# Timers/Hour Meters

1/32 DIN LCD—Timers

# **Product Description**

Simple battery-powered timers provide an easy-toread LCD and a variety of timing display options.

#### **Features**

- Low price and high efficiency
- Large eight-digit LCD display, height of the figures 0.31 in (8 mm)
- Different time ranges from 0.1 second to 100,000 hours
- 0.1 second synchronization makes it suitable for very short activation times
- High voltage input for 10–260 Vac/Vdc voltage pulses
- IP65
- Screw terminals, RM 5 mm
- Lifetime of the battery approximately eight years
- · Locking of the reset key
- Operating temperature 14 to 140 °F (–10 to 60 °C)

#### **Standards and Certifications**

- UL recognized
- CE marked





## **Product Selection**

E5-224-C04\_

# 1/32 DIN LCD Timers



Description	Catalog Number	
Eight-Digit LCD Timer, Battery Power		
Hours/minutes, 0.94 x 1.89 in (24 x 48 mm)	E5-224-C0440	
Hours/minutes, 10-260V input, 0.94 x 1.89 in (24 x 48 mm)	E5-224-C0448	
Minutes/seconds, 0.94 x 1.89 in (24 x 48 mm)	E5-224-C0450	
Minutes/seconds, 10–260V input 0.94 x 1.89 in (24 x 48 mm)	E5-224-C0458	

## **Technical Data and Specifications**

# **General Specifications**

Description	Specification
Power supply	Non-replaceable lithium battery (lifetime approximately eight years at 68 °F (20 °C)
Display	LCD, eight-digits
Figure size	0.31 in (8 mm) high
Counting direction	Adding
Display range	
Time range	99999h 59m (134)
Display	99999 - 59
Time range	99999.99h (134)
Display	99999 - 99
Time range	9999h 59m 59s (135)
Display	9999.59.59
Time range	9999999.9s (135)
Display	9999999.9
Reset	Manual and electrical

# **General Specifications, continued**

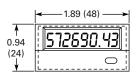
Description	Specification
Timer inputs, DC versions (max. 30 Vdc)	
Timer input	NPN or PNP depending on the type
Switching level	
NPN low	0-0.7V
NPN high	3–30 Vdc
PNP low	0-0.7V
PNP high	4–30 Vdc
Counting start	
NPN	For low signal at the timer input
PNP	For high signal at the timer input
Timer inputs, high voltage version (10–260 Vdc/Vac)	
Timer input	Optocoupler input max. 30 Hz
Min. pulse time	16 ms
Switching level	
Low	0–2 Vdc/Vac
High	10-260 Vdc/Vac
Counting start	For high signal at the timer input
Time range change (mode)	
Contact input—open collector (switching at 0V)	
NPN low	0-0.7V
NPN high	3–5 Vdc
Time range	Depending on the circuit
Reset Input (only DC and high voltage)	
Minimum pulse time	
DC	50 ms
High voltage	10 ms
Contact input (DC)	
NPN low	0-0.7V
NPN high	3–30 Vdc
High voltage input	10-260 Vdc/Vac
Reset locking input (for DC and AC), electrical reset key locking	
Input not active	Reset key locked
Contact input	Open collector NPN (switching at 0V)
Switching level	
NPN low	0-0.7V
NPN high	3–5 Vdc
Interference emissions	EN 55011 Class B, EN 61 000-6-2, EN 61010 Section 1 (only AC versions)
Housing	Dark gray RAL 7021
Operating temperature	14 to 131 °F (-10 to 55 °C)
Ambient temperature	14 to 140 °F (–10 to 60 °C)
Storage temperature	−4 to 158 °F (−20 to 70 °C)
Protection	IP65 (from front)
	Approx. 1.76 oz (50 g)

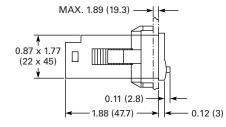
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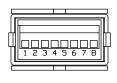
## **Dimensions**

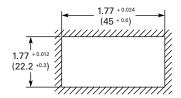
Approximate Dimensions in Inches (mm)

# 1/32 DIN LCD Timers









# E42DI24/E42DIR Series

## **Product Description**

Simple LCD hour meters with flexible input voltages

#### **Features**

- Solid-state hour meters
- Record and display up to 99,999.9 hours, rollover and continue timing
- EEPROM memory can retain data for 25+ years
- Time accumulation indicated by flashing hourglass icon
- Memory will arm only when power has been applied for 5 seconds

## **Standards and Certifications**

- UL recognized
- CE compliant





## **Product Selection**

# **E42DI24/E42DIR Series Elapsed Time Meters**

	Description	Catalog Number
E42DIR_	Round LCD	
	Elapsed hour meter, 48–150 Vdc/100–230 Vac	E42DIR48230
	Elapsed hour meter with reset, 48–150 Vdc/100–230 Vac	E42DIR48230R
	Elapsed hour meter, 12–48 Vdc/20–60 Vac	E42DIR1260
E42DI24_	Rectangular LCD	
• 179355	Elapsed hour meter, 48–150 Vdc/100–230 Vac	E42D12448230
	Elapsed hour meter, with reset, 48–150 Vdc/100–230 Vac	E42D12448230R
	Elapsed hour meter, 12-48 Vdc/20-60 Vac	E42DI241260

## **Technical Data and Specifications**

## **General Specifications**

Description	Specification	
Function	Solid-state hour meter	
Power supply		
E42DIXX1260X	12-48 Vdc ±25%/20-60 Vac ±25%	
E42DIXX48230X	48-150 Vdc +23%-25%/100-230 Vac +17%-25%	
Frequency range	48–440 Hz	
Display	Six-digit LCD, 0.20 in (5 mm)	
Accuracy	±0.1%	
Recording/display capacity	99,999.9 hours	
Resolution	0.1 hour (6 minutes)	
Current consumption max. at nominal voltage		
E42DIXX1260X	0.8 mA at 12 Vdc	
	5.0 mA at 48 Vdc	
	0.5 mA at 20 Vac	
	2.5 mA at 60 Vac	
E42DIXX48230X	0.8 mA at 48 Vdc	
	2.5 mA at 150 Vdc	
	0.9 mA at 100 Vac	
	2.0 mA at 230 Vac	
Input impedance minimum (pins 3 and 4)		
E42DIXX1260X	70 Kohms	
E42DIXX48230X	480 Kohms	
Operating temperature	-40 to 185 °F (-40 to 85 °C)	
Storage temperature	−58 to 194 °F (−50 to 90 °C)	
Weight		
E42DIRXXXXXX	1.94 oz (55 g)	
E42DI24XXXXXX	0.78 oz (22 g)	