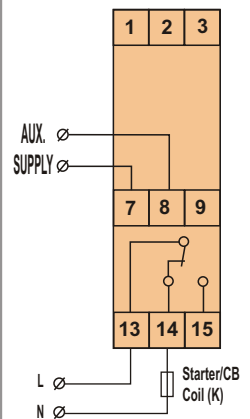
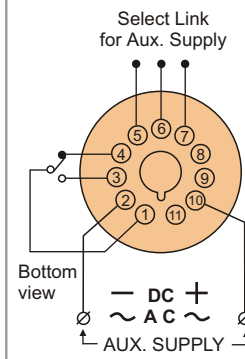
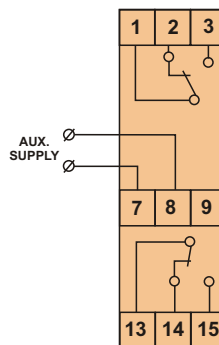
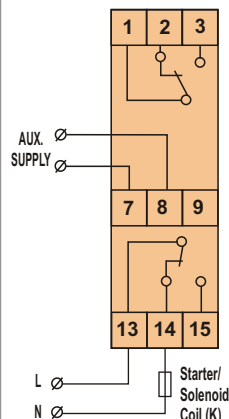
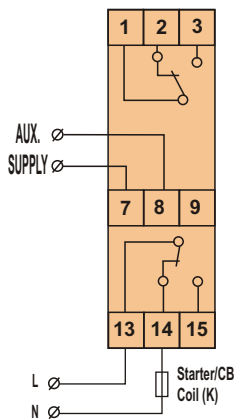
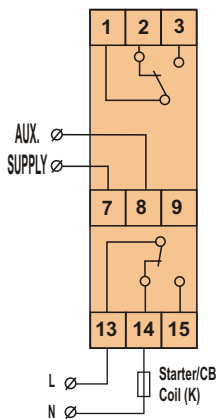
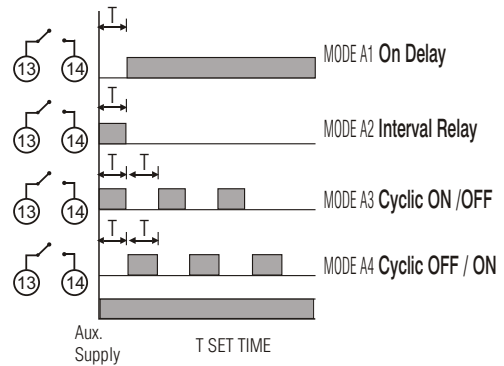
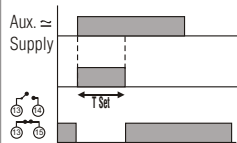
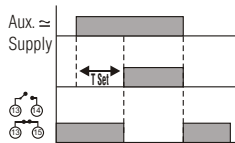
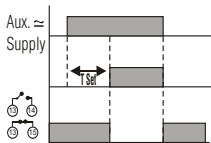


ETE D1

Multi-Function Timer /
Multi Range



110/240/380/415 V AC ±20%, 50/60 Hz 12/24 V AC / DC	110 / 240 / 415 V AC 24 V DC, -20% to + 10%	12 / 24 V DC ±20%	24 - 240 V AC / DC - 20% + 10%	24 / 110 / 240 V AC, 24 V DC ±10% -20%	110 / 240 V AC, 24 V AC / DC (Link selectable) -20% +10%
1 CO (2 CO)	1 CO (2 CO)	1 CO (2 CO)	2 CO	1 CO	1 CO
0.7 min - 30 mins. (4 ranges)	1, 3, 5, 10, 30, 60, 180 secs. (fixed)	1 - 10 secc. 6 - 60 secc.	0.1 sec to 72 hrs. (10 ranges)	0.1 sec to 72 hrs. (10 ranges)	0.1 sec to 72 hrs. (10 ranges)
On Delay	On Delay	Interval Delay	A1 - On Delay A2 - Interval A3 - Cyclic Instant A4 - Cyclic Delay	A1 - On Delay A2 - Interval A3 - Cyclic Instant A4 - Cyclic Delayed	A1 - On Delay A2 - Interval A3 - Cyclic Instant A4 - Cyclic Delay
300 gms.	275 gms.	200 gms.	175 gms.	150 gms.	165 gms.
76 x 30.5 x 117.5 68 centre to centre	76 x 30.5 x 117.5 68 centre to centre	76 x 30.5 x 117.5 68 centre to centre	76 x 30.5 x 117.5 68 centre to centre	80 x 35 x 95 11- pin plug-in	76 x 30.5 x 117.5 68 centre to centre



Electronic Timers

(Special Application Timers)

ESD D1 Star Delta Timer



ETX D1 On Delay Timer with Inst. Contact



ETR D2 Cyclic Timer



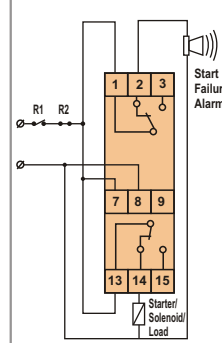
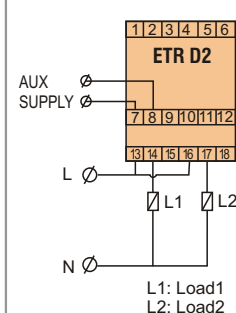
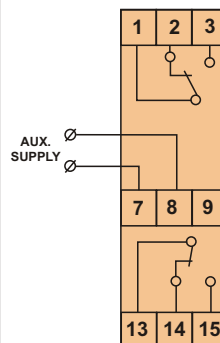
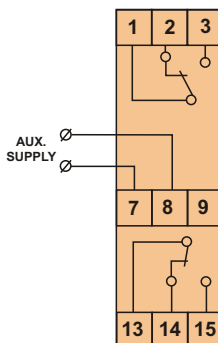
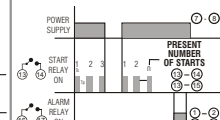
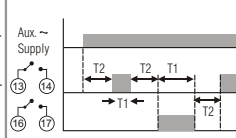
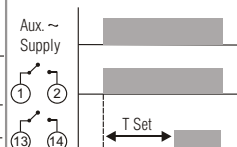
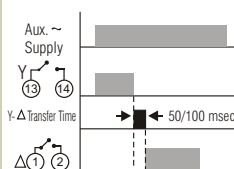
ESR D1 Multi-Start Attempt Timer



Other Special Applications Timers include a Star Delta Timer for Star to Delta changeover operations in Motor Control / Starter panels, Unequal Cyclic Timer for operation of Industrial Washing machine motors in Forward & Reverse direction, a Multi Start Attempt Timer for attempting multiple startup attempts for Diesel Engine Generator sets provides alarm output in case the engine fails to start.

Supply Voltage Auxillary	110 / 240 / 380 / 415 V AC -20% to +10%	24 / 110 / 240 / 380 / 415 V AC -20% to +10% 24 V DC, -20% +10%	110/240/415 V AC ±20% 50/60 Hz ±3%, 24 V DC	110/240 V AC ±20%, 50/60 Hz 12 / 24 V DC ± 20%
Output Contacts	1 NO-Star relay (NO) 1 NO-Delta relay (NO)	1 CO on delay relay 1 CO on instant relay	1 CO + 1 CO	1 CO + 1 CO
Time Range	0.7 – 60 secs. in 2 diff. ranges	0.7 secs. – 30 mins. in 4 diff. ranges	0.7 secs. – 30 mins. in 4 diff. ranges	
Operating Modes	Star Delta Changeover Time 50 / 100 m.secs.	On Delay with instantaneous changeover	Forward / Reverse Cycle with pause time	Start Time - 1 - 15 secs Pause Time - 2 - 16 secs. Star Attempts - 1 - 15 nos.
Weight	175 gms.	175 gms.	410 gms.	175 gms.
Dimensions (mm)				
Overall (L x W x D)	76 x 30.5 x 117.5	76 x 30.5 x 117.5	76 x 56.5 x 117.5	76 x 30.5 x 117.5
Mounting (L x W)	68 centre to centre	68 centre to centre	67 x 46	68 centre to centre

Wherever not specified Contact Rating : 5A @ 230 V AC (resistive)



Ordering Information

- Product Family Name
- Model Name
- Auxiliary Supply Voltage
- Application