

c3controls Series ETR Electronic Timing Relays include a variety of devices with single, dual, and multi-functions and timing ranges from 0.01 seconds to 9,999 hours to satisfy the most basic to highly complex timing applications. Their compact size (17.5mm, 22.5mm, and 45mm wide) and DIN Rail, Panel, Socket, and enclosure door mounting flexibility ensures they can be installed in virtually any control panel. Devices are available with multi-voltage supply design to help reduce inventory requirements.

ELECTRONIC TIMING RELAYS

17.5mm Wide DIN Rail/Panel Mount Electronic Timing Relays 364

22.5mm Wide DIN Rail/Panel Mount Electronic Timing Relays 372

45mm Socket Mount Electronic Timing Relays 388

45mm Digital Electronic Timing Relays 392

Dimensions 397



NOTE: The scope (range, description, price, specifications, dimensions, etc.) of the product featured in this section is subject to change without notice. Refer to www.c3controls.com for product updates.

Conformity to Standards:

UL 61010-1

C22.2 No. 61010-1
IEC 61000-4

Certifications:

UL File #: E329857 (Guide QUYX2, QUYX8)

CE Marked (per EU Low Voltage Directive 2006/95/EC and 93/68/EEC)



Visit www.c3controls.com to download product certifications.

IT'S EASY TO BUILD YOUR OWN ELECTRONIC TIMING RELAY

Simply pick the code number from each of the sections below and combine them to build your part number. See page 6 for more detailed directions.

17.5mm Dual-Function — 4 Range Electronic Timing Relays

ETR — D17 DEI — 60M — 1C
I II III IV V VI

Example: To build one of our most popular Electronic Timing Relays, the part number would be **ETR + D17 + DEI + 60M + 1C + VI** or **ETR-D17DEI-60M-1CDV1**



I. RELAY TYPE

CODE	DESCRIPTION
ETR	Electronic Timing Relay

II. FRAME SIZE AND MOUNTING METHOD

CODE	FRAME SIZE	MOUNTING METHOD
D17	17.5mm (11/16") Wide	35mm DIN Rail and Panel Mount

III. TIMING FUNCTIONS

CODE	SINGLE/DUAL/MULTI	OPERATING MODES	PRICE
DEI	Dual-Function	ON-Delay (Energize Delay) and Interval Delay	\$27.00

IV. TIMING RANGE

CODE	MAXIMUM TIMING RANGE	SETTABLE TIMING RANGES
60M	60 Minutes	Seconds: 15 / 60 Minutes: 7.5 / 60

V. OUTPUT CONTACT AND RATING

CODE	OUTPUT TYPE	OUTPUT RATING
1C	SPDT (1 Changeover)	5A @ 250V AC, 24V DC Resistive

VI. SUPPLY VOLTAGE

CODE	DESCRIPTION	VOLTAGE RANGE
DV1	Dual-Voltage	110V 50 Hz / 120V 60 Hz and 24V AC/DC
DV2	Dual-Voltage	230V 50 Hz / 240V 60 Hz and 24V AC/DC

DISCOUNT
SCHEDULE **C**

SOME OF OUR POPULAR CONFIGURATIONS:

17.5MM DUAL-FUNCTION — 4 RANGE ELECTRONIC TIMING RELAYS

CATALOG NUMBER	DESCRIPTION	PRICE
ETR-D17DEI-60M-1CDV1	17.5mm Dual-Function, 4 Range Electronic Timing Relay, Maximum Timing Range: 60-Minutes, SPDT, 110V 50 Hz/120V 60 Hz and 24V AC/DC	\$27.00
ETR-D17DEI-60M-1CDV2	17.5mm Dual-Function, 4 Range Electronic Timing Relay, Maximum Timing Range: 60-Minutes, SPDT, 230V 50 Hz/240V 60 Hz and 24V AC/DC	\$27.00

17.5MM ELECTRONIC TIMING RELAYS

These c3controls Series ETR Electronic Timing Relays offer maximum functionality and timing ranges in a compact, 17.5mm (11/16") wide housing. An economical, simple dual-function, 4 range relay is available for applications with the most basic timing requirements. For more complex applications, the multi-function (with 13 operating modes) timing relay with its multi-voltage supply design (12V ~ 240V DC and 20V ~ 240V AC) is an ideal solution. Like all of c3controls other products, these devices are UL approved and CE marked, making them suitable for use in global applications. Look and see how the Series ETR Electronic Timing Relays can help you reduce your total installed costs and enhance the performance of your equipment.

Product features include:

- Two versions available:
 - Economical, Dual-Function, 4 Range
 - Timing ranges from 15 seconds to 60 minutes
 - Multi-Function, 8 Range
 - Timing ranges from 3 seconds to 10 hours
- Wide variety of operating modes to satisfy virtually any control application requirement: ON-Delay (Energize Delay), Interval Delay, Pulse Output, Repeat Cycle Equal (OFF first), Repeat Cycle Equal (ON first), Delay on Break, Delay on Make with Totalize, Delay on Make/Delay on Break, Interval after Break, Interval with Totalize, Interval on Make/Interval on Break, Single Shot, and Re-Triggerable Single Shot.
- Repeat tripping accuracy of 0.5% for precise control application performance.
- Versions available that will accept multi-voltage supply input from 12V to 240V DC and 20V to 240V AC, reduces inventory requirements.
- Compact design, only 17.5mm (11/16") wide – reduces panel space requirements and is smaller than most commonly available timing relays.
- SPDT hard contact for switching AC (5A @ 250V) and DC (5A @ 24V) loads.
- Fast and easy installation on a 35mm DIN rail or panel mounting for high vibration applications – reduces installation time and costs.
- IP20 terminals guard against accidental contact with live parts by service personnel.
- UL Approved, CE Marked, and RoHS compliant.



UNIQUE PRODUCT FEATURES

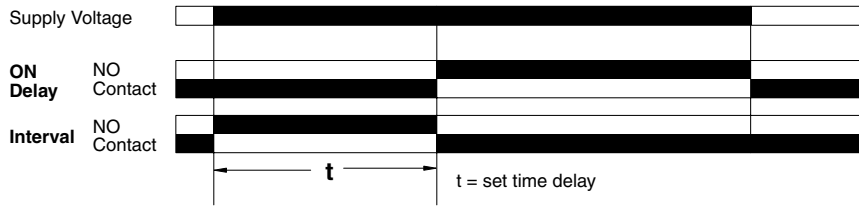


1. User selectable operating modes and timing ranges with convenient, front accessible setting dials and DIP switches.
2. DIP switches are protected by a cover to prevent the ingress of dust and other contaminants. Cover is transparent so the switch settings can be easily checked.
3. LED indication of Power ON and Relay ON – for fast and easy troubleshooting.
4. Terminals, connection diagrams, operating modes, and DIP switch settings are clearly marked on the timing relay for easy commissioning, wiring, and troubleshooting – reduces downtime and installation time.

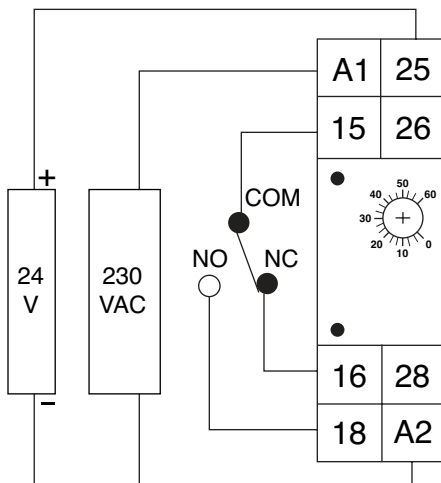
SPECIFICATIONS:

17.5MM DUAL-FUNCTION — 4 RANGE ELECTRONIC TIMING RELAYS		
	UNITS	
TIMING PERFORMANCE		
Operating Modes		ON-Delay (Energize Delay), Interval Delay
Timing Ranges		Seconds: 15 / 60 Minutes: 7.5 / 60
Accuracy		
Setting		± 5% of full scale
Repeat		± 0.5% of full scale or 50 msec. whichever is greater
Reset		On interruption of power
Reset Time		Less than 100 msec.
LED Indication		Power ON and Relay ON
Output Contact		SPDT (1 Changeover)
ELECTRICAL		
Operating Voltage		110V 50 Hz / 120V 60 Hz and 24V AC/DC 230V 50 Hz / 240V 60 Hz and 24V AC/DC
Operating Voltage Limits		85% to 110%
Power Consumption		8 VA Max.
Output Rating		5A @ 250V AC, 24V DC Resistive
ENVIRONMENTAL		
Ambient Operating Temperature		0 to +50° C (32 to +122° F)
Ambient Storage Temperature		-20 to +75° C (-4 to +167° F)
Humidity		95% Relative Humidity (Non-condensing)
Altitude		2,000m (6,528ft.)
CONSTRUCTION		
Ingress Protection		
Terminals (Timer Body)		IP20
Terminal Capacity		
Solid Strand	mm ²	1 x 2.5 ~ 2 x 1.5
Fine Strand	mm ²	1 x 2.5 ~ 2 x 0.75
	AWG	14 ~ 18
Tightening Torque	Nm	0.8
	Lb-in.	7.0
Weight	g	65
	oz.	2.3
RoHS Compliance		For RoHS Compliance documentation by product, refer to www.c3controls.com

OPERATING MODE:



TERMINAL DIAGRAM:



IT'S EASY TO BUILD YOUR OWN ELECTRONIC TIMING RELAY

Simply pick the code number from each of the sections below and combine them to build your part number. See page 6 for more detailed directions.

17.5mm Multi-Function — 8 Range Electronic Timing Relays

ETR - D17 MF1 - 10H - 1C MV4

I II III IV V VI

Example: To build one of our most popular Electronic Timing Relays, the part number would be **I + II + III + IV + V + VI** or **ETR-D17MF1-10H-1CMV4**



I. RELAY TYPE

CODE	DESCRIPTION
ETR	Electronic Timing Relay

II. FRAME SIZE AND MOUNTING METHOD

CODE	FRAME SIZE	MOUNTING METHOD
D17	17.5mm (11/16") Wide	35mm DIN Rail and Panel Mount

III. TIMING FUNCTIONS

CODE	SINGLE/DUAL/MULTI	OPERATING MODES	PRICE
MF1	Multi-Function	ON-Delay (Energize Delay), Interval Delay, Pulse Output, Repeat Cycle Equal (OFF first), Repeat Cycle Equal (ON first), Delay on Break, Delay on Make with Totalize, Delay on Make/Delay on Break, Interval after Break, Interval with Totalize, Interval on Make/Interval on Break, Single Shot, Re-Triggerable Single Shot	\$36.00

IV. TIMING RANGE

CODE	MAXIMUM TIMING RANGE	SETTABLE TIMING RANGES
10H	10 Hours	Seconds: 3 / 10 / 30 Minutes: 3 / 10 / 30 Hours: 3 / 10

V. OUTPUT CONTACT AND RATING

CODE	OUTPUT TYPE	OUTPUT RATING
1C	SPDT (1 Changeover)	5A @ 250V AC, 24V DC Resistive

VI. SUPPLY VOLTAGE

CODE	DESCRIPTION	VOLTAGE RANGE
MV4	Multi-Voltage	20 ~ 240V AC (50/60 Hz) and 12 ~ 240V DC

DISCOUNT
SCHEDULE **C**

SOME OF OUR POPULAR CONFIGURATIONS:

17.5MM MULTI-FUNCTION — 8 RANGE ELECTRONIC TIMING RELAYS

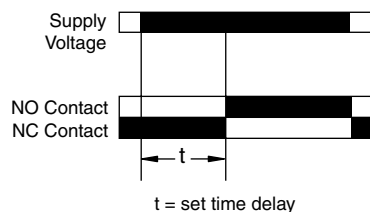
CATALOG NUMBER	DESCRIPTION	PRICE
ETR-D17MF1-10H-1CMV4	17.5mm Multi-Function, 8 Range Electronic Timing Relay, Maximum Timing Range: 10 Hours, SPDT, 12 ~ 240V AC/DC (AC: 50/60 Hz)	\$36.00

SPECIFICATIONS:

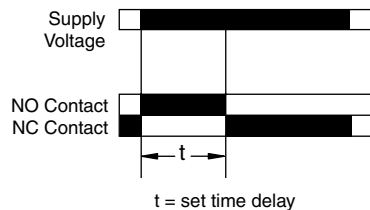
17.5MM MULTI-FUNCTION — 8 RANGE ELECTRONIC TIMING RELAYS		
	UNITS	
TIMING PERFORMANCE		
Operating Modes		ON-Delay (Energize Delay), Interval Delay, Pulse Output, Repeat Cycle Equal (OFF first), Repeat Cycle Equal (ON first), Delay on Break, Delay on Make with Totalize, Delay on Make/Delay on Break, Interval after Break, Interval with Totalize, Interval on Make/Interval on Break, Single Shot, Re-Triggerable Single Shot
Timing Ranges		Seconds: 3 / 10 / 30 Minutes: 3 / 10 / 30 Hours: 3 / 10
Accuracy		
Setting		± 5% of full scale
Repeat		± 0.5% of full scale or 50 msec. whichever is greater
Reset		On interruption of power
Reset Time		Less than 100 msec.
LED Indication		Power ON and Relay ON
Output Contact		SPDT (1 Changeover)
ELECTRICAL		
Operating Voltage		20 ~ 240V AC (AC: 50/60 Hz), 12 ~ 240V DC
Operating Voltage Limits		85% to 110%
Power Consumption		2.5 VA Max.
Output Rating		5A @ 250V AC, 24V DC Resistive
ENVIRONMENTAL		
Ambient Operating Temperature		0 to +50° C (32 to +122° F)
Ambient Storage Temperature		-20 to +75° C (-4 to +167° F)
Humidity		95% Relative Humidity (Non-condensing)
Altitude		2,000m (6,528ft.)
CONSTRUCTION		
Ingress Protection		
Terminals (Timer Body)		IP20
Terminal Capacity		
Solid Strand	mm ²	1 x 2.5 ~ 2 x 1.5
Fine Strand	mm ²	1 x 2.5 ~ 2 x 0.75
	AWG	14 ~ 18
Tightening Torque	Nm	0.8
	Lb-in.	7.0
Weight	g	80
	oz.	2.8
RoHS Compliance		For RoHS Compliance documentation by product, refer to www.c3controls.com

OPERATING MODES:

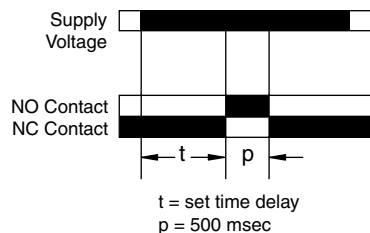
FUNCTION: ON DELAY



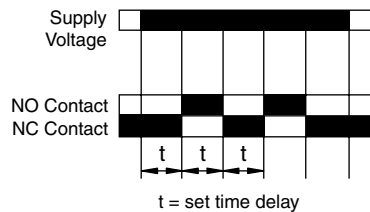
FUNCTION: INTERVAL DELAY



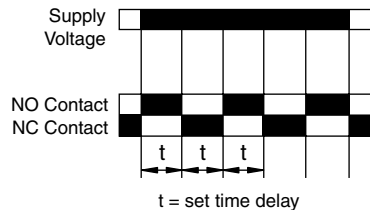
FUNCTION: PULSE OUTPUT



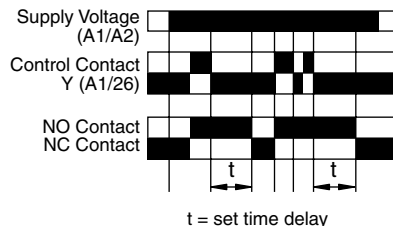
FUNCTION: REPEAT CYCLE EQUAL (OFF FIRST)



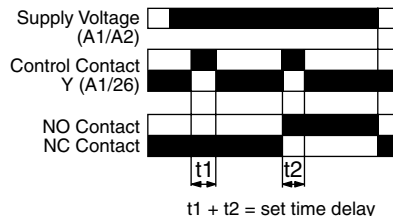
FUNCTION: REPEAT CYCLE EQUAL (ON FIRST)



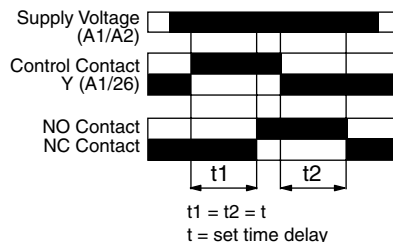
FUNCTION: DELAY ON BREAK



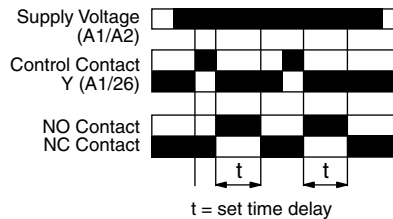
FUNCTION: DELAY ON MAKE WITH TOTALISE (TIME STORAGE)



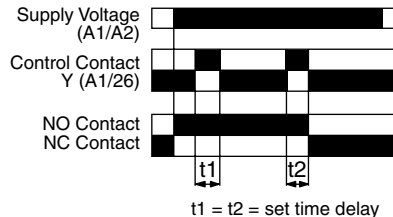
FUNCTION: DELAY ON MAKE / DELAY ON BREAK



FUNCTION: INTERVAL AFTER BREAK

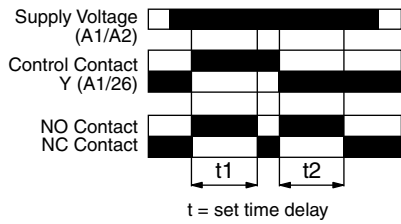


FUNCTION: INTERVAL WITH TOTALISE (TIME STORAGE)

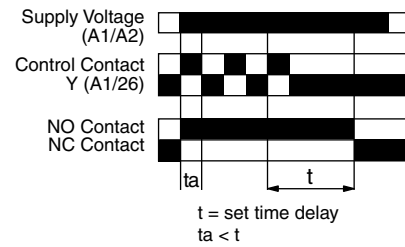


OPERATING MODES:

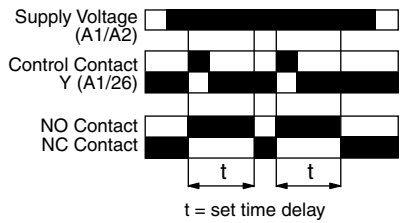
FUNCTION: INTERVAL ON MAKE / INTERVAL ON BREAK



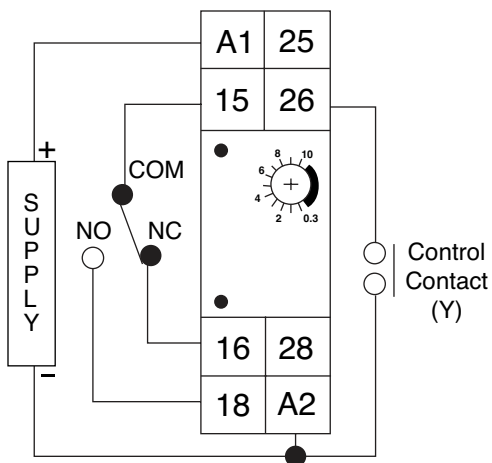
FUNCTION: RETRIGGERABLE SINGLE SHOT



FUNCTION: SINGLE SHOT



TERMINAL DIAGRAM:



IT'S EASY TO BUILD YOUR OWN ELECTRONIC TIMING RELAY

Simply pick the code number from each of the sections below and combine them to build your part number. See page 6 for more detailed directions.

22.5mm Dual-Function — 8 Range Electronic Timing Relays

ETR - D22 DEI - 60M - 1C
I II III IV V VI

Example: To build one of our most popular Electronic Timing Relays, the part number would be **ETR + D22 + DEI + 60M + 1C + VI** or **ETR-D22DEI-60M-1CDV1**



I. RELAY TYPE

CODE	DESCRIPTION
ETR	Electronic Timing Relay

II. FRAME SIZE AND MOUNTING METHOD

CODE	FRAME SIZE	MOUNTING METHOD
D22	22.5mm (7/8") Wide	35mm DIN Rail and Panel Mount

III. TIMING FUNCTIONS

CODE	SINGLE/DUAL/MULTI	OPERATING MODES	PRICE
DEI	Dual-Function	ON-Delay (Energize Delay) and Interval Delay	\$41.00

IV. TIMING RANGE

CODE	MAXIMUM TIMING RANGE	SETTABLE TIMING RANGES
60M	60 Minutes	Seconds: 3 / 10 / 30 / 60 Minutes: 3 / 10 / 30 / 60

V. OUTPUT CONTACT AND RATING

CODE	OUTPUT TYPE	OUTPUT RATING
1C	SPDT (1 Changeover)	5A @ 250V AC, 24V DC Resistive

VI. SUPPLY VOLTAGE

CODE	DESCRIPTION	VOLTAGE RANGE
DV1	Dual-Voltage	110V 50 Hz / 120V 60 Hz and 24V AC/DC
DV2	Dual-Voltage	230V 50 Hz / 240V 60 Hz and 24V AC/DC

DISCOUNT
SCHEDULE **C**

SOME OF OUR POPULAR CONFIGURATIONS:

22.5MM DUAL-FUNCTION — 8 RANGE ELECTRONIC TIMING RELAYS

CATALOG NUMBER	DESCRIPTION	PRICE
ETR-D22DEI-60M-1CDV1	22.5mm Dual-Function, 8 Range Electronic Timing Relay, Maximum Timing Range: 60-Minutes, SPDT, 110V 50 Hz/120V 60 Hz and 24V AC/DC	\$41.00
ETR-D22DEI-60M-1CDV2	22.5mm Dual-Function, 8 Range Electronic Timing Relay, Maximum Timing Range: 60-Minutes, SPDT, 230V 50 Hz/240V 60 Hz and 24V AC/DC	\$41.00

22.5MM ELECTRONIC TIMING RELAYS

These c3controls Series ETR Electronic Timing Relays include a variety of single function, dual-function, and multi-function relays with up to 12 timing ranges in a compact, 22.5mm (7/8") wide housing. This industry standard dimension makes these devices interchangeable with many commonly available electronic timers. Economical, simple dual-function, 8 and 12 range relays are available for applications with the most basic timing requirements. For applications requiring more special operating modes, Off-Delay, Cyclic, and Star (Wye) Delta timing relays are available. These electronic timing relays are also available with a multi-voltage supply design (20V ~ 240V AC and 12V ~ 240V DC) – enabling inventories to be reduced. Like all of c3controls other products, these devices are UL approved and CE marked, making them suitable for use in global applications. Look and see how the Series ETR Electronic Timing Relays can help you reduce your total installed costs and enhance the performance of your equipment.

Product features include:

- Five versions available:
 - Economical, Dual-Function, 8 and 12 Range
 - ON-Delay and Interval Delay
 - Timing ranges from 3 seconds to 30 hours
 - Single-Function
 - OFF-Delay, Cyclic, and Star-Delta (Wye-Delta)
 - Timing ranges – varies by function, refer to the specifications for each timing relay
- Repeat tripping accuracy of 0.5% for precise control application performance.
- Versions available that will accept multi-voltage supply input from 20V to 240V AC and 12V to 240V DC, reduces inventory requirements.
- Compact design, only 22.5mm (7/8") wide – reduces panel space requirements and is interchangeable with commonly available timing relays.
- SPDT and DPDT hard contacts for switching AC (5A @ 250V) and DC (5A @ 24V) loads.
- Fast and easy installation on a 35mm DIN rail or panel mounting for high vibration applications – reduces installation time and costs.
- IP20 terminals guard against accidental contact with live parts by service personnel.
- UL Approved, CE Marked, and RoHS compliant.



UNIQUE PRODUCT FEATURES



1. User selectable operating modes and timing ranges with convenient, front and top accessible setting dials and DIP switches.
2. DIP switches are protected by a cover to prevent the ingress of dust and other contaminants. Cover is transparent so the switch settings can be easily checked.
3. LED indication of Power ON and Relay ON – for fast and easy troubleshooting.
4. Terminals, connection diagrams, operating modes, and DIP switch settings are clearly marked on the timing relay for easy commissioning, wiring, and troubleshooting – reduces downtime and installation time.

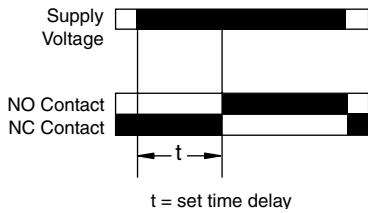
SPECIFICATIONS:

22.5MM DUAL-FUNCTION — 8 RANGE ELECTRONIC TIMING RELAYS

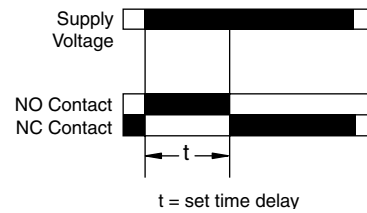
	UNITS	
TIMING PERFORMANCE		
Operating Modes		ON-Delay (Energize Delay), Interval Delay
Timing Ranges		Seconds: 3 / 10 / 30 / 60 Minutes: 3 / 10 / 30 / 60
Accuracy		
Setting		± 5% of full scale
Repeat		± 0.5% of full scale or 50 msec. whichever is greater
Reset		On interruption of power
Reset Time		Less than 100 msec.
LED Indication		Power ON and Relay ON
Output Contact		SPDT (1 Changeover)
ELECTRICAL		
Operating Voltage		110V 50 Hz / 120V 60 Hz and 24V AC/DC 230V 50 Hz / 240V 60 Hz and 24V AC/DC
Operating Voltage Limits		85% to 110%
Power Consumption		6VA Max.
Output Rating		5A @ 250V AC, 24V DC Resistive
ENVIRONMENTAL		
Ambient Operating Temperature		0 to +50° C (32 to +122° F)
Ambient Storage Temperature		-5 to +50° C (23 to +122° F)
Humidity		95% Relative Humidity (Non-condensing)
Altitude		2,000m (6,528ft.)
CONSTRUCTION		
Ingress Protection		
Terminals (Timer Body)		IP20
Terminal Capacity		
Solid Strand	mm ²	1 x 2.5 ~ 2 x 1.5
Fine Strand	mm ²	1 x 2.5 ~ 2 x 0.75
	AWG	14 ~ 18
Tightening Torque	Nm	0.8
	Lb-in.	7.0
Weight	g	115
	oz.	4.0
RoHS Compliance		For RoHS Compliance documentation by product, refer to www.c3controls.com

OPERATING MODES:

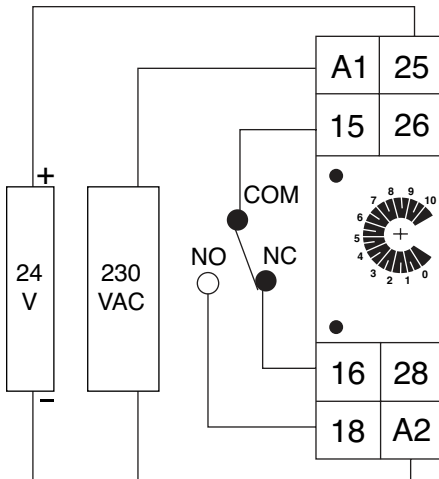
FUNCTION: ON DELAY



FUNCTION: INTERVAL DELAY



TERMINAL DIAGRAM:



IT'S EASY TO BUILD YOUR OWN ELECTRONIC TIMING RELAY

Simply pick the code number from each of the sections below and combine them to build your part number. See page 6 for more detailed directions.

22.5mm Dual-Function — 12 Range Electronic Timing Relays

ETR – D22 DEI – 30H – 2C MV1

I II III IV V VI

Example: To build one of our most popular Electronic Timing Relays, the part number would be **I + II + III + IV + V + VI** or **ETR-D22DEI-30H-2CMV1**



I. RELAY TYPE

CODE	DESCRIPTION
ETR	Electronic Timing Relay

II. FRAME SIZE AND MOUNTING METHOD

CODE	FRAME SIZE	MOUNTING METHOD
D22	22.5mm (7/8") Wide	35mm DIN Rail and Panel Mount

III. TIMING FUNCTIONS

CODE	SINGLE/DUAL/MULTI	OPERATING MODES	PRICE
DEI	Dual-Function	ON-Delay (Energize Delay) and Interval Delay	\$50.00

IV. TIMING RANGE

CODE	MAXIMUM TIMING RANGE	SETTABLE TIMING RANGES
30H	30 Hours	Seconds: 1 / 3 / 10 / 30 Minutes: 1 / 3 / 10 / 30 Hours: 1 / 3 / 10 / 30

V. OUTPUT CONTACT AND RATING

CODE	OUTPUT TYPE	OUTPUT RATING
2C	DPDT (2 Changeover)	5A @ 250V AC, 24V DC Resistive

VI. SUPPLY VOLTAGE

CODE	DESCRIPTION	VOLTAGE RANGE
MV1	Multi-Voltage	20 ~ 240V AC (50/60 Hz) and 12 ~ 240V DC

DISCOUNT
SCHEDULE **C**

SOME OF OUR POPULAR CONFIGURATIONS:

22.5MM DUAL-FUNCTION — 12 RANGE ELECTRONIC TIMING RELAYS

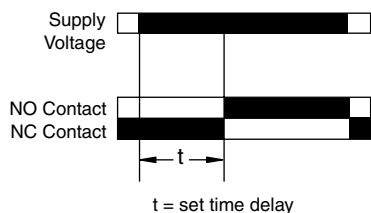
CATALOG NUMBER	DESCRIPTION	PRICE
ETR-D22DEI-30H-2CMV1	22.5mm Dual-Function, 12 Range Electronic Timing Relay, Maximum Timing Range: 30 Hours, DPDT, 20 ~ 240V AC (50/60 Hz) and 12 ~ 240V DC	\$50.00

SPECIFICATIONS:

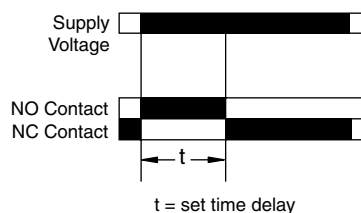
22.5MM DUAL-FUNCTION — 12 RANGE ELECTRONIC TIMING RELAYS		
	UNITS	
TIMING PERFORMANCE		
Operating Modes		ON-Delay (Energize Delay) and Interval Delay
Timing Ranges		Seconds: 1 / 3 / 10 / 30 Minutes: 1 / 3 / 10 / 30 Hours: 1 / 3 / 10 / 30
Accuracy		
Setting		± 5% of full scale
Repeat		± 0.5% of full scale or 50 msec. whichever is greater
Reset		On interruption of power
Reset Time		Less than 100 msec.
LED Indication		Power ON and Relay ON
Output Contact		DPDT (2 Changeover)
ELECTRICAL		
Operating Voltage		20 ~ 240V AC (50/60 Hz) and 12 ~ 240V DC
Operating Voltage Limits		85% to 110%
Power Consumption		2VA Max.
Output Rating		5A @ 250V AC, 24V DC Resistive
ENVIRONMENTAL		
Ambient Operating Temperature		0 to +50° C (32 to +122° F)
Ambient Storage Temperature		-20 to +75° C (-4 to +167° F)
Humidity		95% Relative Humidity (Non-condensing)
Altitude		2,000m (6,528ft.)
CONSTRUCTION		
Ingress Protection		
Terminals (Timer Body)		IP20
Terminal Capacity		
Solid Strand	mm ²	1 x 2.5 ~ 2 x 1.5
Fine Strand	mm ²	1 x 2.5 ~ 2 x 0.75
	AWG	4 ~ 18
Tightening Torque	Nm	0.8
	Lb-in.	7.0
Weight	g	100
	oz.	3.5
RoHS Compliance		For RoHS Compliance documentation by product, refer to www.c3controls.com

OPERATING MODES:

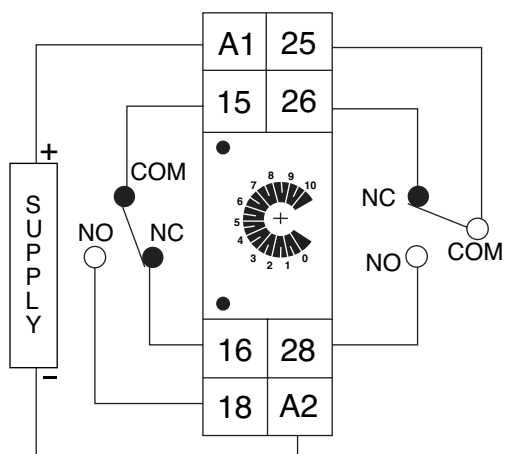
FUNCTION: ON DELAY



FUNCTION: INTERVAL DELAY



TERMINAL DIAGRAM:



IT'S EASY TO BUILD YOUR OWN ELECTRONIC TIMING RELAY

Simply pick the code number from each of the sections below and combine them to build your part number. See page 6 for more detailed directions.

22.5mm OFF-Delay Electronic Timing Relays

ETR – D22 SD – **IV** – 2C MV2
I II III IV V VI

Example: To build one of our most popular Electronic Timing Relays, the part number would be **ETR + D22 + SD + IV + 2C + MV2** or **ETR-D22SD-60S-2CMV2**

**I. RELAY TYPE**

CODE	DESCRIPTION
ETR	Electronic Timing Relay

II. FRAME SIZE AND MOUNTING METHOD

CODE	FRAME SIZE	MOUNTING METHOD
D22	22.5mm (7/8") Wide	35mm DIN Rail and Panel Mount

III. TIMING FUNCTIONS

CODE	SINGLE/DUAL/MULTI	OPERATING MODES	PRICE
SD	Single-Function	OFF-Delay (De-Energize Delay)	\$68.00

IV. TIMING RANGE

CODE	MAXIMUM TIMING RANGE
60S	60 Seconds (factory set)
180S	180 Seconds (factory set)

V. OUTPUT CONTACT AND RATING

CODE	OUTPUT TYPE	OUTPUT RATING
2C	DPDT (2 Changeover)	5A @ 250V AC, 28V DC Resistive

VI. SUPPLY VOLTAGE

CODE	DESCRIPTION	VOLTAGE RANGE
MV2	Multi-Voltage	110 ~ 240V AC/DC (AC: 50/60 Hz)

DISCOUNT
SCHEDULE **C**

SOME OF OUR POPULAR CONFIGURATIONS:

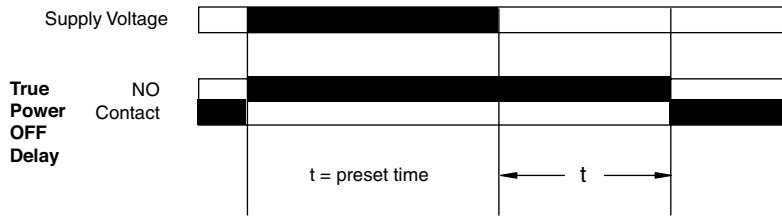
22.5MM OFF-DELAY ELECTRONIC TIMING RELAYS

CATALOG NUMBER	DESCRIPTION	PRICE
ETR-D22SD-60S-2CMV2	22.5mm Single-Function OFF-Delay Electronic Timing Relay, Maximum Timing Range: 60-Seconds, DPDT, 110 ~ 240V AC/DC (AC: 50/60 Hz)	\$68.00
ETR-D22SD-180S-2CMV2	22.5mm Single-Function OFF-Delay Electronic Timing Relay, Maximum Timing Range: 180 Seconds, DPDT, 110 ~ 240V AC/DC (AC: 50/60 Hz)	\$68.00

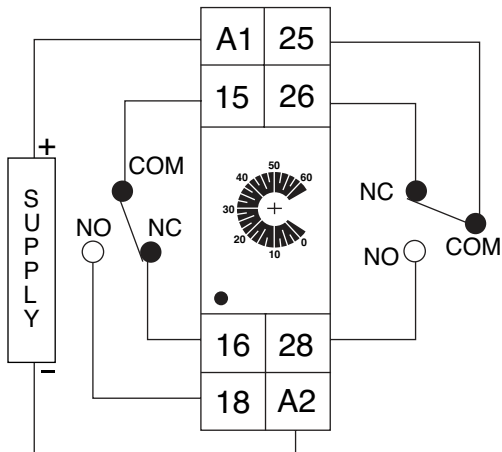
SPECIFICATIONS:

22.5MM OFF-DELAY ELECTRONIC TIMING RELAYS		
	UNITS	
TIMING PERFORMANCE		
Operating Modes		OFF-Delay (De-Energize Delay)
Timing Ranges		Seconds: 60 / 180 (factory set)
Accuracy		
Setting		± 10% of full scale
Repeat		± 2% of full scale or 100 msec. whichever is greater
Reset		On interruption of power
Reset Time		Less than 100 msec.
LED Indication		Power ON
Output Contact		DPDT (2 Changeover)
ELECTRICAL		
Operating Voltage		110 ~ 240V AC/DC (AC: 50/60 Hz)
Operating Voltage Limits		85% to 110%
Power Consumption		2.5VA Max.
Output Rating		5A @ 250V AC, 28V DC Resistive
ENVIRONMENTAL		
Ambient Operating Temperature		0 to +50° C (32 to +122° F)
Ambient Storage Temperature		-5 to +50° C (23 to +122° F)
Humidity		95% Relative Humidity (Non-condensing)
Altitude		2,000m (6,528ft.)
CONSTRUCTION		
Ingress Protection		
Terminals (Timer Body)		IP20
Terminal Capacity		
Solid Strand	mm ²	1 x 2.5 ~ 2 x 1.5
Fine Strand	mm ²	1 x 2.5 ~ 2 x 0.75
	AWG	14 ~ 18
Tightening Torque	Nm	0.8
	Lb-in.	7.0
Weight	g	110
	oz.	3.9
RoHS Compliance		For RoHS Compliance documentation by product, refer to www.c3controls.com

OPERATING MODE:



TERMINAL DIAGRAM:



IT'S EASY TO BUILD YOUR OWN ELECTRONIC TIMING RELAY

Simply pick the code number from each of the sections below and combine them to build your part number. See page 6 for more detailed directions.

22.5mm Cyclic Electronic Timing Relays

ETR - D22 SC - 10H - 2C MV1

I II III IV V VI

Example: To build one of our most popular Electronic Timing Relays, the part number would be **I + II + III + IV + V + VI** or **ETR-D22SC-10H-2CMV1**



I. RELAY TYPE

CODE	DESCRIPTION
ETR	Electronic Timing Relay

II. FRAME SIZE AND MOUNTING METHOD

CODE	FRAME SIZE	MOUNTING METHOD
D22	22.5mm (7/8") Wide	35mm DIN Rail and Panel Mount

III. TIMING FUNCTIONS

CODE	SINGLE/DUAL/MULTI	OPERATING MODES	PRICE
SC	Single-Function	Cyclic	\$45.00

IV. TIMING RANGE

CODE	MAXIMUM TIMING RANGE	SETTABLE TIMING RANGES
10H	10 Hours	Seconds: 1 / 10 Minutes: 1 / 10 Hours: 1 / 10

V. OUTPUT CONTACT AND RATING

CODE	OUTPUT TYPE	OUTPUT RATING
2C	DPDT (2 Changeover)	5A @ 250V AC, 24V DC Resistive

VI. SUPPLY VOLTAGE

CODE	DESCRIPTION	VOLTAGE RANGE
MV1	Multi-Voltage	20 ~ 240V AC (50/60 Hz) and 12 ~ 240V DC

DISCOUNT
SCHEDULE **C**

SOME OF OUR POPULAR CONFIGURATIONS:

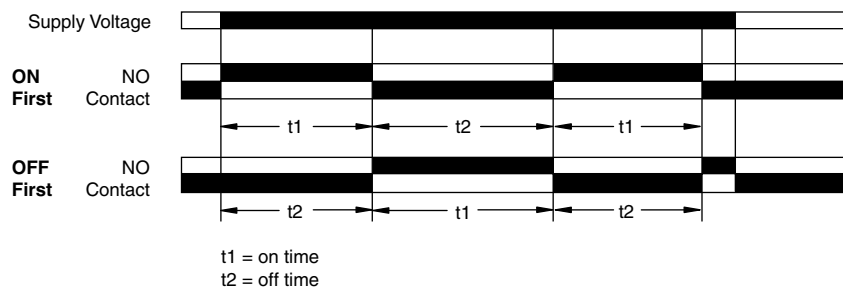
22.5MM CYCLIC ELECTRONIC TIMING RELAYS

CATALOG NUMBER	DESCRIPTION	PRICE
ETR-D22SC-10H-2CMV1	22.5mm Single-Function Cyclic Electronic Timing Relay, Maximum Timing Range: 10 Hours, DPDT, 20 ~ 240V AC (50/60 Hz) and 12 ~ 240V DC	\$45.00

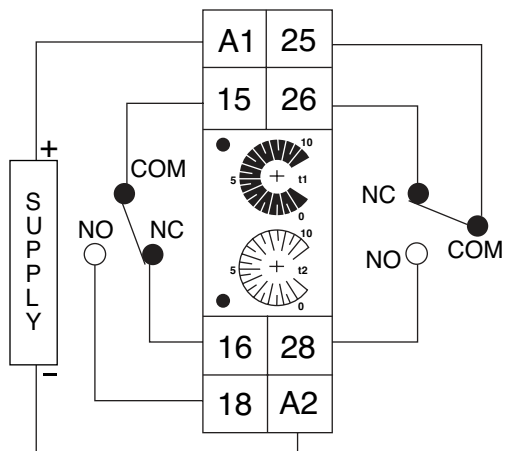
SPECIFICATIONS:

22.5MM CYCLIC ELECTRONIC TIMING RELAYS		
	UNITS	
TIMING PERFORMANCE		
Operating Modes		Cyclic, "ON first" and "OFF first" (Selectable via DIP switches)
Timing Ranges (for both ON and OFF time)		Seconds: 1 / 10 Minutes: 1 / 10 Hours: 1 / 10
Accuracy		
Setting		± 5% of full scale
Repeat		± 0.5% of full scale or 50 msec. whichever is greater
Reset		On interruption of power
Reset Time		Less than 100 msec.
LED Indication		Power ON, Relay ON
Output Contact		DPDT (2 Changeover)
ELECTRICAL		
Operating Voltage		20 ~ 240V AC (50/60 Hz) and 12 ~ 240V DC
Operating Voltage Limits		85% to 110%
Power Consumption		2VA Max.
Output Rating		5A @ 250V AC, 24V DC Resistive
ENVIRONMENTAL		
Ambient Operating Temperature		0 to +50° C (32 to +122° F)
Ambient Storage Temperature		-20 to +75° C (-4 to +167° F)
Humidity		95% Relative Humidity (Non-condensing)
Altitude		2,000m (6,528ft.)
CONSTRUCTION		
Ingress Protection		
Terminals (Timer Body)		IP20
Terminal Capacity		
Solid Strand	mm ²	1 x 2.5 ~ 2 x 1.5
Fine Strand	mm ²	1 x 2.5 ~ 2 x 0.75
	AWG	14 ~ 18
Tightening Torque	Nm	0.8
	Lb-in.	7.0
Weight	g	110
	oz.	3.9
RoHS Compliance		For RoHS Compliance documentation by product, refer to www.c3controls.com

OPERATING MODE:



TERMINAL DIAGRAM:



IT'S EASY TO BUILD YOUR OWN ELECTRONIC TIMING RELAY

Simply pick the code number from each of the sections below and combine them to build your part number. See page 6 for more detailed directions.

22.5mm Star (Wye) Delta Electronic Timing Relays

ETR - D22 SS - 60S - 2X VI

Example: To build one of our most popular Electronic Timing Relays, the part number would be **ETR + D22 + SS + 60S + 2X + VI** or **ETR-D22SS-60S-2XD**



I. RELAY TYPE

CODE	DESCRIPTION
ETR	Electronic Timing Relay

II. FRAME SIZE AND MOUNTING METHOD

CODE	FRAME SIZE	MOUNTING METHOD
D22	22.5mm (7/8") Wide	35mm DIN Rail and Panel Mount

III. TIMING FUNCTIONS

CODE	SINGLE/DUAL/MULTI	OPERATING MODES	PRICE
SS	Single-Function	Star-Delta (Wye-Delta)	\$40.00

IV. TIMING RANGE

CODE	MAXIMUM TIMING RANGE	SETTABLE TIMING RANGES
60S	60 Seconds (Starting Time)	Starting Time: 30 / 60 seconds Changeover Time: 40 / 100 milli-seconds

V. OUTPUT CONTACT AND RATING

CODE	OUTPUT TYPE	OUTPUT RATING
2X	1 SPDT (1 Changeover) for Star (Wye) and 1 SPDT (1 Changeover) for Delta	5A @ 250V AC, 24V DC Resistive

VI. SUPPLY VOLTAGE

CODE	DESCRIPTION	VOLTAGE RANGE
D	Fixed Voltage	110V 50 Hz / 120V 60 Hz
F	Fixed Voltage	230V 50 Hz / 240V 60 Hz
R	Fixed Voltage	400 ~ 415V 50 Hz

DISCOUNT
SCHEDULE **C**

SOME OF OUR POPULAR CONFIGURATIONS:

22.5MM STAR (WYE) DELTA ELECTRONIC TIMING RELAYS

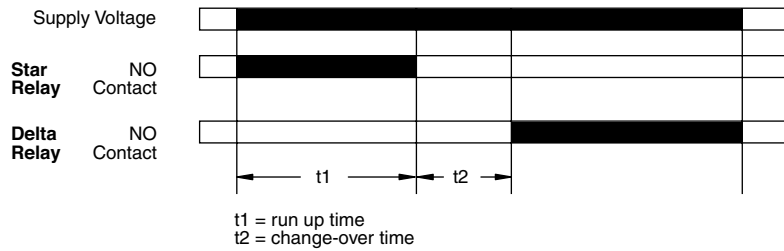
CATALOG NUMBER	DESCRIPTION	PRICE
ETR-D22SS-60S-2XD	22.5mm Single-Function Star (Wye) Delta Electronic Timing Relay, Maximum Timing Range: 60-Seconds, 2 SPDT, 110V 50 Hz/120V 60 Hz	\$40.00
ETR-D22SS-60S-2XF	22.5mm Single-Function Star (Wye) Delta Electronic Timing Relay, Maximum Timing Range: 60-Seconds, 2 SPDT, 230V 50 Hz/240V 60 Hz	\$40.00
ETR-D22SS-60S-2XR	22.5mm Single-Function Star (Wye) Delta Electronic Timing Relay, Maximum Timing Range: 60-Seconds, 2 SPDT, 400 ~ 415V 50 Hz	\$40.00

SPECIFICATIONS:

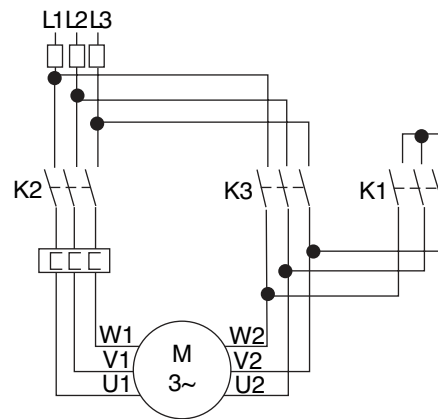
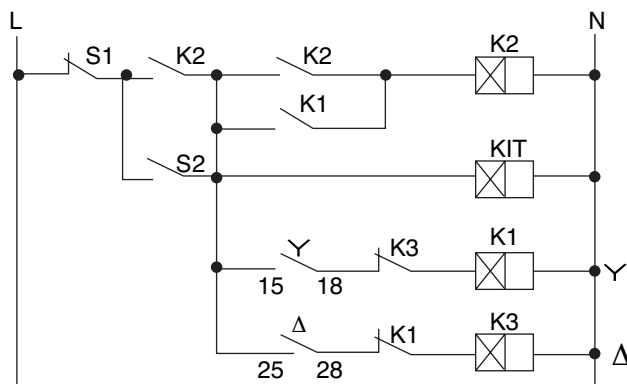
22.5MM STAR (WYE) DELTA ELECTRONIC TIMING RELAYS

	UNITS	
TIMING PERFORMANCE		
Operating Modes		Star-Delta (Wye Delta)
Timing Ranges		Starting Time: 30 / 60 seconds Changeover Time: 40 / 100 milli-seconds
Accuracy		
Setting		± 5% of full scale
Repeat		± 0.5% of full scale or 50 msec. whichever is greater
Reset		On interruption of power
Reset Time		Less than 100 msec.
LED Indication		Star (Wye) Relay "ON", Delta Relay "ON"
Output Contact		1 SPDT (1 Changeover) for Star (Wye) and 1 SPDT (1 Changeover) for Delta
ELECTRICAL		
Operating Voltage		110V 50 Hz / 120V 60 Hz 230V 50 Hz / 240V 60 Hz 400 ~ 415V 50Hz
Operating Voltage Limits		85% to 110%
Power Consumption		10VA Max.
Output Rating		5A @ 250V AC, 24V DC Resistive
ENVIRONMENTAL		
Ambient Operating Temperature		0 to +50° C (32 to +122° F)
Ambient Storage Temperature		-20 to +75° C (-4 to +167° F)
Humidity		95% Relative Humidity (Non-condensing)
Altitude		2,000m (6,528ft.)
CONSTRUCTION		
Ingress Protection		
Terminals (Timer Body)		IP20
Terminal Capacity		
Solid Strand	mm ²	1 x 2.5 ~ 2 x 1.5
Fine Strand	mm ²	1 x 2.5 ~ 2 x 0.75
	AWG	14 ~ 18
Tightening Torque	Nm	0.8
	Lb-in.	7.0
Weight	g	130
	oz.	4.6
RoHS Compliance		For RoHS Compliance documentation by product, refer to www.c3controls.com

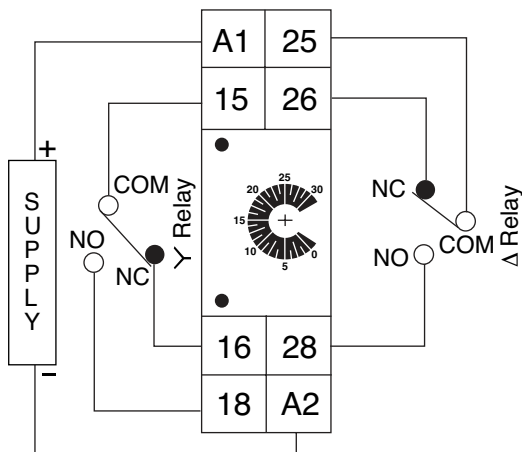
OPERATING MODE:



WIRING DIAGRAMS:



TERMINAL DIAGRAM:



IT'S EASY TO BUILD YOUR OWN ELECTRONIC TIMING RELAY

Simply pick the code number from each of the sections below and combine them to build your part number. See page 6 for more detailed directions.

45mm Socket Mount Dual-Function — 12 Range Electronic Timing Relays

ETR – S45 DEI – 30H – 2C MV1

I II III IV V VI

Example: To build one of our most popular Electronic Timing Relays, the part number would be **I + II + III + IV + V + VI** or **ETR-S45DEI-30H-2CMV1**



I. RELAY TYPE

CODE	DESCRIPTION
ETR	Electronic Timing Relay

II. FRAME SIZE AND MOUNTING METHOD

CODE	FRAME SIZE	MOUNTING METHOD
S45	45mm (1-3/4") Wide x 45mm (1-3/4") High (1/16 DIN)	8 Pin Socket Mount (Cat. No. GPRA-SP08G1 or GPRA-SP08U1)

III. TIMING FUNCTIONS

CODE	SINGLE/DUAL/MULTI	OPERATING MODES	PRICE
DEI	Dual-Function	ON-Delay (Energize Delay) and Interval Delay	\$47.00

IV. TIMING RANGE

CODE	MAXIMUM TIMING RANGE	SETTABLE TIMING RANGES
30H	30 Hours	Seconds: 1 / 3 / 10 / 30 Minutes: 1 / 3 / 10 / 30 Hours: 1 / 3 / 10 / 30

V. OUTPUT CONTACT AND RATING

CODE	OUTPUT TYPE	OUTPUT RATING
2C	DPDT (2 Changeover)	5A @ 250V AC, 24V DC Resistive

VI. SUPPLY VOLTAGE

CODE	DESCRIPTION	VOLTAGE RANGE
MV1	Multi-Voltage	20 ~ 240V AC (50/60 Hz) and 12 ~ 240V DC

NOTE: 8 Pin Sockets can be found on page 420.

DISCOUNT
SCHEDULE **C**

SOME OF OUR POPULAR CONFIGURATIONS:

45MM SOCKET MOUNT DUAL-FUNCTION — 12 RANGE ELECTRONIC TIMING RELAYS

CATALOG NUMBER	DESCRIPTION	PRICE
ETR-S45DEI-30H-2CMV1	45mm Socket Mount Dual-Function, 12 Range Electronic Timing Relay, Maximum Timing Range: 30 Hours, DPDT, 20 ~ 240V AC (50/60 Hz) and 12 ~ 240V DC	\$47.00

45MM SOCKET MOUNT DUAL-FUNCTION— 12 RANGE ELECTRONIC TIMING RELAYS

This c3controls Series ETR Electronic Timing Relay offers dual-functions and a timing range up to 30 hours in a compact, 45mm (1-3/4") Wide x 45mm (1-3/4") High (1/16 DIN) housing that can be panel mounted or mounted in an enclosure door, with an 8 pin socket. This industry standard dimension and socket mounting makes these devices interchangeable with many commonly available electronic timers. This economical, simple dual-function, 12 range timing relay is ideal for applications with the most basic timing requirements. Its multi-voltage supply design (20V ~ 240V AC and 12V ~ 240V DC) reduces inventory. Like all of c3controls other products, this device is UL approved and CE marked, making it suitable for use in global applications. Look and see how the Series ETR Electronic Timing Relays can help you reduce your total installed costs and enhance the performance of your equipment.

Product features include:

- Dual Function, 12 Range
 - ON-Delay and Interval Delay
 - Timing range from 1 second to 30 hours
- Repeat tripping accuracy of 0.5% for precise control application performance.
- Accepts multi-voltage supply input from 20V to 240V AC and 12V to 240V DC, reduces inventory requirements.
- Compact design, only 45mm (1-3/4") wide x 45mm (1-3/4") high (1/16 DIN) – reduces panel space requirements.
- DPDT hard contact for switching AC (5A @ 250V) and DC (5A @ 24V) loads.
- UL Approved, CE Marked, and RoHS compliant.



UNIQUE PRODUCT FEATURES



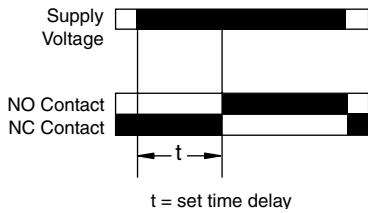
1. User selectable operating modes and timing ranges with convenient, front accessible setting dials and DIP switches.
2. DIP switches are protected by a cover to prevent the ingress of dust and other contaminants. Cover is transparent so the switch settings can be easily checked.
3. LED indication of Power ON and Relay ON – for fast and easy troubleshooting.
4. Fast and easy installation in an 8 pin socket – reduces installation time and costs. The socket can be mounted on a 35mm DIN Rail or panel, or the timing relay can be installed on an enclosure door. See page 420 for 8 pin sockets.
5. Terminals, connection diagrams, operating modes, and DIP switch settings are clearly marked on the timing relay for easy commissioning, wiring, and troubleshooting – reduces downtime and installation time.

SPECIFICATIONS:

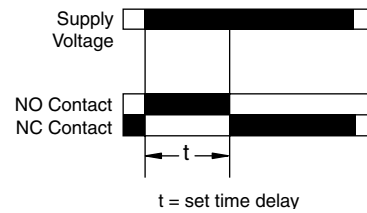
45MM SOCKET MOUNT DUAL-FUNCTION — 12 RANGE ELECTRONIC TIMING RELAYS		
	UNITS	
TIMING PERFORMANCE		
Operating Modes		ON-Delay (Energize Delay) and Interval Delay
Timing Ranges		Seconds: 1 / 3 / 10 / 30 Minutes: 1 / 3 / 10 / 30 Hours: 1 / 3 / 10 / 30
Accuracy		
Setting		± 5% of full scale
Repeat		± 0.5% of full scale or 50 msec. whichever is greater
Reset		On interruption of power
Reset Time		Less than 100 msec.
LED Indication		Power ON and Relay ON
Output Contact		DPDT (2 Changeover)
ELECTRICAL		
Operating Voltage		20 ~ 240V AC (50/60 Hz) and 12 ~ 240V DC
Operating Voltage Limits		85% to 110%
Power Consumption		2VA Max.
Output Rating		5A @ 250V AC, 24V DC Resistive
ENVIRONMENTAL		
Ambient Operating Temperature		0 to +50° C (32 to +122° F)
Ambient Storage Temperature		-5 to +50° C (23 to +122° F)
Humidity		95% Relative Humidity (Non-condensing)
Altitude		2,000m (6,528ft.)
CONSTRUCTION		
Ingress Protection		
Terminals (Timer Body)		IP20
Exterior Bezel		IP40
Weight	g	100
	oz.	3.5
RoHS Compliance		For RoHS Compliance documentation by product, refer to www.c3controls.com

OPERATING MODES:

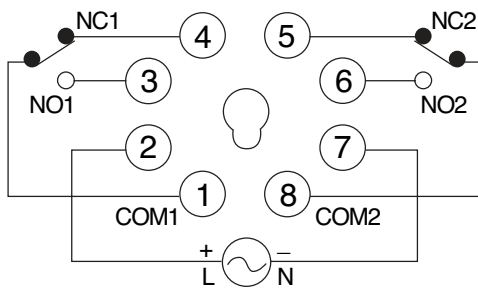
FUNCTION: ON DELAY



FUNCTION: INTERVAL DELAY



TERMINAL DIAGRAM:



IT'S EASY TO BUILD YOUR OWN ELECTRONIC TIMING RELAY

Simply pick the code number from each of the sections below and combine them to build your part number. See page 6 for more detailed directions.

45mm Digital Electronic Timing Relays

ETRD - P45 MF2 - PR - 2X VI

Example: To build one of our most popular Electronic Timing Relays, the part number would be **ETRD + P45 + MF2 + PR + 2X + VI** or **ETRD-P45MF2-PR-2XMV3**



I. RELAY TYPE

CODE	DESCRIPTION
ETRD	Digital Electronic Timing Relay

II. FRAME SIZE AND MOUNTING METHOD

CODE	FRAME SIZE	MOUNTING METHOD
P45	45mm (1-3/4") Wide x 45mm (1-3/4") High (1/16 DIN)	Enclosure Door Mount

III. TIMING FUNCTIONS

CODE	SINGLE/DUAL/MULTI	OPERATING MODES	PRICE
MF2	Multi-Function	ON-Delay (Energize Delay), Interval Delay, Cyclic ON First, Cyclic OFF First, Forward- Pause-Reverse, Instantaneous + Delayed, Timer, Batch	\$104.00

IV. TIMING RANGE

CODE	SETTABLE TIMING RANGES
PR	Seconds: 99.99 / 999.9 / 9999 Minutes : Seconds: 99:59 Minutes: 999.9 / 9999 Hours : Minutes: 99:59 Hours: 999.9 / 9999

V. OUTPUT CONTACT AND RATING

CODE	OUTPUT TYPE	OUTPUT RATING
2X	2 SPST (NO)	5A @ 250V AC, 24V DC Resistive

VI. SUPPLY VOLTAGE

CODE	DESCRIPTION	VOLTAGE RANGE
MV3	Multi-Voltage	85 ~ 270V AC/DC (AC: 50/60 Hz)
ZC	Fixed Voltage	24V DC

DISCOUNT
SCHEDULE **C**

SOME OF OUR POPULAR CONFIGURATIONS:

45MM DIGITAL ELECTRONIC TIMING RELAYS

CATALOG NUMBER	DESCRIPTION	PRICE
ETRD-P45MF2-PR-2XMV3	45mm Multi-Function Digital Electronic Timing Relay, 2 NO (SPST NO Double Break), 85 ~ 270V AC/DC (AC: 50/60 Hz)	\$104.00
ETRD-P45MF2-PR-2XZC	45mm Multi-Function Digital Electronic Timing Relay, 2 NO (SPST NO Double Break), 24V DC	\$104.00

45MM DIGITAL ELECTRONIC TIMING RELAYS

The c3controls Series ETRD Digital Electronic Timing Relays offer maximum functionality and timing ranges from 0.01 seconds to 9,999 hours in a compact, 45mm (1-3/4") Wide x 45mm (1-3/4") High (1/16 DIN) housing. This industry standard dimension makes these devices interchangeable with many commonly available electronic timers. Fully programmable, this multi-function timing relay with its multi-voltage supply design (85V ~ 270V AC/DC) is an ideal solution for the most complex, timing applications. Where precision timing is required, the 0.05% repeat tripping accuracy is sure to satisfy the most demanding application requirements. The attractive, 2 line LED display, and intuitive key pad make programming and monitoring easy. Like all of c3controls other products, these devices are UL approved and CE marked, making them suitable for use in global applications. Look and see how the Series ETRD Digital Electronic Timing Relays can help you reduce your total installed costs and enhance the performance of your equipment.



- Multi-function to satisfy virtually any control application requirement: ON-Delay (Energize Delay), Interval Delay, Cyclic ON First, Cyclic OFF First, Forward-Pause-Reverse, Instantaneous + Delayed, Batch.
- Timing Ranges from 0.01 seconds to 9999 hours.
- Repeat tripping accuracy of 0.05% for the most precise and exact control application performance.
- Versions available that will accept multi-voltage supply input from 85V to 270V AC/DC, reduces inventory requirements. A fixed voltage, 24V DC version is also available.
- Compact design, only 45mm (1-3/4") wide x 45mm (1-3/4") high (1/16 DIN) – reduces panel space requirements.
- Two (2) SPST (NO) hard contacts for switching AC (5A @ 250V) and DC (5A @ 24V) loads.
- Fast and easy installation in an enclosure door.
- IP20 terminals guard against accidental contact with live parts by service personnel.
- UL Approved, CE Marked, and RoHS compliant.

UNIQUE PRODUCT FEATURES



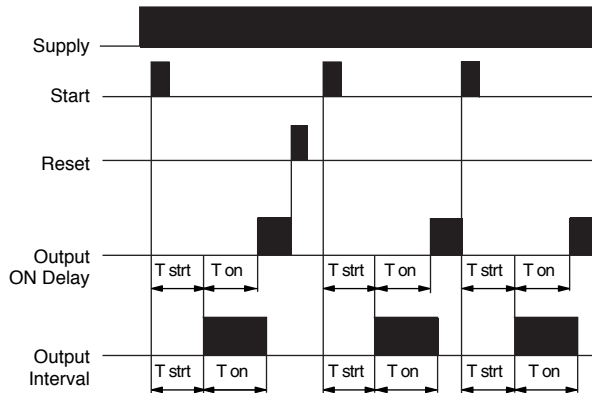
1. Operating modes and timing ranges are fully programmable, with the intuitive key pad on the front of the timing relay.
2. Advanced timing relay features include:
 - Various Reset Modes: front panel (selectable), remote, and on power interruption
 - 2 Set points
 - Start Input: gate / pulse (programmable)
 - Batch counting
 - Counting Direction: up and down
 - Memory Retention: 10 years
 - Configuration Lock: password protected
3. Easy to read two-line display:
 - Upper: 7 segment Red LED, 0.5"; 4 Digits
 - Lower: 7 segment Green LED, 0.3"; 4 Digits
4. LED indication of relay status and seconds, minutes, and hours – for fast and easy troubleshooting.
5. Terminals, connection diagrams, operating modes, and DIP switch settings are clearly marked on the timing relay for easy commissioning, wiring, and troubleshooting – reduces downtime and installation time.

SPECIFICATIONS:

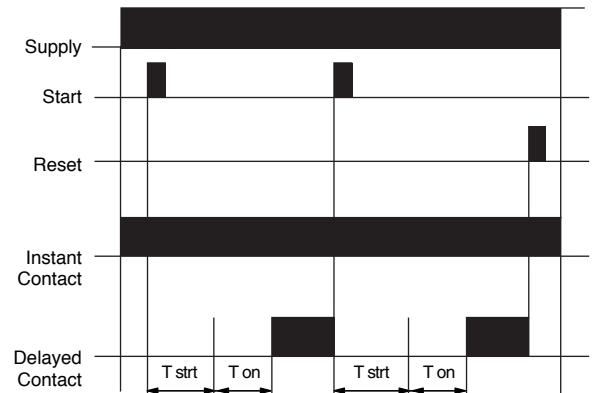
45MM DIGITAL ELECTRONIC TIMING RELAYS		
	UNITS	
TIMING PERFORMANCE		
Display		Upper: 7 segment Red LED, 0.5"; 4 Digits Lower: 7 segment Green LED, 0.3"; 4 Digits
Time Setting		Front Keypad
Operating Modes		ON-Delay (Energize Delay), Interval Delay, Cyclic ON First, Cyclic OFF First, Forward-Pause-Reverse, Instantaneous + Delayed, Timer, Batch
Set Points		2
Timing Ranges		Seconds: 99.99 / 999.9 / 9999 Minutes : Seconds: 99:59 Minutes: 999.9 / 9999 Hours : Minutes: 99:59 Hours: 999.9 / 9999
Counting Direction		Up/Down
Start Input		Gate / Pulse Start (programmable)
Accuracy		
Repeat		± 0.05% of full scale or 50 msec. whichever is greater
Reset		Front, Remote, Power Interruption (programmable)
Memory		10 Years
Configuration Lock		Password Protected
LED Indication		Relay Status, sec., min., hr.
Output Contact		2 SPST (NO)
ELECTRICAL		
Operating Voltage		85 ~ 270V AC/DC (AC: 50/60 Hz), 24V DC
Operating Voltage Limits		85% to 110%
Power Consumption		5 VA Max.
Output Rating		5A @ 250V AC, 24V DC Resistive
ENVIRONMENTAL		
Ambient Operating Temperature		0 to +50° C (32 to +122° F)
Ambient Storage Temperature		-5 to +50° C (23 to +167° F)
Humidity		95% Relative Humidity (Non-condensing)
Altitude		2,000m (6,528ft.)
CONSTRUCTION		
Ingress Protection		
Terminals (Timer Body)		IP20
Exterior Bezel		IP65
Terminal Capacity		
Solid Strand	mm ²	1 x 2.5 ~ 2 x 1.5
Fine Strand	mm ²	1 x 2.5 ~ 2 x 0.75
	AWG	14 ~ 18
Tightening Torque	Nm	0.8
	Lb-in.	7.0
Weight	g	175
	oz.	6.2
RoHS Compliance		For RoHS Compliance documentation by product, refer to www.c3controls.com

OPERATING MODES:

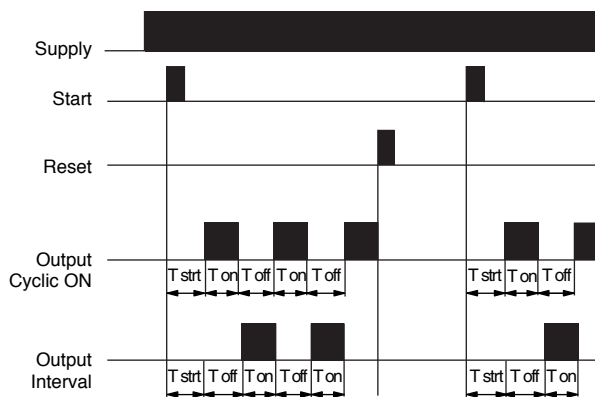
FUNCTION: ON DELAY, INTERVAL



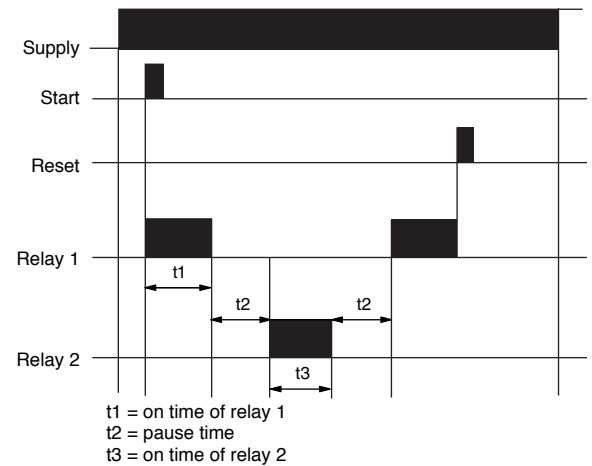
FUNCTION: INSTANTANEOUS + DELAYED AT POWER ON



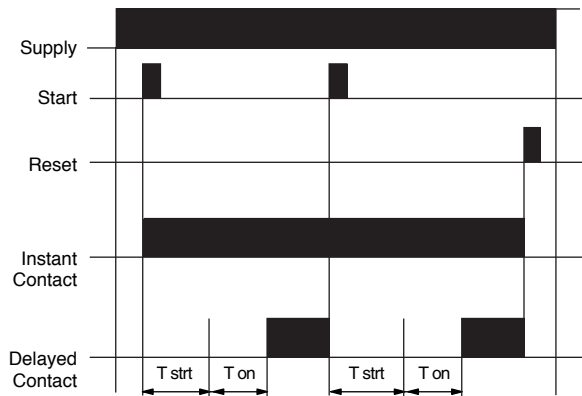
FUNCTION: CYCLIC ON FIRST, CYCLIC OFF FIRST



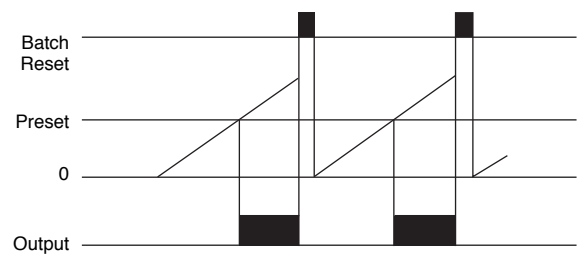
FUNCTION: MOTOR REVERSE MODE



FUNCTION: INSTANTANEOUS + DELAYED AT START PULSE

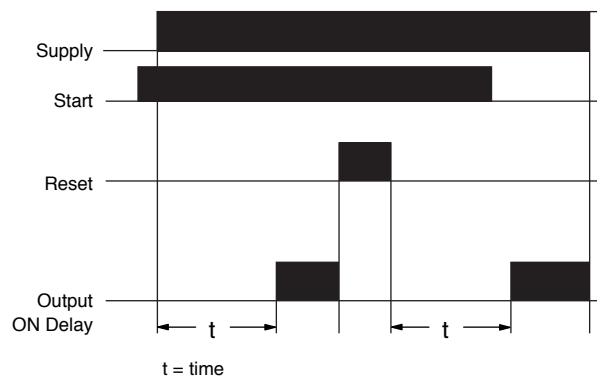


FUNCTION: BATCH MODE

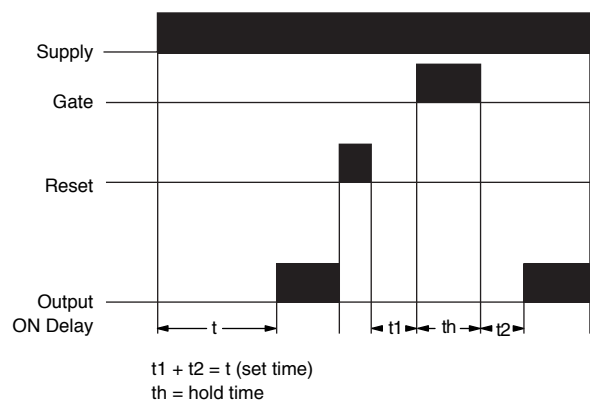


OPERATING MODES:

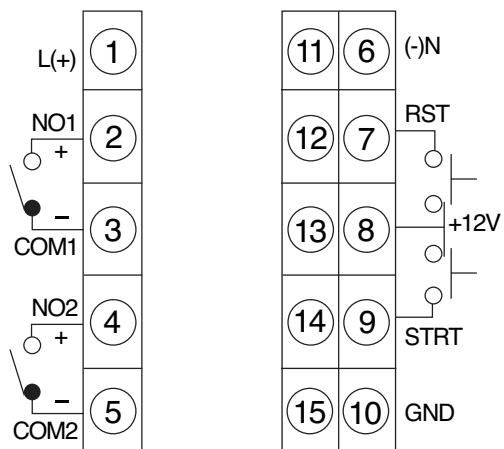
FUNCTION: TYPICAL APPLICATION OF CONTINUOUS START AND RESET IN ON DELAY



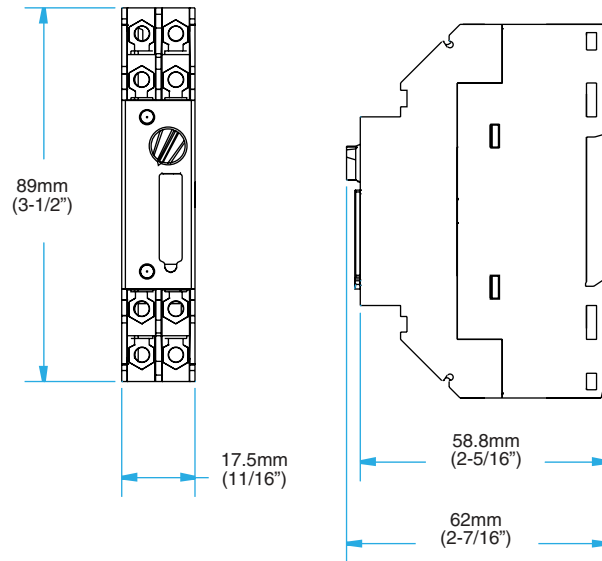
FUNCTION: TYPICAL APPLICATION OF GATE START IN ON DELAY



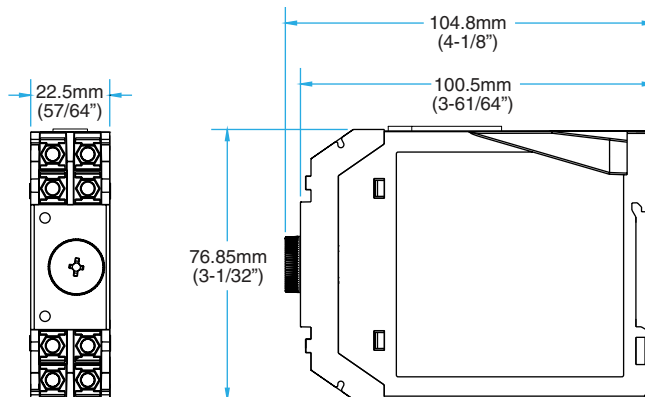
TERMINAL DIAGRAM:



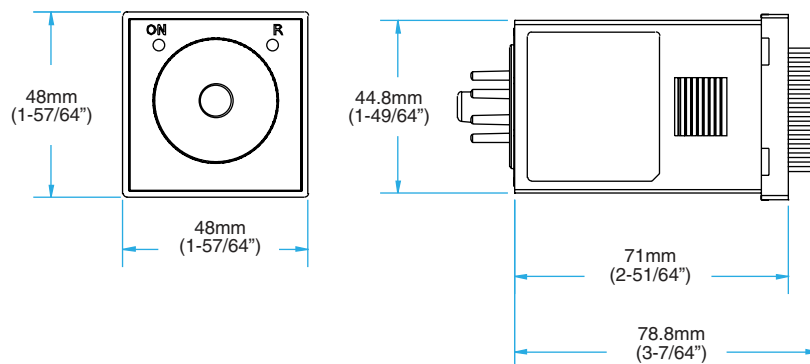
17.5MM ELECTRONIC TIMING RELAYS



22.5MM ELECTRONIC TIMING RELAYS



45MM SOCKET MOUNTED ELECTRONIC TIMING RELAYS



DIGITAL PROGRAMMABLE ELECTRONIC TIMING RELAYS

