

Product Family Overview

Introduction







Timers are used in applications where time itself is the main focus. These include simple knowledge of how long a machine has been running to determine machine maintenance, for example, (elapsed time) to knowing when to change an elevator cable (cable life and safety). Timers generally have the ability to stop and then to continue on from the point at which they stopped. Timer Relays are used in applications where an output is required to make something happen at a predetermined point in time (to stop or start the process).

Application Examples

- Elapsed time indication for interval maintenance of construction and agricultural equipment
- Usage metering for determining charges on rental equipment
- Controlled process timing for adhesive application/curing equipment

Timers/Hour Meters Product Family Overview

Table 62. Product Family Overview

Product Family	Characteristics	Panel Cutout in Inches (mm)	Page Number
 E5-224-C	<ul style="list-style-type: none"> ■ Non-replaceable battery (min. 8-yr. life) ■ Compact, low cost and high efficiency ■ 8-Digit LCD timer ■ Manual or electrical reset ■ Various timing modes (Hr/Min/Sec) 	0.870 x 1.772 (22 x 44)	63
 E5-24-E	<ul style="list-style-type: none"> ■ Compact device with bright, LED display ■ Multiple functions available: count, time, rate, multifunction, double-function ■ 24V DC Power 	0.870 x 1.772 (22 x 44)	24
 E5-248-C	<ul style="list-style-type: none"> ■ Panel-mount, battery powered time relay ■ 8 timing modes, 9 time ranges ■ 3 programmable activation modes ■ 8A relay contacts (N.O. or N.C.) 	1.772 x 1.772 (45 x 45)	68
 E5-496-E	<ul style="list-style-type: none"> ■ Economical, multifunction display ■ Large, LED characters ■ AC or DC power options 	1.772 x 3.622 (45 x 92)	27
 Hour Meters	<ul style="list-style-type: none"> ■ Compact, low-cost LCD and electromechanical elapsed time meters ■ Various power options for almost any power supply 	Various	65
 E42DP55	<ul style="list-style-type: none"> ■ DIN Rail-mount, battery-powered time relay ■ 8 timing modes ■ 1 million operations or 10 years ■ 10A contact rating 	N/A	70

E42DI24/E42DIR Series — Durant®



- Input Impedance Minimum (Pins 3 and 4) —
 - E42DIXX1260X: 70k ohms
 - E42DIXX48230X: 480k ohms
- 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)

Product Selection

Table 64. Product Selection — E42DI24/E42DIR Series Elapsed Time Meters

Description	Catalog Number	*
Round LCD		
Elapsed Hour Meter, 48 – 150V DC/100 – 230V AC	E42DIR48230	
Elapsed Hour Meter w/Reset, 48 – 150V DC/100 – 230V AC	E42DIR48230R	
Elapsed Hour Meter, 12 – 48V DC/20 – 60V AC	E42DIR1260	
Rectangular LCD		
Elapsed Hour Meter, 48 – 150V DC/100 – 230V AC	E42DI2448230	
Elapsed Hour Meter, w/Reset, 48 – 150V DC/100 – 230V AC	E42DI2448230R	
Elapsed Hour Meter, 12 – 48V DC/20 – 60V AC	E42DI241260	

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

Technical Data and Specifications

- Function: Solid-state hour meter
- Power Supply —
 - E42DIXX1260X: 12 – 48V DC ±25%/ 20 – 60V AC ±25%
 - E42DIXX48230X: 48 – 150V DC +23% -25%/ 100 – 230V AC +17% -25%
- Frequency Range: 48 – 440 Hz
- Display: 6-digit LCD, 0.20" (5 mm)
- Accuracy: ±0.1%
- Recording/Display Capacity: 99,999.9 hours
- Resolution: 0.1 hour (6 minutes)
- Current Consumption Max. @ Nominal Voltage
 - E42DIXX1260X: 0.8 mA @ 12V DC, 5.0 mA @ 48V DC, 0.5 mA @ 20V AC, 2.5 mA @ 60V AC
 - E42DIXX48230X: 0.8 mA @ 48V DC, 2.5 mA @ 150V DC, 0.9 mA @ 100V AC, 2.0 mA @ 230V AC

Dimensions

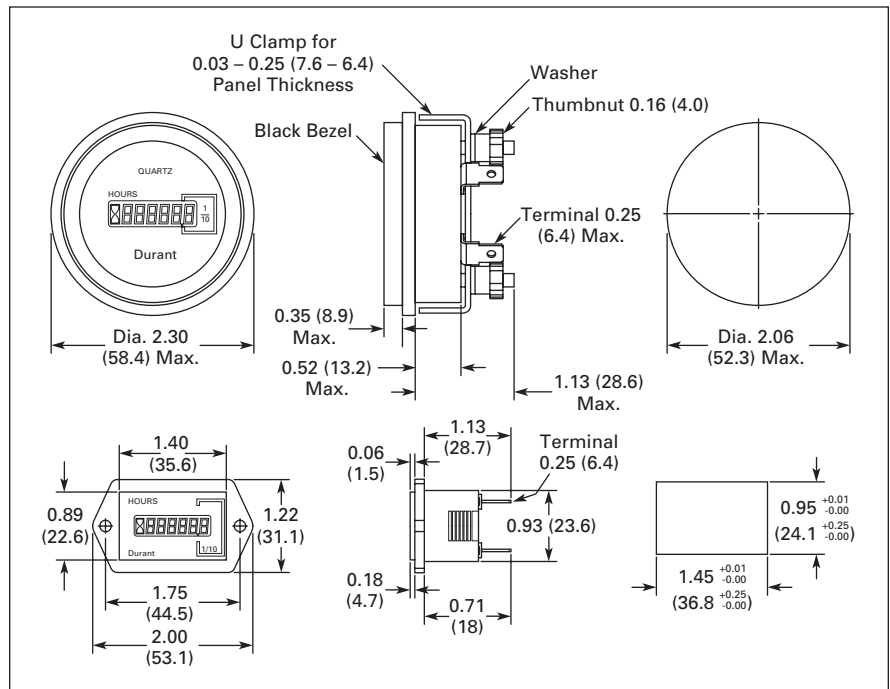


Figure 57. E42DI24/E42DIR Series — Approximate Dimensions in Inches (mm)

Discount Symbol **CC-4**