

ETR-Series 17.5mm Timers

ETR1-X / ETRE-X / ETRCS-X / ETRN-X / ETR-S / ETR-Sa

Features

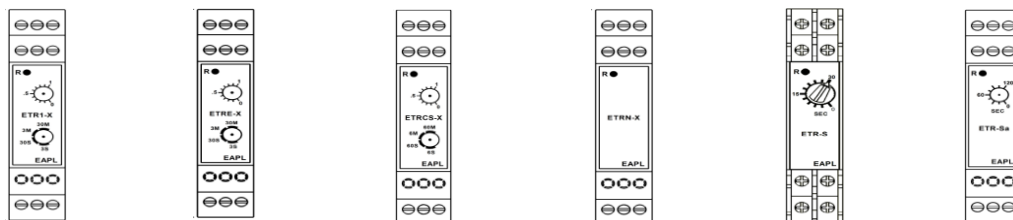
- Slim and Compact Design.
- Suitable for Din-Rail mounting.
- Finger guard protection.
- LED indication for timing in progress.



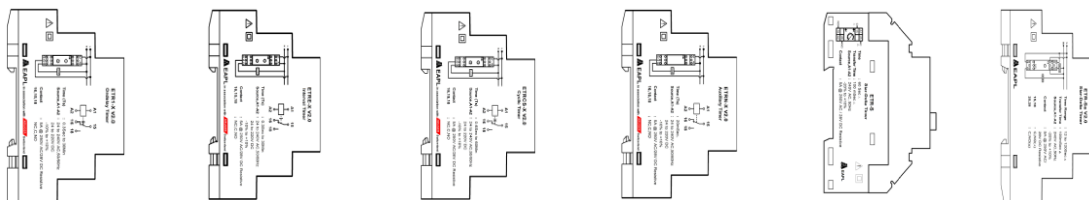
Ordering Information

Models	Function	Source Voltage	Time Selection	Output
ETR1-X	On Delay	24V AC to 240V AC, 24V DC to 220V DC	0.3Sec to 30Min	1 C/o Relay
ETRE-X	Interval		0.3 Sec to 30 Min	
ETRCs-X	Cyclic Equal Off - On		0.6Sec to 60 Min	
ETRN-X	Auxiliary		20m Sec	
ETR-S	Star Delta	240V AC	6s to 60s, Transfer Time 100ms	1 C/o (C-NO)Star 1 C/o (C-NO)Delta
ETR-Sa			12s to 120s, Transfer time,100mSec	

Front View ETR1-X ETRE-X ETRCS-X ETRN-X ETR-S ETR-Sa



Side View ETR1-X ETRE-X ETRCS-X ETRN-X ETR-S ETR-Sa



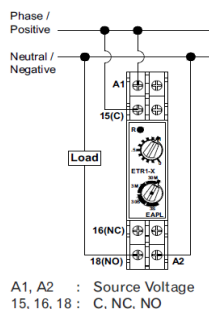
Over-all Dimension

Models	Dimension Details in mm		
	W	H	D
ETR1-X/ETRE-X/ETRCs-X/ETRN-X/ETR-S/ETR-Sa	17.8	90	65
ETR-S	17.5	89	62

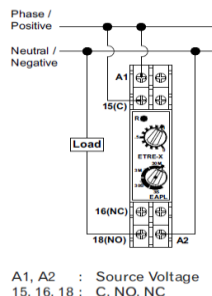
Specifications

Parameters	Models	ETR1-X	ETRE-X	ETRCs-X	ETRN-X	ETR-S	ETR-Sa
Function		ON delay timer	Interval timer	Equal OFF-ON cyclic timer	Auxiliary relay timer	Star to delta change over timer with star time & transfer time.	
Rated supply Voltage		24 to 240V AC & 24 to 220V DC				240V AC	
Operating voltage range		± 10% of rated voltage				-20% to +10% of rated voltage	
Rated Frequency		50 / 60Hz ± 5%				50Hz ± 5%	
Allowable ripple (for DC supply)		3% maximum				-	
Power consumption		AC approx.5VA DC approx.3W				A C approx.15VA	
Control output		1C/O rated for 5A @ 250VAC/28VDC resistive load					
Time range		0.3 Sec to 30 Min		0.6 Sec to 60 Min	20 ± 10mSec	6Sec to 60 Sec/Transfer time,100mSec	12Sec to 120 Sec/Transfer time,100mSec
Range selection		-				6Sec to 60 Sec/Transfer time,100mSec ± 10mSec	12Sec to 120 Sec/Transfer time,100mSec ± 10mSec
Setting accuracy		± 10% max. w.r.t full scale ±100mSec			-	± 10% max. w.r.t full scale ±100mSec	
Repeat accuracy		± 1% max. ± 100mSec			-	± 1% max. ± 100mSec	
Recovery time		100mSec minimum				150mSec minimum	
Variation due to voltage change		± 2% max. ± 100mSec			-	± 2% max. ± 100mSec	
Variation due to temperature change		± 5% max. ± 100mSec			-	± 5% max. ± 100mSec	
Variation due to frequency change		± 2% max. ±100mSec			-	± 2% max. ±100mSec	
Ambient temperature		Operation: -10 ⁰ C to +55 ⁰ C Storage: -25 ⁰ C to +80 ⁰ C					
Humidity		MAX 95% RH @ 40 ⁰ C				MAX 85% RH @ 40 ⁰ C	
Service life (under no load)		10 ⁶ operations minimum					
Electrical life (under full load)		10 ⁵ operations minimum					
Rated frequency of operation		1800 ± 5% operations per hour max					
Insulation resistance		>100M ohms @ 500V DC					
Dielectric strength		01) 1.5KV AC (rms), 50Hz for 1 minute.(Between INPUT terminals & enclosure) 02) 1.5KV AC (rms), 50Hz for 1 minute. (Between relay contact terminals & enclosure) 03) 1.5 KV AC (rms), 50Hz for 1 minute.(Between INPUT terminals & relay contact terminals) 04) 1.0KV AC (rms), 50Hz for 10-30 sec. (Between non continuous contacts of the relay)				01) 2.5KV AC, 50Hz for 1 minute. (Between current carrying& noncurrent carrying parts) 02) 1.5KV AC, 50Hz for 1 minute.(Between contacts & Control Circuit) 03) 750V AC, 50Hz for 1 Minute (Between non-continuous contacts of the relay)	
Electrical connection		3 pin screw type terminal				Screw type terminals with self lifting clamps	
Dimension		17.8 x 90 x 65mm (W x H x D)				17.5 x 89x 62mm (W x H x D)	17.8 x 90 x 65mm (W x H x D)

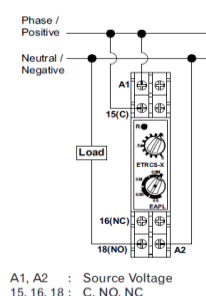
Connection and Terminal Details



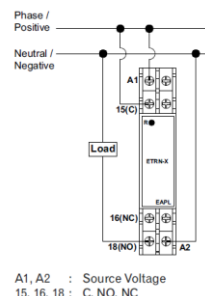
ETR1-X



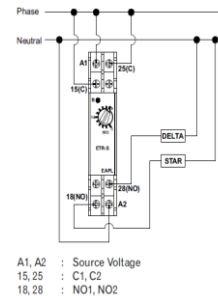
ETRE-X



ETRCs-X



ETRN-X



ETR-S/Sa