DS-SE-VR100-eng
September, 2017

Data Sheet

Model VR100

VR100
Power Supply

Secondary Electronics for Capacitance Manometers

Single Channel Power Supply and Display Module

Overview

The VR100 is a compact single channel power supply and display module for Brooks CMX0, CMX45 and CMC Series of Capacitance Manometers*

**VR100 can also be used to display vacuum reading from the high temperature CMX100 and CMX160 models*

Product Description

- High accuracy 4 ½ digit LED display
- Easy set up and operation via single-level menu structure and front panel membrane buttons.
- Four user programmable solid state, open collector set-points
- Compact 1/8″ DIN package

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Product Specifications

Input

Signal Input	± 10 Vdc full scale (from Capacitance Manometer)
Input Impedence	> 1 Megaohm

Readout

Display Type	0.4″ high efficiency green LEDs
Maximum Readout	±99,999
Accuracy	±0.005% of reading ±2 counts
Decimal Points	Selectable via front panel buttons
Polarity	Minus sign displayed for negative readings
Overrange Display	Flashing display indicates input > 10 Vdc
No Sensor Indication	Display will flash overrange when sensor is not connected

Output

Sensor Signal	0-10 Vdc full scale (from Capacitance Manometer)
Digital Communication	Bi-directional RS232C serial communication (optional)

Input Power

Voltage	100, 110 or 230 Vac @ 50-60Hz (selectable via ordering code)
Current	150 mA (typ)

Sensor Power Supply

Voltage	± 15 Vdc
Current	250 mA max., short circuit current limited with thermal overload protection

Compatible Sensors

Unheated Capacitance Manometers	Brooks CMC, CMX0 and CMX
Heated Capacitance Manometers	Brooks CMX45

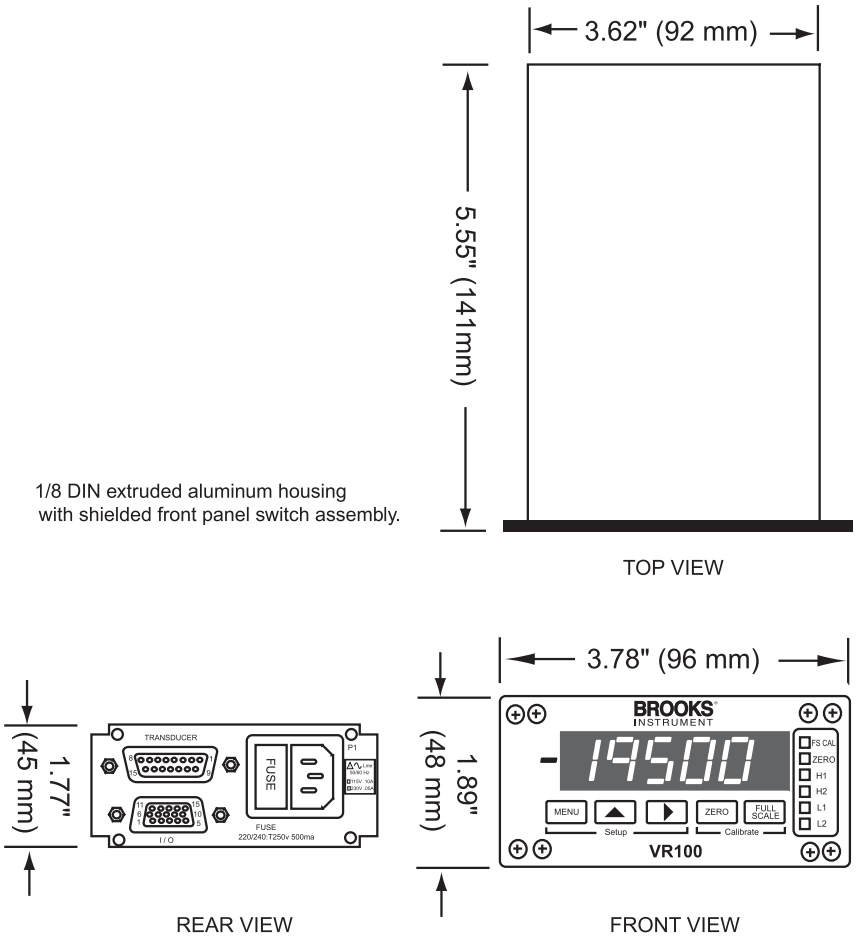
Specifications

Programmable Alarms	4 open collector transistors (2 high, 2 low) with adjustable hysteresis and status LEDs
Adjustment Range	1 to 100%
Voltage (maximum)	50 V
Current (maximum)	100 mA
Storage Temperature Range	+0 to +55°C
Operating Temperature Range	-40 to +85°C
Warm Up Time (at 25°C)	30 minutes
Packaging	1/8 DIN

Certifications

EN55011: 1991
EN50082: 1995
EN61010-1: 1993
CE

Product Dimensions



VR100 Dimensions

Model Code

Code Description		Code	Code Description
I.	Base Model Code	**VR100**	Single Channel Power Supply and Display
II.	Communication Protocols	**0**	Standard
		1	RS232C
III.	Power Input	**1**	100 Vac
		2	110 Vac
		3	230 Vac
IV.	Reserved	**XXX**	None

Sample Model Code

I	II	III	IV
VR100	**1**	**2**	

Accessories - Cables

LR1009P15	CMX/CMC with 9 pin sub D connector to VR100, 1 meter long
LR10015P15	CMX/CMC with 15 pin sub D connector to VR100, 1 meter long
LR1005T15	CMC 5 pin terminal block connector to VR100, 1 meter long

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Brooks is committed to assuring all of our customers receive the ideal flow solution for their application, along with outstanding service and support to back it up. We operate first class repair facilities located around the world to provide rapid response and support. Each location utilizes primary standard calibration equipment to ensure accuracy and reliability for repairs and recalibration and is certified by our local weights and measures authorities and traceable to the relevant international standards.

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Brooks Instrument can provide start-up service prior to operation when required. For some process applications, where ISO-9001 quality certification is important, it is mandatory to verify and/or (re)calibrate the products periodically. In many cases this service can be provided under in-situ conditions, and the results will be traceable to the relevant international quality standards.

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