TIMERS STAR DELTA TIMER

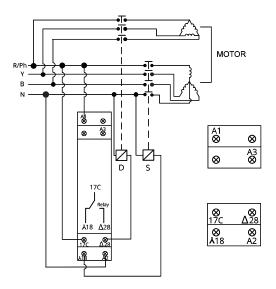
Type: SD-A-R1-P1



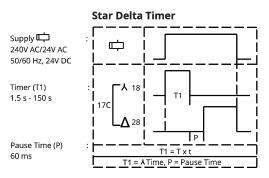


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Connection Diagram



Functional Diagram





Application

'elmex' make Star Delta Timer is used with Star Delta starters and provides desired monitoring and control in Motor operations.

- 17.5 mm DIN Rail Mount.
- Star-Delta.
- Star Mode 1 NO.
- Delta Mode 1 NO.
- Slim, Space Saving Design.
- One Red LED for Star mode Indication.
- Second Red LED for Delta mode Indication.
- Sealable Front Cover for Tamper Proofing.
- Provision of Multimeter probe for parameters measurement.

Technical Specification	
Input Specifications	
Supply voltage A1-A2/A3-A2	240V AC/ 24V AC-DC*
Frequency	50/60 Hz
Supply Variation	-20% to +10%
Power Consumption	8VA (max)
Accuracy	Settings: ±5% of Full Scale
Functional Specifications	
Delta mode on time delay (T1)	1.5 sec to 150 sec
Pause timing(P)	60 ms(Fix)
Output	5A @240V AC / 28V DC (Resistive)
LED Indications	
Star mode indication	3 mm Red LED
Delta mode indication	3 mm Red LED
Environmental Specifications	
Temperature	Operating: -10 to 55 °C(14 to 131 °F) Storage: -20 to 70 °C(-4 to 158 °F)
Humidity(non-condensing)	95% RH
Protection Level	IP40 for Casing
	IP20 for Terminals
Housing	
Housing Material	Polycarbonate
Colour	White
Dimension (H x D x W)	85 x 70.05 x 17.5 mm
Weight	70 gms
Mounting	TS 35 DIN Rail

^{*} Other Voltages on Request

TIMERS STAR DELTA TIMER

Type: SD-D-R2-P2

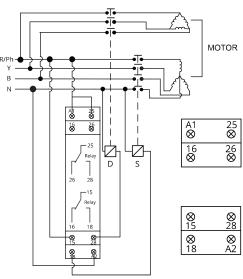




Certification

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Connection Diagram



Note: Short 15-25 externally to make common 'Pole'

Functional Diagram

Star Delta Timer Supply 240V AC, 50/60 Hz Star NO Relay Contact Delta NO Relay Contact

T1 = T x t (Run up time (3 - 30 s, 6 - 60 s))P = Pause time (50 ms / 100 ms)

Application

'elmex' make Star Delta Timer is used with Star Delta starters and provides desired monitoring and control in Motor operations.

- 17.5 mm DIN Rail Mount.
- Star-Delta.
- Star Mode 1 C/O.
- Delta Mode 1 C/O.
- Slim, Space Saving Design.
- One Red LED for Star mode Indication.
- Second Red LED for Delta mode Indication.
- Sealable Front Cover for Tamper Proofing.
- Provision of Multimeter probe for parameters measurement.

Technical Specification	
Input Specifications	
Supply voltage A1-A2	240V AC*
Frequency	50/60 Hz
Supply Variation	-20% to +10%
Power Consumption	8VA (max)
Accuracy	Settings: ±5% of Full Scale
Functional Specifications	
Delta mode on time delay (T1)	3-30sec, 6-60 sec
Pause timing(P)	50 msec / 100 msec.
Output	5A @240V AC / 28V DC (Resistive)
LED Indications	
Star mode indication	3 mm Red LED
Delta mode indication	3 mm Red LED
Environmental Specifications	
Temperature	Operating: -10 to 55 °C(14 to 131 °F) Storage: -20 to 70 °C(-4 to 158 °F)
Humidity(non-condensing)	95% RH
Protection Level	IP40 for Casing IP20 for Terminals
Housing	
Housing Material	Polycarbonate
Colour	White
Dimension (H x D x W)	85 x 70.05 x 17.5 mm
Weight	70 gms
Mounting	TS 35 DIN Rail

^{*} Other Voltages on Request

TIMERS STAR DELTA TIMER

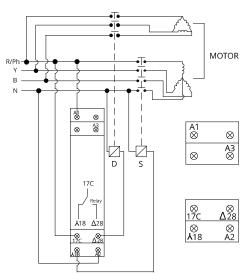
Type: SD-A-R1-P3





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Connection Diagram



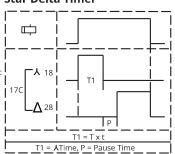
Note: Short 15-25 externally to make common 'Pole'

Functional Diagram

Star Delta Timer

Timer (T1) 1.5 s - 150 s

Pause Time (P) 50 ms to 500 ms (10 Steps in Steps of 50 ms)





Application

'elmex' make Star Delta Timer is used with Star Delta starters and provides desired monitoring and control in Motor operations.

- 17.5 mm DIN Rail Mount.
- Star-Delta.
- Star Mode 1 NO.
- Delta Mode 1 NO.
- Slim, Space Saving Design.
- Wide range of pause time.
- One Red LED for Star mode Indication.
- · Second Red LED for Delta mode Indication.
- Sealable Front Cover for Tamper Proofing.
- Provision of Multimeter probe for parameters measurement.

echnical Specification	
Input Specifications	
Supply voltage A1-A2/A3-A2	240V AC/ 24V AC-DC*
Frequency	50/60 Hz
Supply Variation	-20% to +10%
Power Consumption	8VA (max)
Accuracy	Settings: ±5% of Full Scale
Functional Specifications	
Delta mode on time delay (T1)	1.5 sec to 150 sec
Pause timing(P)	50 to 500 msec. in steps of 50 msec.
Output	5A @240V AC / 28V DC (Resistive)
LED Indications	
Star mode indication	3 mm Red LED
Delta mode indication	3 mm Red LED
Environmental Specifications	
Temperature	Operating: -10 to 55 °C(14 to 131 °F) Storage: -20 to 70 °C(-4 to 158 °F)
Humidity(non-condensing)	95% RH
Protection Level	IP40 for Casing IP20 for Terminals
Housing	
Housing Material	Polycarbonate
Colour	White
Dimension (H x D x W)	85 x 70.05 x 17.5 mm
Weight	70 gms
Mounting	TS 35 DIN Rail

^{*} Other Voltages on Request

TIMERS ON DELAY TIMER

Type: OD-A-R3

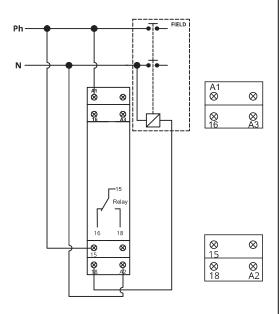




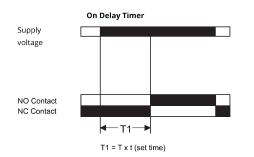
Certification

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Connection Diagram



Functional Diagram



Application

'elmex' On Delay Timer is used for facilitating simple, Reliable and economical control for definite purpose solution in Industrial Application or in OEMs.

- 17.5 mm DIN Rail Mount.
- On Delay.
- 10 Time Ranges.
- Front knobs for Time Range & Time Scale.
- Slim, Space Saving Design.
- Green LED for Power ON.
- Red LED for Relay ON.
- Sealable Front Cover for Tamper Proofing.
- Provision of Multimeter probe for parameters measurement.

Input Specifications	
Supply voltage A1-A2/A3-A2	240V AC/ 24V AC-DC*
Frequency	50/60 Hz
Supply Variation	-20% to +10%
Power Consumption	8VA (max)
Accuracy	Settings: ±5% of Full Scale
Functional Specifications	
Mode	On Delay
Output Contact	SPDT(1C/O)
Contact Rating	5A @240V AC / 28V DC (Resistive)
	0.1 - 1 sec, 0.3 - 3 sec, 1 - 10 sec, 3 - 30sec,
Time Ranges	0.1 - 1 min, 0.3 - 3 min, 1 - 10 min, 3 - 30min,
	0.1 - 1 hrs, 0.3 - 3 hrs
LED Indications	
Power ON	3 mm Green LED
Relay ON	3 mm Red LED
Environmental Specifications	
Temperature	Operating: -10 to 55 °C(14 to 131 °F)
	Storage: -20 to 70 °C(-4 to 158 °F)
Humidity(non-condensing)	95% RH
Protection Level	IP40 for Casing
	IP20 for Terminals
Housing	
Housing Material	Polycarbonate
Colour	White
Dimension (H x D x W)	85 x 70.05 x 17.5 mm
Weight	62 gms

^{*} Other Voltages on Request

TIMERS ON DELAY TIMER

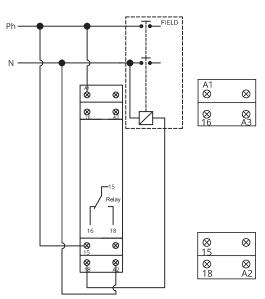
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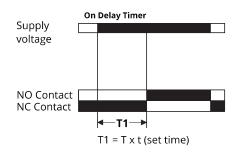


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Connection Diagram



Functional Diagram





Application

'elmex' On Delay Timer is used for facilitating simple, Reliable and economical control for definite purpose solution in Industrial Application or in OEMs.

- 17.5 mm DIN Rail Mount.
- On Delay.
- 6 Time Ranges.
- Front knobs for Time Range & Time Scale.
- Slim, Space Saving Design.
- Green LED for Power ON.
- Red LED for Relay ON.
- Sealable Front Cover for Tamper Proofing.
- Provision of Multimeter probe for parameters measurement.

nput Specifications	
Supply voltage A1-A2/A3-A2	240V AC/ 24V AC-DC*
Frequency	50/60 Hz
Supply Variation	-20% to +10%
Power Consumption	8VA (max)
Accuracy	Settings: ±5% of Full Scale
Functional Specifications	
Mode	On Delay
Output Contact	SPDT(1C/O)
Contact Rating	5A @240V AC / 28V DC (Resistive)
Time Ranges	0.3 - 3 sec, 3 - 30sec, 0.3 - 3 min, 3 - 30min, 0.3 - 3 hrs, 3 - 30 hrs
LED Indications	
Power ON	3 mm Green LED
Relay ON	3 mm Red LED
Environmental Specifications	
Temperature	Operating: -10 to 55 °C(14 to 131 °F) Storage: -20 to 70 °C(-4 to 158 °F)
Humidity(non-condensing)	95% RH
Protection Level	IP40 for Casing IP20 for Terminals
Housing	
Housing Material	Polycarbonate
Colour	White
Dimension (H x D x W)	85 x 70.05 x 17.5 mm
Weight	62 gms
Mounting	TS 35 DIN Rail

^{*} Other Voltages on Request

TIMERS ON DELAY/ INTERVAL TIMER

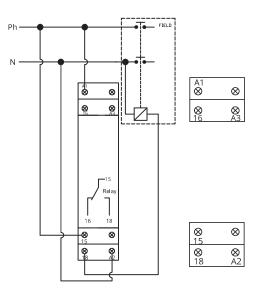
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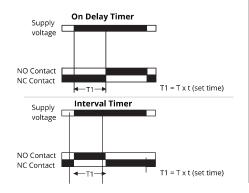


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Connection Diagram



Functional Diagram





Application

'elmex' On Delay / Interval timer is used for facilitating simple, Reliable and economical control for definite purpose solution in Industrial Application or in OEMs.

- 17.5 mm DIN Rail Mount.
- · On Delay/Interval.
- 6 Time Ranges.
- Front knobs for Time Range, Time Scale & Mode Setting.
- Slim, Space Saving Design.
- Green LED for Power ON.
- Red LED for Relay ON.
- Sealable Front Cover for Tamper Proofing.
- Provision of Multimeter probe for parameters measurement.

Technical Specification	
Input Specifications	
Supply voltage A1-A2/A3-A2	240V AC/ 24V AC-DC*
Frequency	50/60 Hz
Supply Variation	-20% to +10%
Power Consumption	8VA (max)
Accuracy	Settings: ±5% of Full Scale
Functional Specifications	
Mode	On Delay/ Interval (Selectable)
Output Contact	SPDT(1C/O)
Contact Rating	5A @240V AC / 28V DC (Resistive)
Time Ranges	0.3 - 3 sec, 3 - 30 sec, 0.3 - 3 min, 3 - 30 min, 0.3 - 3 hrs, 3 - 30 hrs
LED Indications	
Power ON	3 mm Green LED
Relay ON	3 mm Red LED
Environmental Specifications	
Temperature	Operating: -10 to 55 °C(14 to 131 °F) Storage: -20 to 70 °C(-4 to 158 °F)
Humidity(non-condensing)	95% RH
Protection Level	IP40 for Casing IP20 for Terminals
Housing	
Housing Material	Polycarbonate
Colour	White
Dimension (H x D x W)	85 x 70.05 x 17.5 mm
Weight	70 gms
Mounting	TS 35 DIN Rail

^{*} Other Voltages on Request

TIMERS OFF DELAY TIMER

Type: OFF-A-R3

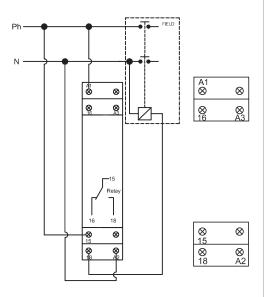




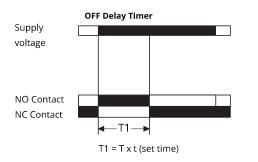
Certification

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Connection Diagram



Functional Diagram



Application

'elmex' Off Delay Timer is used for facilitating simple, Reliable and economical control for definite purpose solution in Industrial Application or in OEMs.

- 17.5 mm DIN Rail Mount.
- · Off Delay.
- 10 Time Ranges.
- Front knobs for Time Range & Time Scale.
- Slim, Space Saving Design.
- Green LED for Power ON.
- Red LED for Relay ON.
- Sealable Front Cover for Tamper Proofing.
- Provision of Multimeter probe for parameters measurement.

Technical Specification	
Input Specifications	
Supply voltage A1-A2/A3-A2	240V AC/ 24V AC-DC*
Frequency	50/60 Hz
Supply Variation	-20% to +10%
Power Consumption	8VA (max)
Accuracy	Settings: ±5% of Full Scale
Functional Specifications	
Mode	Off Delay
Output Contact	SPDT(1C/O)
Contact Rating	5A @240V AC / 28V DC (Resistive)
Time Ranges	0.1 - 1 sec, 0.3 - 3 sec, 1 - 10 sec, 3 - 30sec, 0.1 - 1 min, 0.3 - 3 min, 1 - 10 min, 3 - 30min, 0.1 - 1 hrs, 0.3 - 3 hrs
LED Indications	
Power ON	3 mm Green LED
Relay ON	3 mm Red LED
Environmental Specifications	
Temperature	Operating: -10 to 55 °C(14 to 131 °F) Storage: -20 to 70 °C(-4 to 158 °F)
Humidity(non-condensing)	95% RH
Protection Level	IP40 for Casing IP20 for Terminals
Housing	
Housing Material	Polycarbonate
Colour	White
Dimension (H x D x W)	85 x 70.05 x 17.5 mm
Weight	62 gms
Mounting	TS 35 DIN Rail

^{*}Other Voltages on Request

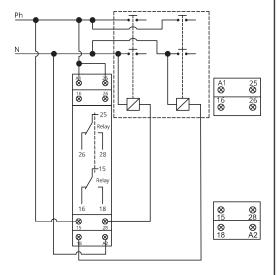
Type: M05-D-R3





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Connection Diagram





Application

'elmex' Multi-Function timer is used for facilitating simple, Reliable and economical control for definite purpose solution in Industrial Application or in OEMs.

- 17.5 mm DIN Rail Mount.
- 5 Function.
- 10 Time Ranges.
- Front knobs for Time Range, Time Scale & Mode Setting.
- Slim, Space Saving Design.
- Green LED for Power ON.
- Red LED for Relay ON.
- Sealable Front Cover for Tamper Proofing.
- Provision of Multimeter probe for parameters measurement.

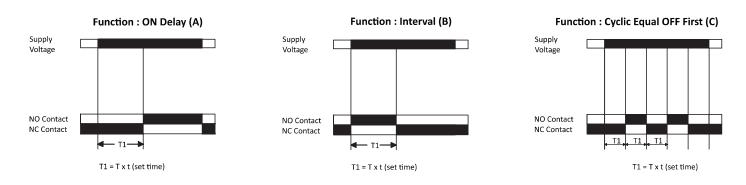
Technical Specification	
Input Specifications	
Supply Voltage A1-A2	240V AC*
Frequency	50/60 Hz
Supply Variation	-20% to +10%
Power Consumption	12VA (max)
Accuracy	Settings: ±5% of Full Scale
Functional Specifications	
Mode	On Delay/ Interval (Selectable)
Output Contact	DPDT(2 C/O)
Contact Rating	5A @240V AC / 28V DC (Resistive)
Time Ranges	0.1 - 1 sec, 0.3 - 3 sec, 1 - 10 sec, 3 - 30sec, 0.1 - 1 min, 0.3 - 3 min, 1 - 10 min, 3 - 30min, 0.1 - 1 hrs, 0.3 - 3 hrs
LED Indications	
Power ON	3 mm Green LED
Relay ON	3 mm Red LED
Environmental Specifications	
Temperature	Operating: -10 to 55 °C(14 to 131 °F) Storage: -20 to 70 °C(-4 to 158 °F)
Humidity(non-condensing)	95% RH
Protection Level	IP40 for Casing IP20 for Terminals
Housing	
Housing Material	Polycarbonate
Colour	White
Dimension (H x D x W)	85 x 70.05 x 17.5 mm
Weight	70 gms
Mounting	TS 35 DIN Rail

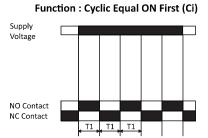
^{*} Other Voltages on Request

Type: M05-D-R3

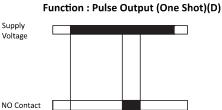


Functional Diagram





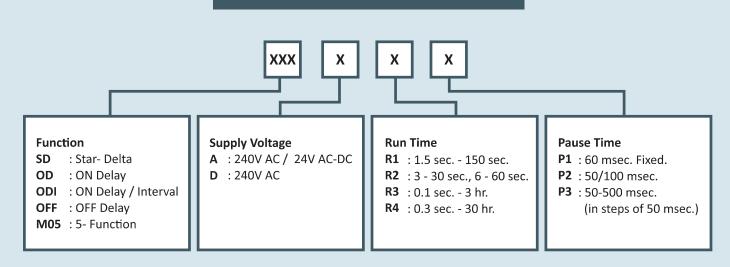




T1 = T x t (set time); P = 500 msec.

TIMER CODE DESCRIPTION

NC Contact



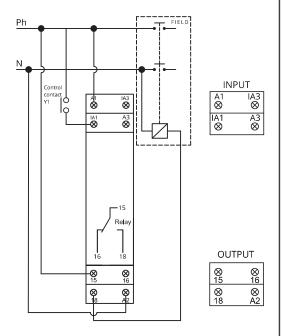
Type: M10-A-R6





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Connection Diagram





Application

'elmex' Multi-Function timer is used for facilitating simple, Reliable and economical control for definite purpose solution in Industrial Application or in OEMs.

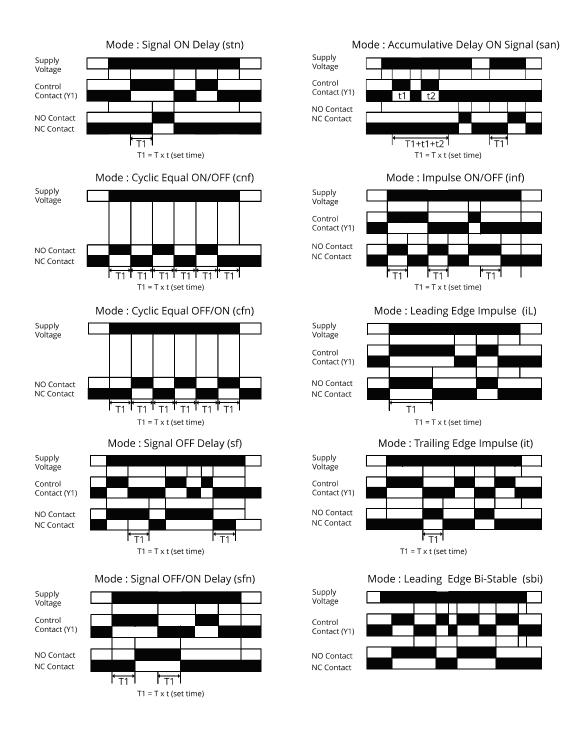
- 17.5 mm DIN Rail Mount.
- 10 Function.
- 7 Time Ranges.
- Green LED for Power ON.
- Red LED for Relay ON.
- Front knobs for Time Range, Time Scale & Mode Setting.
- Slim, Space Saving Design.
- Sealable Front Cover for Tamper Proofing.
- Provision of Multimeter probe for parameters measurement.

Input Specifications Supply Voltage A1-A2 Supply Variation Power Consumption Accuracy Frequency Signal ON Delay (stn), Cyclic Equal ON/OFF (cnf), Signal OFF/ON (cfn), Signal OFF Delay (sf), Signal OFF/ON (sfn), Accumulative Delay ON Signal (san), Impulse ON/OFF (inf), Leading Edge Impulse (it), Trailing Edge Bi-Stable (sbi) Output Contact SpDT(1C/O) Contact Rating SA @240V AC / 28V DC (Resistive) O1 1 sec, 1 - 10 sec, O1 1 hrs, 1 - 10 hrs, 10 - 100 hrs LED Indications Power ON Relay ON Relay ON Brownental Specifications Temperature Operating: -10 to 55 °C(14 to 131 °F) Storage: -20 to 70 °C(-4 to 158 °F) Humidity(non-condensing) Post RH Protection Level IP40 for Casing IP20 for Terminals Housing Housing Mounting Mounting TS 35 DIN Rail	Technical Specification		
Frequency Supply Variation Power Consumption Accuracy Functional Specifications Mode Signal ON Delay (stn), Cyclic Equal ON/OFF (cnf), Cyclic Equal OFF/ON (sfn), Signal OFF Delay (sf), Signal OFF/ON (sfn), Signal OFF Delay (sf), Signal OFF/ON (sfn), Accumulative Delay ON Signal (san), Impulse ON/OFF (inf), Leading Edge Impulse (it), Leading Edge Bi-Stable (sbi) Output Contact SPDT(1C/O) Contact Rating SA @240V AC / 28V DC (Resistive) O.1 - 1 sec, 1 - 10 sec, O.1 - 1 min, 1 - 10 min, O.1 - 1 hrs, 1 - 10 hrs, 10 - 100 hrs LED Indications Power ON Relay ON 3 mm Green LED Relay ON 3 mm Red LED Environmental Specifications Temperature Operating: -10 to 55 °C(14 to 131 °F) Storage: -20 to 70 °C(-4 to 158 °F) Humidity(non-condensing) Protection Level IP40 for Casing IP20 for Terminals Housing Housing Material Polycarbonate Colour White Dimension (H x D x W) Weight Protection Level Polycarbonate Colour White Dimension (H x D x W) Weight	Input Specifications		
Supply Variation -20% to +10% Power Consumption 12VA (max) Accuracy Settings: ±5% of Full Scale Functional Specifications Mode Signal ON Delay (stn), Cyclic Equal ON/OFF (cnf), Cyclic Equal OFF/ON (cfn), Signal OFF Delay (sf), Signal OFF/ON (sfn), Signal OFF Delay (sf), Signal OFF/ON (sfn), Accumulative Delay ON Signal (san), Impulse ON/OFF (inf), Leading Edge Impulse (it), Leading Edge Impulse (it), Leading Edge Impulse (it), Leading Edge Bi-Stable (sbi) Output Contact SPDT(1C/O) Contact Rating 5A @240V AC / 28V DC (Resistive) 0.1 - 1 sec, 1 - 10 sec, 0.1 - 1 min, 1 - 10 min, 0.1 - 1 hrs, 1 - 10 hrs, 10 - 100 hrs LED Indications Power ON 3 mm Green LED Relay ON 3 mm Red LED Environmental Specifications Temperature Operating: -10 to 55 °C(14 to 131 °F) Storage: -20 to 70 °C(-4 to 158 °F) Humidity(non-condensing) 95% RH Protection Level IP40 for Casing IP20 for Terminals Housing Housing Material Polycarbonate Colour White Dimension (H x D x W) 85 x 70.05 x 17.5 mm Weight	Supply Voltage A1-A2	240V AC/ 24V AC-DC	
Power Consumption Accuracy Settings: ±5% of Full Scale Functional Specifications Mode Signal ON Delay (stn), Cyclic Equal ON/OFF (cnf), Cyclic Equal OFF/ON (sfn), Signal OFF Delay (sf), Signal OFF/ON (sfn), Accumulative Delay ON Signal (san), Impulse ON/OFF (inf), Leading Edge Impulse (iL), Trailing Edge Impulse (it), Leading Edge Bi-Stable (sbi) Output Contact SPDT(1C/O) Contact Rating 5A @240V AC / 28V DC (Resistive) 0.1 - 1 sec, 1 - 10 sec, 0.1 - 1 min, 1 - 10 min, 0.1 - 1 hrs, 1 - 10 hrs, 10 - 100 hrs LED Indications Power ON 3 mm Green LED Relay ON 3 mm Red LED Environmental Specifications Temperature Operating: -10 to 55 °C(14 to 131 °F) Storage: -20 to 70 °C(-4 to 158 °F) Humidity(non-condensing) Protection Level IP40 for Casing IP20 for Terminals Housing Housing Material Polycarbonate Colour White Dimension (H x D x W) Weight Vegitt	Frequency	50/60 Hz	
Accuracy Functional Specifications Mode Signal ON Delay (stn), Cyclic Equal ON/OFF (cnf), Cyclic Equal OFF/ON (cnf), Signal OFF Delay (sf), Signal OFF/ON (sfn), Accumulative Delay ON Signal (san), Impulse ON/OFF (inf), Leading Edge Impulse (it), Leading Edge Impulse (it), Leading Edge Bi-Stable (sbi) Output Contact SPDT(1C/O) Contact Rating 5A @240V AC / 28V DC (Resistive) 0.1 - 1 sec, 1 - 10 sec, 0.1 - 1 min, 1 - 10 min, 0.1 - 1 hrs, 1 - 10 hrs, 10 - 100 hrs LED Indications Power ON Relay ON 3 mm Green LED Relay ON 3 mm Red LED Environmental Specifications Temperature Operating: -10 to 55 °C(14 to 131 °F) Storage: -20 to 70 °C(-4 to 158 °F) Humidity(non-condensing) Protection Level IP40 for Casing IP20 for Terminals Housing Housing Material Polycarbonate Colour White Dimension (H x D x W) 85 x 70.05 x 17.5 mm Weight	Supply Variation	-20% to +10%	
Functional Specifications Mode Signal ON Delay (stn), Cyclic Equal ON/OFF (cnf), Cyclic Equal OFF/ON (cfn), Signal OFF Delay (sf), Signal OFF/ON (sfn), Accumulative Delay ON Signal (san), Impulse ON/OFF (inf), Leading Edge Impulse (iL), Trailing Edge Impulse (it), Leading Edge Bi-Stable (sbi) Output Contact SPDT(1C/O) Contact Rating 5A @240V AC / 28V DC (Resistive) 0.1 - 1 sec, 1 - 10 sec, 0.1 - 1 min, 1 - 10 min, 0.1 - 1 hrs, 1 - 10 hrs, 10 - 100 hrs LED Indications Power ON Relay ON 3 mm Green LED 8 and Red LED Environmental Specifications Temperature Operating: -10 to 55 °C(14 to 131 °F) Storage: -20 to 70 °C(-4 to 158 °F) Humidity(non-condensing) 95% RH Protection Level IP40 for Casing IP20 for Terminals Housing Housing Housing Material Polycarbonate Colour White Dimension (H x D x W) 85 x 70.05 x 17.5 mm Weight	Power Consumption	12VA (max)	
Mode Signal ON Delay (stn), Cyclic Equal ON/OFF (cnf), Cyclic Equal OFF/ON (cfn), Signal OFF Delay (sf), Signal OFF/ON (sfn), Accumulative Delay ON Signal (san), Impulse ON/OFF (inf), Leading Edge Impulse (iL), Trailing Edge Impulse (it), Leading Edge Bi-Stable (sbi) Output Contact SPDT(1C/O) Contact Rating 5A @240V AC / 28V DC (Resistive) 0.1 - 1 sec, 1 - 10 sec, 0.1 - 1 min, 1 - 10 min, 0.1 - 1 hrs, 1 - 10 hrs, 10 - 100 hrs LED Indications Power ON Relay ON 3 mm Green LED 8 my med LED Environmental Specifications Temperature Operating: -10 to 55 °C(14 to 131 °F) Storage: -20 to 70 °C(-4 to 158 °F) Humidity(non-condensing) 95% RH Protection Level IP40 for Casing IP20 for Terminals Housing Housing Material Polycarbonate Colour White Dimension (H x D x W) 85 x 70.05 x 17.5 mm Weight	Accuracy	Settings: ±5% of Full Scale	
Signal ON Delay (Stn), Cyclic Equal OH/OFF (cnf), Cyclic Equal OFF/ON (cfn), Signal OFF Delay (sf), Signal OFF/ON (sfn), Accumulative Delay ON Signal (san), Impulse ON/OFF (inf), Leading Edge Impulse (iL), Trailing Edge Impulse (it), Leading Edge Bi-Stable (sbi) Output Contact SPDT(1C/O) Contact Rating 5A @240V AC / 28V DC (Resistive) 0.1 - 1 sec, 1 - 10 sec, 0.1 - 1 min, 1 - 10 min, 0.1 - 1 hrs, 1 - 10 hrs, 10 - 100 hrs LED Indications Power ON 3 mm Green LED Relay ON 3 mm Red LED Environmental Specifications Temperature Operating: -10 to 55 °C(14 to 131 °F) Storage: -20 to 70 °C(-4 to 158 °F) Humidity(non-condensing) Protection Level IP40 for Casing IP20 for Terminals Housing Housing Material Polycarbonate Colour White Dimension (H x D x W) Weight 70 gms	Functional Specifications		
Contact Rating 5A @240V AC / 28V DC (Resistive) 0.1 - 1 sec, 1 - 10 sec, 0.1 - 1 min, 1 - 10 min, 0.1 - 1 hrs, 1 - 10 hrs, 10 - 100 hrs LED Indications Power ON Relay ON 3 mm Green LED Relay ON 5 mm Red LED Environmental Specifications Temperature Operating: -10 to 55 °C(14 to 131 °F) Storage: -20 to 70 °C(-4 to 158 °F) Humidity(non-condensing) Protection Level IP40 for Casing IP20 for Terminals Housing Housing Material Polycarbonate Colour White Dimension (H x D x W) 85 x 70.05 x 17.5 mm Weight	Mode	Cyclic Equal OFF/ON (cfn), Signal OFF Delay (sf), Signal OFF/ON (sfn), Accumulative Delay ON Signal (san), Impulse ON/OFF (inf), Leading Edge Impulse (iL), Trailing Edge Impulse (it),	
Time Ranges 0.1 - 1 sec, 1 - 10 sec, 0.1 - 1 min, 1 - 10 min, 0.1 - 1 hrs, 1 - 10 hrs, 10 - 100 hrs LED Indications Power ON Relay ON 3 mm Green LED 8 mm Red LED Environmental Specifications Temperature Operating: -10 to 55 °C(14 to 131 °F) Storage: -20 to 70 °C(-4 to 158 °F) Humidity(non-condensing) Protection Level IP40 for Casing IP20 for Terminals Housing Housing Material Polycarbonate Colour White Dimension (H x D x W) 85 x 70.05 x 17.5 mm Weight	Output Contact	SPDT(1C/O)	
Time Ranges 0.1 - 1 min, 1 - 10 min, 0.1 - 1 hrs, 1 - 10 hrs, 10 - 100 hrs LED Indications Power ON Relay ON 3 mm Green LED 3 mm Red LED Environmental Specifications Temperature Operating: -10 to 55 °C(14 to 131 °F) Storage: -20 to 70 °C(-4 to 158 °F) Humidity(non-condensing) 95% RH Protection Level IP40 for Casing IP20 for Terminals Housing Housing Material Polycarbonate Colour White Dimension (H x D x W) 85 x 70.05 x 17.5 mm Weight	Contact Rating	5A @240V AC / 28V DC (Resistive)	
Power ON 3 mm Green LED Relay ON 3 mm Red LED Environmental Specifications Temperature Operating: -10 to 55 °C(14 to 131 °F) Storage: -20 to 70 °C(-4 to 158 °F) Humidity(non-condensing) 95% RH Protection Level IP40 for Casing IP20 for Terminals Housing Housing Material Polycarbonate Colour White Dimension (H x D x W) 85 x 70.05 x 17.5 mm Weight 70 gms	Time Ranges	0.1 - 1 min, 1 - 10 min,	
Relay ON Environmental Specifications Temperature Operating: -10 to 55 °C(14 to 131 °F) Storage: -20 to 70 °C(-4 to 158 °F) Humidity(non-condensing) 95% RH Protection Level IP40 for Casing IP20 for Terminals Housing Housing Material Polycarbonate Colour White Dimension (H x D x W) 85 x 70.05 x 17.5 mm Weight	LED Indications		
Environmental Specifications Temperature Operating: -10 to 55 °C(14 to 131 °F) Storage: -20 to 70 °C(-4 to 158 °F) Humidity(non-condensing) 95% RH Protection Level IP40 for Casing IP20 for Terminals Housing Housing Material Polycarbonate Colour White Dimension (H x D x W) 85 x 70.05 x 17.5 mm Weight	Power ON	3 mm Green LED	
Temperature Operating: -10 to 55 °C(14 to 131 °F) Storage: -20 to 70 °C(-4 to 158 °F) Humidity(non-condensing) 95% RH Protection Level IP40 for Casing IP20 for Terminals Housing Housing Material Polycarbonate Colour White Dimension (H x D x W) 85 x 70.05 x 17.5 mm Weight	Relay ON	3 mm Red LED	
Storage: -20 to 70 °C(-4 to 158 °F) Humidity(non-condensing) 95% RH Protection Level IP40 for Casing IP20 for Terminals Housing Housing Material Polycarbonate Colour White Dimension (H x D x W) 85 x 70.05 x 17.5 mm Weight	Environmental Specifications		
Protection Level IP40 for Casing IP20 for Terminals Housing Housing Material Colour Dimension (H x D x W) Weight Polycarbonate White 85 x 70.05 x 17.5 mm 70 gms	Temperature		
Housing Housing Material Colour White Dimension (H x D x W) Weight Polycarbonate 85 x 70.05 x 17.5 mm 70 gms	Humidity(non-condensing)	95% RH	
Housing Material Polycarbonate Colour White Dimension (H x D x W) 85 x 70.05 x 17.5 mm Weight 70 gms	Protection Level		
Colour White Dimension (H x D x W) 85 x 70.05 x 17.5 mm Weight 70 gms	Housing		
Dimension (H x D x W) 85 x 70.05 x 17.5 mm Weight 70 gms	Housing Material	Polycarbonate	
Weight 70 gms	Colour	White	
-	Dimension (H x D x W)	85 x 70.05 x 17.5 mm	
Mounting TS 35 DIN Rail	Weight	70 gms	
	Mounting	TS 35 DIN Rail	

Type: M10-A-R6



Functional Diagram



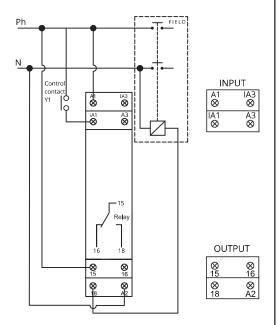
Type: M13-A-R3





UK (€ RoHS ✓

Connection Diagram





Application

'elmex' Multi-Function timer is used for facilitating simple, Reliable and economical control for definite purpose solution in Industrial Application or in OEMs.

- 17.5 mm DIN Rail Mount.
- 13 Function.
- 10 Time Ranges.
- Green LED for Power ON.
- Red LED for Relay ON.
- Front knobs for Time Range, Time Scale & Mode Setting.
- Slim, Space Saving Design.
- Sealable Front Cover for Tamper Proofing.
- Provision of Multimeter probe for parameters measurement.

Technical Specification	
Input Specifications	
Supply Voltage A1-A2	240V AC/ 24V AC-DC
Frequency	50/60 Hz
Supply Variation	-20% to +10%
Power Consumption	12VA (max)
Accuracy	Settings: ±5% of Full Scale
Functional Specifications	
Mode	On Delay(A), Interval(B), Cyclic equal OFF first (C), Cyclic equal ON first (Ci), Pulse output, 500ms fixed (D), Delay ON break (E), Delay ON make/Delay ON break (F), Interval after break(H), Single Shot (I), Retriggerable Single shot(J), Latching Relay (K), Delay with Totalise (Ai), Interval with Totalise (Bi)
Output Contact	SPDT(1C/O)
Contact Rating	5A @240V AC / 28V DC (Resistive)
Time Ranges	0.1 - 1 sec, 0.3 - 3 sec, 1 - 10 sec, 3 - 30sec, 0.1 - 1 min, 0.3 - 3 min, 1 - 10 min, 3 - 30min, 0.1 - 1 hrs, 0.3 - 3 hrs
LED Indications	
Power ON	3 mm Green LED
Relay ON	3 mm Red LED
Environmental Specifications	
Temperature	Operating: -10 to 55 °C(14 to 131 °F) Storage: -20 to 70 °C(-4 to 158 °F)
Humidity(non-condensing)	95% RH
Protection Level	IP40 for Casing IP20 for Terminals
Housing	
Housing Material	Polycarbonate
Colour	White
Dimension (H x D x W)	85 x 70.05 x 17.5 mm
Weight	70 gms
Mounting	TS 35 DIN Rail

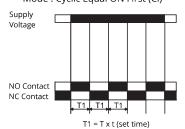
Type: M13-A-R3



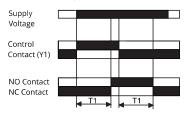
Functional Diagram

Mode: ON Delay (A) Supply Voltage NO Contact NC Contact $T1 = T \times t$ (set time)

Mode: Cyclic Equal ON First (Ci)

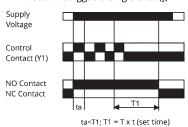


Mode: Delay On Make / Break (F)

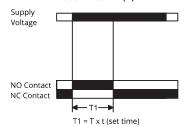


 $T1 = T \times t$ (set time)

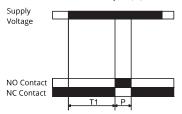
Mode: Retriggable Single shot (J)



Mode: Interval (B)

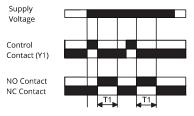


Mode: Pulse Output (D)



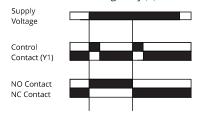
 $T1 = T \times t$ (set time), P = 500msec.

Mode: Interval After Break (H)

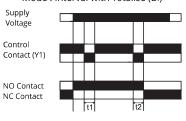


 $T1 = T \times t$ (set time)

Mode: Latching Relay (K)

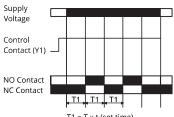


Mode: Interval with Totalise (Bi)



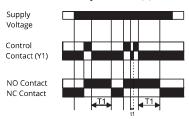
t1+t2=T1; T1 = T x t (set time)

Mode: Cyclic Equal OFF First (C)



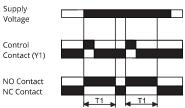
 $T1 = T \times t$ (set time)

Mode: Delay On Break (E)



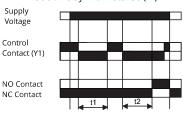
 $T1 = T \times t$ (set time); t1 < T1

Mode: Single shot (I)



 $T1 = T \times t$ (set time)

Mode: Delay with Totalise (Ai)



t1+t2=T1; T1 = T x t (set time)