ELECTRONIC TIMING RELAYS

series ETR

c3controls Series ETR Electronic Timing Relays include a variety of devices with single, dual, and multi-functions 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.

Section 25

Selection Guide & Timing Charts 4

17.5mm Electronic Timing Relays 6
(DIN Rail)

22.5mm Electronic Timing Relays 11
(DIN Rail or Panel Mount)

45mm Socket Mount Electronic Timing Relays 18
(Door or Panel Mount, DIN Rail)

Dimensions 22

PROVEN

Conformity to Standards:
UL 61010-1, 508
C22.2 No. 61010-1, No. 14
IEC 61000-4

Certifications:
UL File #: E329857 (Guide QUYX2, QUYX8), E68568 (Guide NKCR, NKCR8)

CE Marked (per EU Low Voltage Directive 2006/95/EC, EMC 2004/108/EC and RoHS Directive 2011/65/EU)

Visit www.c3controls.com to download product certifications.

REVISION 04.2025

ELECTRONIC TIMING RELAYS

c3controls offers a comprehensive line of Electronic Timing Relays, just one example of our superior products designed and manufactured to meet the needs of the machine builder. Check out all the features of our Series ETR timing relays below!

COMPACT AND EFFICIENT TIMING RELAYS FOR SUPERIOR ACCURACY.

✓ **Proven**	Our electronic timing relays meet UL and IEC Standards requirements making them suitable for use in global applications.
✓ **Various Sizes**	Our product line includes timing relays in 17.5mm, 22.5mm, and 45mm form factors.
✓ **Wide Range of Operation**	Wide variety of operating modes satisfies virtually any application: ON-Delay, Interval Delay, Pulse Output, Cycle (ON/OFF), Delay on Make/Delay on Break, and more.
✓ **Compact Size**	Compact design—reduces panel space requirements and is interchangeable with commonly available timing relays.
✓ **Tripping Accuracy**	Our ETRs feature a repeat tripping accuracy of 0.5%, for precise control application performance.
✓ **Superior Protection**	The IP20 terminals guard against accidental contact with live parts for enhanced protection.
✓ **Secure Installation**	Quick and simple installation on a 35mm DIN Rail or panel mounted in high-vibration applications.
✓ **Multi-Voltage Capability**	Most ETRs accept a range of voltage supply inputs. (see Selection Table or individual ETR model for capabilities)
✓ **AC/DC Load Switching**	Our ETRs feature hard contact outputs.
✓ **Limited Lifetime Warranty***	Every product is backed by our limited lifetime warranty—unmatched in the industry—bringing you quality components that perform in the most demanding applications.
✓ **Guaranteed Same-Day Shipping***	Product availability reduces inventory, and improves cash-flow—saving you money. With c3controls any order for standard catalog items received by 6:00pm ET is guaranteed to ship same-day.
✓ **Advantage Pricing**	Our approach to product development, manufacturing, and focus on servicing the OEM and Electrical Equipment Builder reduces cost. The result—the best value in the industry.

*See c3controls Terms & Conditions

"c3controls has proven time and time again to have better product availability and customer service than most of the larger companies we work with."

Steve Velasquez, Industrial Sales • **Broken Arrow Electric Supply**

17.5mm Wide
DIN Rail

22.5mm Wide
DIN Rail/Panel Mount

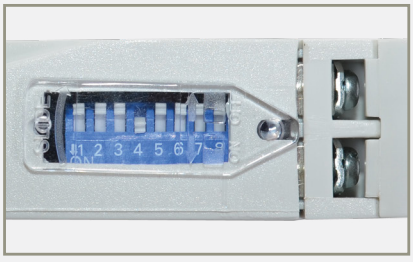
45mm Socket Mount
Door or Panel Mount, DIN Rail

UNIQUE PRODUCT LINE FEATURES

CONVENIENT OPERATION

Easily select operating modes and timing ranges with accessible setting dials and DIP switches.

TRANSPARENT COVER



We've protected the DIP switches with a transparent cover that keeps out dust and other contaminants and allows you to see the switch settings.

QUICK TROUBLESHOOTING

Power ON and relay ON LED indicators make troubleshooting effortless.

CLEAR MARKINGS

We've clearly marked the terminals, operating modes and DIP switches, and imprinted connection diagrams to reduce downtime when commissioning and wiring during installation and while troubleshooting.

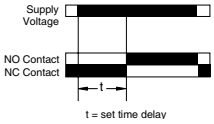
ETR SELECTION GUIDE

Match the functions you need in the far left column to the corresponding model along the top of the chart.

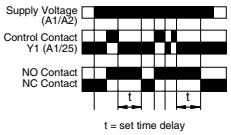
Function	ETR-D17MF1-03H-1CMV4	ETR-D22DEI-30H-2CMV1	ETR-D22SS-60S-2XD	ETR-S45DEI-30H-2CMV1
Timing Functions				
Delay				
ON-Delay (Energize Delay)	✓	✓		✓
Interval Delay	✓	✓		✓
Pulse Output	✓			
Cyclic				
Repeat Cycle Equal (ON First)	✓			
Repeat Cycle Equal (OFF First)	✓			
Delay On Make or Break				
Delay on Break	✓			
Delay on Break with Totalize	✓			
Delay on Make/Delay on Break	✓			
Interval				
Interval After Break	✓			
Interval with Totalize	✓			
Latching Relay	✓			
Single Shot				
Single Shot	✓			
Re-Triggerable Single Shot	✓			
Special				
Star (Wye) Delta			✓	
Other Characteristics				
Dimensions (mm)	17.5	22.5	22.5	45
Mounting	DIN, Panel	DIN, Panel	DIN, Panel	Door, DIN, Panel
Quantity of Timing Ranges	10	12	2	12
Timing Ranges ("<" means "less than")	< 1 sec to 3 hrs	< 1 sec to 30 hrs	1 sec to 1 min	< 1 sec to 30 hrs
Types	Delay	Delay	Startup Delay, Changeover Delay	Delay
Control Contact (Input)	✓			
Output Contact(s) (C/O = Changeover, NO = Normally Open)	SPDT (1 C/O)	DPDT (2 C/O)	Star (Wye): 1 SPDT (1 C/O) Delta: 1 SPDT (1 C/O)	DPDT (2 C/O)
Line Power (Voltage)				
110V 50Hz / 120V 60Hz AC			✓	
400-415V 50Hz AC			✓	
20-240V AC (50/60Hz) & 12-240V DC	✓	✓		✓

Timing Charts:

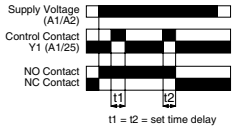
On Delay (Energize Delay)



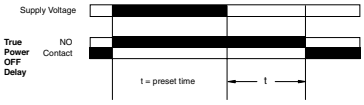
Delay on Break



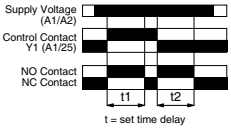
Interval with Totalize (time storage)



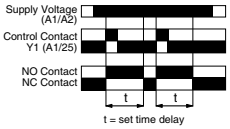
Off Delay (De-energize Delay)



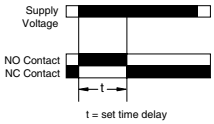
Interval on Make / Interval on Break



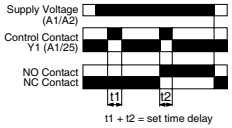
Single Shot



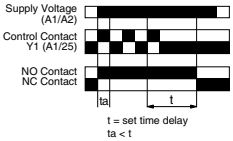
Interval Delay



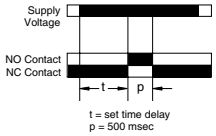
Delay on Make with Totalize (Time Storage)



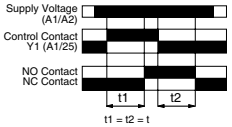
Retriggerable Single Shot



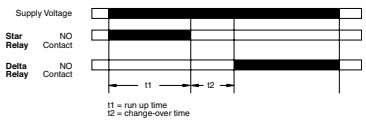
Pulse Output



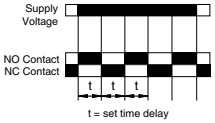
Delay on Make / Delay on Break



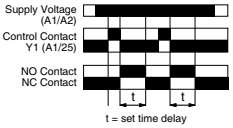
Star (Wye) Delta



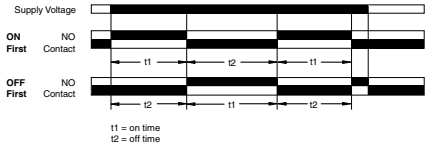
Repeat Cycle Equal (on first)



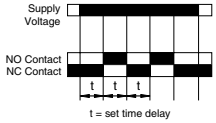
Interval after Break



(Asymmetrical) Cyclic ON First, Cyclic OFF First



Repeat Cycle Equal (off first)



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.

17.5mm Multi-Function — 10 Range Electronic Timing Relays

ETR – D17 MF1 – 03H – 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-D17MF1-03H-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

III. TIMING FUNCTIONS

CODE	SINGLE/DUAL/MULTI	OPERATING MODES	LIST
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 Break with Totalize, Delay on Make/Delay on Break, Interval after Break, Interval with Totalize, Latching Relay, Single Shot, Re-Triggerable Single Shot	$56.00

IV. TIMING RANGE

CODE	MAXIMUM TIMING RANGE	SETTABLE TIMING RANGES
03H	3 Hours	Seconds: 1 / 3 / 10 / 30 Minutes: 1 / 3 / 10 / 30 Hours: 1 / 3

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

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17.5mm Multi-Function—10 Range Electronic Timing Relays

This c3controls Series ETR Electronic Timing Relay offers maximum functionality and timing ranges in a compact, 17.5mm (11/16") wide housing. 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 for more complex applications. 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:

- Multi-Function, 10 Range
- Timing ranges from 1 second to 3 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 Break with Totalize, Delay on Make/Delay on Break, Interval after Break, Interval with Totalize, Latching Relay, Single Shot, and Re-Triggerable Single Shot.
- Repeat tripping accuracy of 0.5% for precise control application performance.
- Accepts 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 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

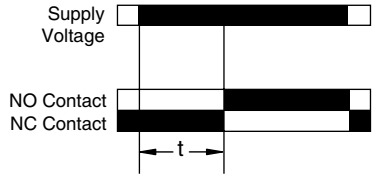
1. User selectable operating modes and timing ranges with convenient, front accessible setting dials.
2. LED indication of Power ON and Relay ON – for fast and easy troubleshooting.
3. Terminals and connection diagrams are clearly marked on the timing relay for easy commissioning, wiring, and troubleshooting – reduces downtime and installation time.

SPECIFICATIONS:

17.5MM MULTI-FUNCTION — 10 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 Break with Totalize, Delay on Make/Delay on Break, Interval after Break, Interval with Totalize, Latching Relay, Single Shot, Re-Triggerable Single Shot
Timing Ranges		Seconds: 1 / 3 / 10 / 30 Minutes: 1 / 3 / 10 / 30 Hours: 1 / 3
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
Power Consumption	VA	3.2 Max.
Output Rating		5A @ 250V AC, 24V DC Resistive
ENVIRONMENTAL		
Ambient Operating Temperature	°C / °F	-30 to +50 / -22 to +122
Ambient Storage Temperature	°C / °F	-30 to +75 / -22 to +167
Humidity		95% Relative Humidity (Non-condensing)
Altitude	m / ft.	2,000 / 6,528
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
Weight	g	64
	oz.	2.3
ROHS COMPLIANCE		For RoHS Compliance documentation by product, refer to www.c3controls.com

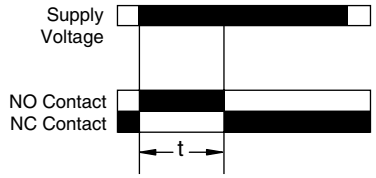
Operating Modes:

Function: On Delay



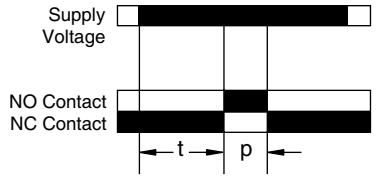
t = set time delay

Function: Interval Delay



t = set time delay

Function: Pulse Output

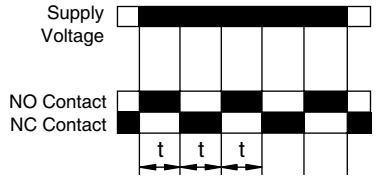


t = set time delay
p = 500 msec

Function: Repeat Cycle Equal (off first)

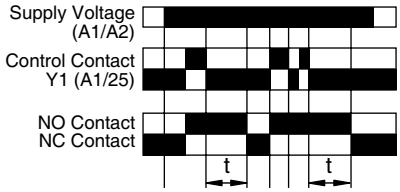
t = set time delay

Function: Repeat Cycle Equal (on first)



t = set time delay

Function: Delay on Break

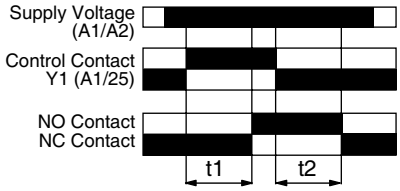


t = set time delay

Function: Delay on Break with Totalize (time storage)

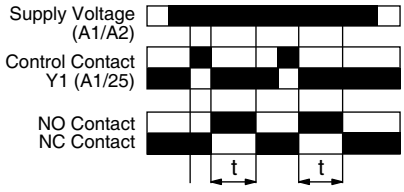
t1 + t2 = set time delay

Function: Delay on Make / Delay on Break



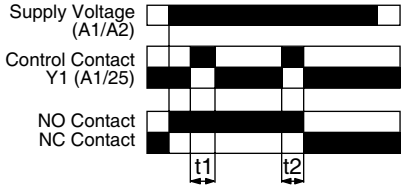
t1 = t2 = t
t = set time delay

Function: Interval after Break



t = set time delay

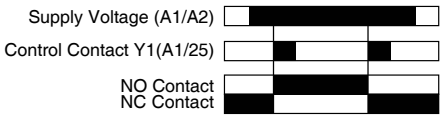
Function: Interval with Totalize (time storage)



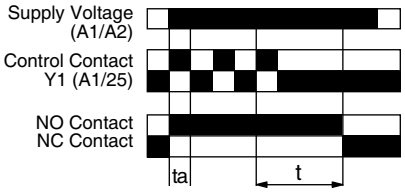
t1 = t2 = set time delay

Operating Modes:

Function: Latching Relay

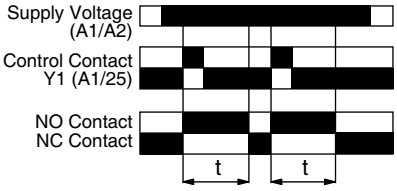


Function: Retriggerable Single Shot



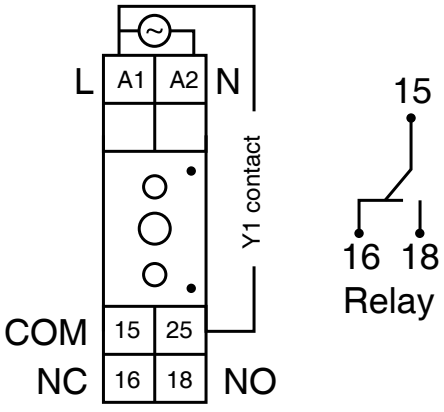
t = set time delay
ta < t

Function: Single Shot



t = set time 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.

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	LIST
DEI	Dual-Function	ON-Delay (Energize Delay) and Interval Delay	$84.00

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 G

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, 12 range relay available for applications with the most basic timing requirements. For applications requiring more special operating modes, Off-Delay 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:

- Four versions available:
  - Economical, Dual-Function, 12 Range
    - ON-Delay and Interval Delay
    - Timing ranges from 1 second to 30 hours
  - Single-Function
    - OFF-Delay 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 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

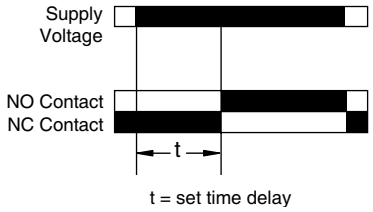
1. User selectable operating modes and timing ranges with convenient, front and top accessible setting dials and DIP switches.
2. DIP switches are protected by a cover to prevent the ingress of dust and other contaminants. Cover is transparent so the switch settings can be easily checked.
3. LED indication 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 — 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	VA	2 Max.
Output Rating		5A @ 250V AC, 24V DC Resistive
ENVIRONMENTAL		
Ambient Operating Temperature	°C / °F	-30 to +50 / -22 to +122
Ambient Storage Temperature	°C / °F	-30 to +75 / -22 to +167
Humidity		95% Relative Humidity (Non-condensing)
Altitude	m / ft.	2,000 / 6,528
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	100
	oz.	3.5
ROHS COMPLIANCE		For RoHS Compliance documentation by product, refer to www.c3controls.com

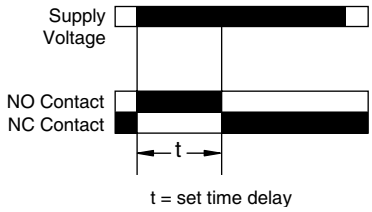
Operating Modes:

Function: On Delay



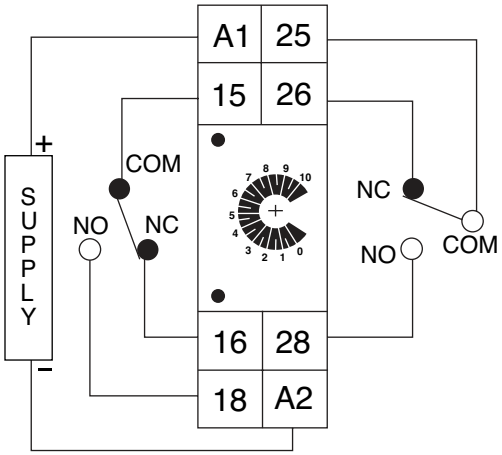
t = set time delay

Function: Interval Delay



t = set time 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.

22.5mm Star (Wye) Delta Electronic Timing Relays

ETR – D22 SS – 60S – 2X ____

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-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	LIST
SS	Single-Function	Star-Delta (Wye-Delta)	$67.00

IV. TIMING RANGE

CODE	MAXIMUM TIMING RANGE	SETTABLE TIMING RANGES
60S	60 Seconds (Starting Time)	Starting Time: 30 / 60 seconds Changeover Time: 50 / 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

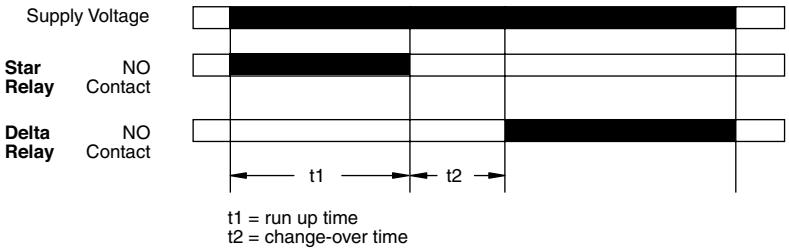
CODE	DESCRIPTION	VOLTAGE RANGE
D	Fixed Voltage	110V 50 Hz / 120V 60 Hz

DISCOUNT SCHEDULE G

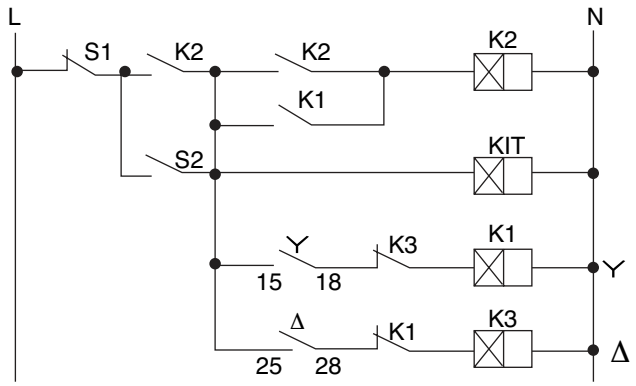
Specifications:

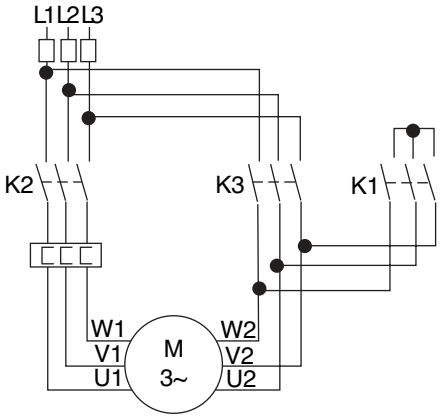
22.5MM STAR (WYE) DELTA ELECTRONIC TIMING RELAYS		
	UNITS	
TIMING PERFORMANCE		
Operating Modes		Star-Delta (Wye Delta)
Timing Ranges		Starting Time: 30 / 60 seconds Changeover Time: 40 / 100 milli-seconds
Accuracy		
Setting		± 5% of full scale
Repeat		± 0.5% of full scale or 50 msec. whichever is greater
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
Operating Voltage Limits	%	85 to 110
Power Consumption	VA	10 Max.
Output Rating		5A @ 250V AC, 24V DC Resistive
ENVIRONMENTAL		
Ambient Operating Temperature	°C / °F	-30 to +50 / -22 to +122
Ambient Storage Temperature	°C / °F	-30 to +75 / -22 to +167
Humidity		95% Relative Humidity (Non-condensing)
Altitude	m / ft.	2,000 / 6,528
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:

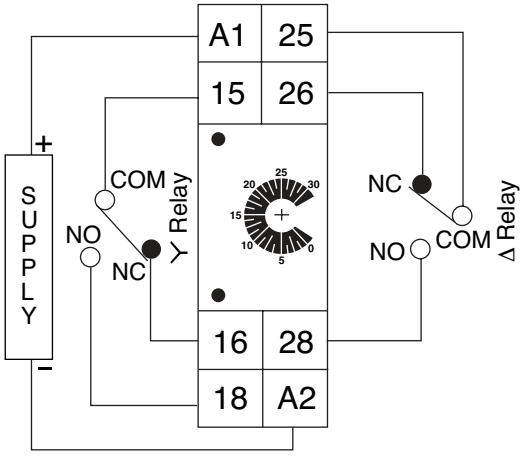


Wiring Diagrams:





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.

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)	Door or Panel Mount, 35mm DIN Rail 8 Pin Socket Mount (Cat. No. GPRA-SP08G1 or GPRA-SP08U1, refer to Section 26 Page 24)

III. TIMING FUNCTIONS

CODE	SINGLE/DUAL/MULTI	OPERATING MODES	LIST
DEI	Dual-Function	ON-Delay (Energize Delay) and Interval Delay	$118.00

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 G

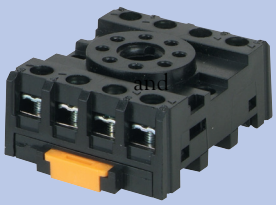
45mm Socket Mount Dual-Function–12 Range Electronic Timing Relays

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



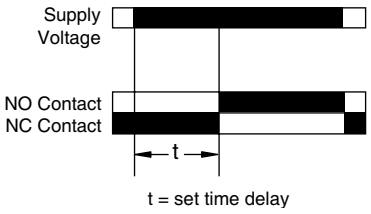
1. User selectable operating modes and timing ranges with convenient, front accessible setting dials and DIP switches.
2. DIP switches are protected by a cover to prevent the ingress of dust and other contaminants. Cover is transparent so the switch settings can be easily checked.
3. LED indication of 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 Section 26 Page 24 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:

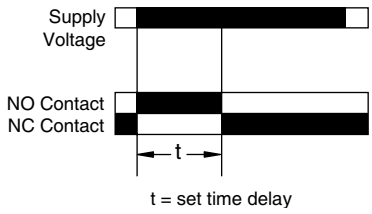
45MM SOCKET MOUNT DUAL-FUNCTION — 12 RANGE ELECTRONIC TIMING RELAYS		
	UNITS	
TIMING PERFORMANCE		
Operating Modes		ON-Delay (Energize Delay) and Interval Delay
Timing Ranges		Seconds: 1 / 3 / 10 / 30 Minutes: 1 / 3 / 10 / 30 Hours: 1 / 3 / 10 / 30
Accuracy		
Setting		± 5% of full scale
Repeat		± 0.5% 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	VA	2 Max.
Output Rating		5A @ 250V AC, 24V DC Resistive
ENVIRONMENTAL		
Ambient Operating Temperature	°C / °F	-30 to +50 / -22 to +122
Ambient Storage Temperature	°C / °F	-30 to +75 / -22 to +167
Humidity		95% Relative Humidity (Non-condensing)
Altitude	m / ft.	2,000 / 6,528
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:

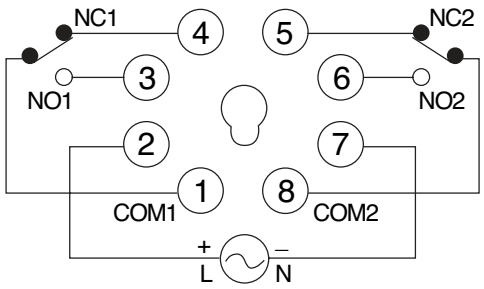
Function: On Delay



Function: Interval Delay

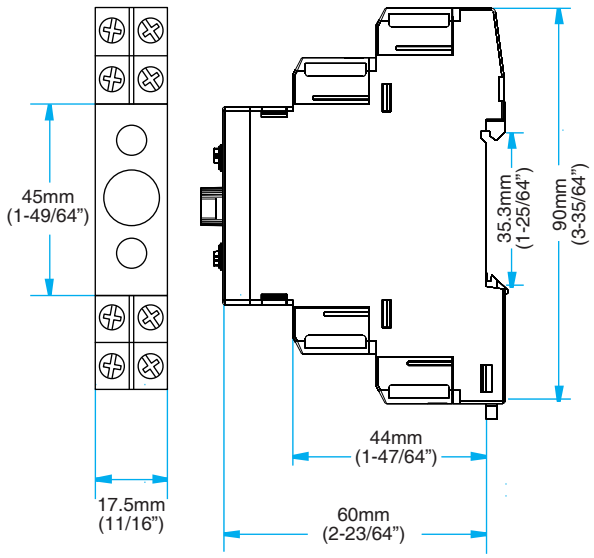


Terminal Diagram:

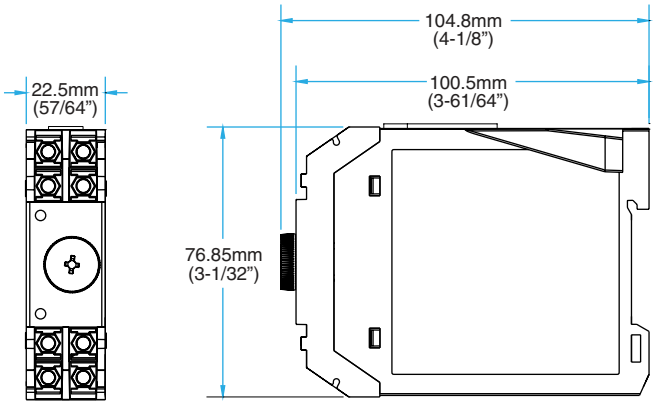


17.5MM ELECTRONIC TIMING RELAYS

MULTI-FUNCTION



22.5MM ELECTRONIC TIMING RELAYS



45MM SOCKET MOUNTED ELECTRONIC TIMING RELAYS