

Introduction

Your Veeder-Root brand Series C342 panel instrument is powered by an internal lithium battery, features an 8 digit LCD display and is housed in a ultra compact 1/32 DIN package. An IEC IP65 rated front panel is suitable for washdown environments.

All models feature signal and remote-reset inputs capable of accepting the high voltage AC or DC impulses. They can be applied in much the same manner as electromechanical devices of similar voltage rating, but have the inherent life and reliability benefits of modern electronic design.

This product has been configured at the factory to perform one of the following functions: Count Totalizer, Time Totalizer (Hours:Minutes:Seconds), or Time Totalizer (Hours, 1/100 resolution).

The following pages of the manual will provide information on proper panel mounting of the device, terminal layout and wiring instructions, as well as an overview of the basic operating functions of the unit. Also included are the key product specifications, warranty procedures, and ordering information should you require additional units.



Models Covered in this Manual

C342-0474 Totalizer: Accumulates and displays counted pulses. Total can be reset via front panel button (may be disabled) or remote reset terminals.

C342-1474 Time Totalizer: Accumulates time in the format Hours:Minutes:Seconds. Can be reset via front panel button (may be disabled) or remote reset terminals.

C342-2474 Time Totalizer: Accumulates time in hours with 1/100 resolution. Can be reset via front panel button (may be disabled) or remote reset terminals.

Features

- Available models include count and time totalization
- Unique input circuit accepts 12 to 250 V, AC/DC, for signal and reset functions
- Crisp 8 digit LCD display provides easy to read process values
- Compact 1/32 DIN bezel and 60mm behind the panel depth save panel space
- Internal lithium battery provides long life and eliminates the need for external power
- IEC IP65 rated front panel for use in washdown environments

Other matching C342 models are available which offer features such as a 6 digit LED display, quadrature (bidirectional encoder) input capability, factory programmed presets and scale values, and a message display with alpha numeric capability. Ask us for more information regarding the complete C342 family of products.

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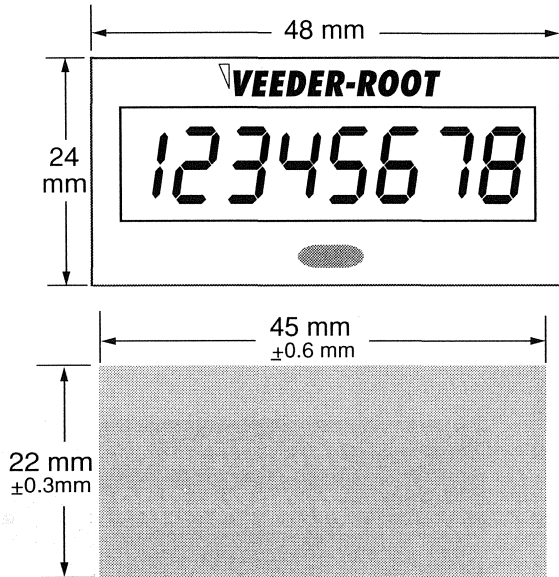
**Technical Manual
702084-0001**

**Veeder-Root brand
Series C342
Self Powered
LCD Display
HV Input**

OVERVIEW

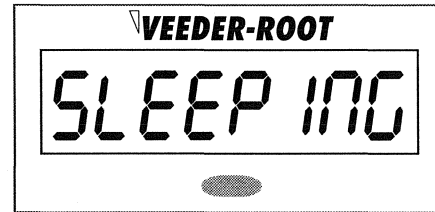
INSTALLATION

Dimensions



Energy Conservation Mode

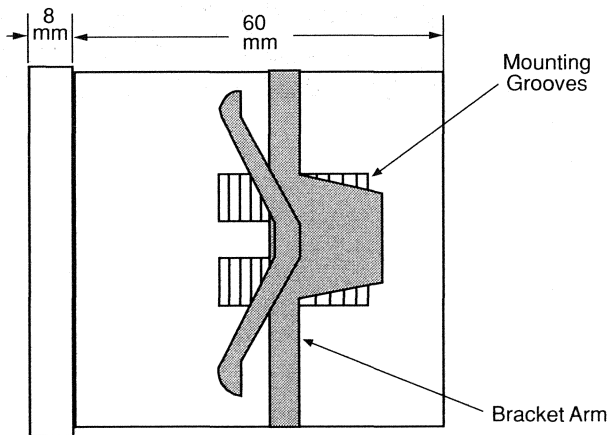
In order to maximize the lifetime of the internal battery the unit is shipped in a low energy use mode. When in this mode, the display will appear as shown in the figure below. Prior to use, the unit must be woken up by pressing the front panel reset key. Please note that the Energy Conservation Mode can not be reactivated.



Panel Mounting

Make a panel cutout per the recommended opening illustrated by the figure above. Place the included gasket over the rear of the unit and place the unit in the panel cutout. Slide the panel mount bracket into place over the unit's rear allowing the bracket tabs to engage the grooves on the case. Continue to push forward until the bracket arm fits snugly against the panel.

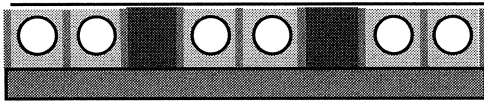
Top View



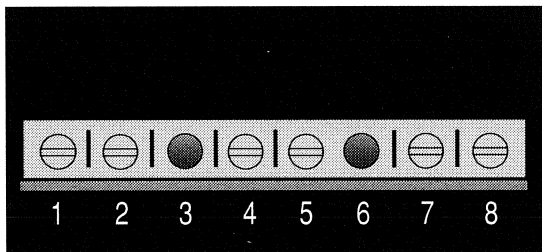
SETUP

REAR TERMINAL CONNECTIONS

Top View of Terminals



Rear View of Terminals



Wiring

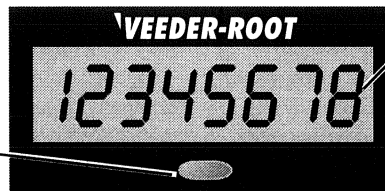
Insert wire into the appropriate openings as pictured in the drawings on this page. Turn the screws, located on the rear of the terminal block to tighten the clamp and secure the wire. Terminals 3 and 6 are not used.

	<p>Remote Reset: the displayed value will be reset. Signal input is ignored when the Reset is active. The main and neutral (for AC) and the positive and negative (for DC) are not polarity dependant.</p>
	<p>Signal Input: Voltage signals are accumulated for count. For timer versions, timer runs when signal is present. The main and neutral (for AC) and the positive and negative (for DC) are not polarity dependant.</p>
	<p>Reset-lock Input: When active, the Front Panel Reset Function is restricted. Use jumper for full restriction or key-switch for selective restriction. Do not apply voltage.</p>

OPERATION

Front Panel Reset

Used to reset the Process Value Display, unless disabled through the keylock input



Process Value Display

Displays the count or time value based upon the model

Dependant on model, your C342 will perform one of the following functions:

C342-0474 Totalizer: The instrument will accumulate and display the pulses received on the input terminals (1 & 2). Count capacity is 8 digits: 12345678. The total can be reset via the remote input terminals (7 & 8) or the front panel. Connecting terminals 4 & 5 will disable the front panel reset key.

C342-1474 Time Totalizer: The instrument will accumulate time when the input signal (terminals 1 & 2) is active. The time will be displayed in the format: 9999:59:59 Hours:Minutes:Seconds and can be reset via the remote input terminals (7 & 8) or the front panel. Connecting terminals 4 & 5 will disable the front panel reset key.

C342-2474 Time Totalizer: The instrument will accumulate time when the input signal (terminals 1 & 2) is active. The time will be displayed in hours with 1/100 resolution 99999999 and can be reset via the remote input terminals (7 & 8) or the front panel. Connecting terminals 4 & 5 will disable the front panel reset key.

GENERAL

SPECIFICATIONS

Count Input:

Count Input: 12 - 250 Volts AC/DC
Count Speed: 20 Hz max
Logic: Low < 3.0 volts, High > 12 Volts
Minimum Pulse Width: 25 ms

Operation:

Power Source: Internal Lithium Battery
Expected Battery Life: 7 Years
Display Type: 8 digit LCD
Display Height: 7 mm
Operating Temperature: -10°C to 50°C
Storage Temperature: -20°C to 60°C
Approvals: CE

Reset Input:

Type: 12 - 250 Volts AC/DC
Logic: Low < 3.0 volts, High > 12 Volts
Minimum Pulse Width: 25 ms

Physical:

Dimensions: 24mm x 48mm, 60 mm deep
Mounting: Panel Mount (mounting bracket supplied)
22mm (\pm 0.3mm) x 45mm (\pm 0.6mm) panel cutout
Maximum Panel Thickness: 26mm
Connections: 6 screw terminals
Weight: Approximately 2.25 ounces
Front Panel Rating: IEC IP65

ORDERING INFORMATION

<u>Part #</u>	<u>Description</u>
C342-0474	Count Totalizer
C342-1474	Timer (H:M:S)
C342-2474	Timer (Hundredths of Hours)

WARRANTY

Standard products manufactured by the Company are warranted to be free from defects in workmanship and material for a period of one year from the date of shipment, and products which are defective in workmanship or material will be repaired or replaced, at the option of the Company, at no charge to the Buyer. Final determination as to whether a product is actually defective rests with the Company. The obligation of the Company hereunder shall be limited solely to repair and replacement of products that fall within the foregoing limitations, and shall be conditioned upon receipt by the Company of written notice of any alleged defects or deficiency promptly after discovery within the warranty period, and in the case of components or units purchased by the Company, the obligation of the Company shall not exceed the settlement that the Company is able to obtain from the supplier thereof. No products shall be returned to the Company without its

prior consent. Products which the Company consents to have returned shall be shipped F.O.B. the Company's factory. The Company cannot assume responsibility or accept invoices for unauthorized repairs to its components, even though defective. The life of the products of the Company depends, to a large extent, upon the type of usage thereof, and THE COMPANY MAKES NO WARRANTY AS TO FITNESS OF ITS PRODUCTS FOR SPECIFIC APPLICATIONS BY THE BUYER NOR AS TO PERIOD OF SERVICE UNLESS THE COMPANY SPECIFICALLY AGREES OTHERWISE IN WRITING AFTER THE PROPOSED USAGE HAS BEEN MADE KNOWN TO IT.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO ANY WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE.