DYNAMIC RATINGS

B100 SERIES

ELECTRONIC TEMPERATURE MONITOR

MONITORING, CONTROL AND COMMUNICATION SOLUTIONS FOR ELECTRICAL POWER APPARATUS

DO MORE THAN WATCH A GAUGE.

TAKE CONTROL OF ASSET HEALTH.

The reliable and cost-effective B100 Series Electronic Temperature Monitor (ETM) provides exceptional measurement accuracy, asset control and secure communications for your transformer. While gauges have been the default cooling control device for decades, their lenses can become unreadable and the needles often stick, causing inaccurate measurements and preventing proper cooling control. Unlike gauges, the B100 stores the long term history of temperature data and alarm activations in real time or for download later.

The B100 features two RTD inputs for Top Oil temperature and ambient or LTC Temperature. Three CT inputs are provided for Load Current. The Winding Hot Spot temperature is calculated for up to three windings. Cooling control can be controlled by Top Oil Temperature, Winding Temperature and/or Load Current. The LTC Delta T analytic detects problems in the LTC compartment while filtering out false alarms. The relay output contacts can be configured for any individual temperature alarm, LTC alarm, load threshold or a combination thereof. The B100 provides SCADA communications via DNP, Modbus or IEC 61850.

Feature	Benefit
Top Oil plus up to three winding temperatures. Cooling circuit control, alarms, relay trips, LTC differential.	Replaces up to five mechanical gauges (Top Oil, LTC Oil, up to three Winding Hot Spots).
Backlit LCD screen visible from 60 feet. Cycles through critical temperature measurements.	Easy to read at night and in bright sunlight, no need to open enclosure.
On-unit configuration with secure access. Uniquely configure and combine alarm and setpoint triggers.	No computer required to change settings. Combination of alarms and setpoints significantly reduce wiring complexity compared to meters.
Multiple conduit/cable ports.	Easy to install for retrofit applications using multiple cable sizes.
IP66 / NEMA 4 enclosure.	Rugged, durable enclosure designed for long life and to protect against harsh environments created by water, dirt, dust and temperature extremes.

How To Order

B100 - ☐ - ☐

Base Unit

Each B100 Series ETM includes the following I/O:
2 x RTD, 3 x CT, 1 x Digital Input, 6 x Digital Outputs, 2 x Analog Outputs, 1 x System Alarm

Ethernet Communications Options

N	None	N
L	100Base-FX Fiber Ethernet with SC connectors	L
S	100Base-FX Fiber Ethernet with ST connectors	S
R	100Base-T Copper Ethernet with RJ45 connector	R

Serial Communications Options

N	None	N
4	RS-485 Copper Serial Port	4
F	Serial Fiber with ST connectors	F

Unit with iBridge Communications[1]

Base Unit and Integrated iBridge Communications System for Ethernet and Serial Communications over existing power wire. Installed iBridge replaces Ethernet and Serial options. — B100 - I

[1] Includes one IND2000N 9 mm inductive coupler (for most power wire sizes). Couplers for other wire sizes available. Requires a new or existing receiving iBridge (CE-520) or Gateway (CE-530) for communications to control room.

Sensors and Accessories

Part #	Description
CT-054	Auxiliary CT: Split Core CT 1000:1 Ratio w/5A Primary
CT-055	Auxiliary CT: Fixed Core CT 1000:1 Ratio w/5A Primary
MMTS-3C	One Magnetic Mount Temperature Sensor (3 wire PT-100 RTD) includes 1/2" NPT conduit connection.
MMTS-3Wxx	One Magnetic Mount Temperature Sensor (3 wire PT-100 RTD) includes stainless steel armored cable with flying leads connection. Specify length of 7.62 m, 15.24 m or 22.86 m (25 ft, 50 ft or 75 ft).
SE-060	RTD temperature sensor probe for 1/2" NPT Thermal Well
CE-520	Receiving iBridge for Communications to Control Room over any existing power wire[2]
CE-530	Receiving Gateway for Communications to Multiple iBridge units over any existing power wire[2]
IND2000N (9 mm), IND2020N (13 mm), IND2040N (18 mm), IND2100N (25 mm)	iBridge Communications System Inductive Coupler for coupling communications to existing power wire when wire size exceeds included 9 mm coupler

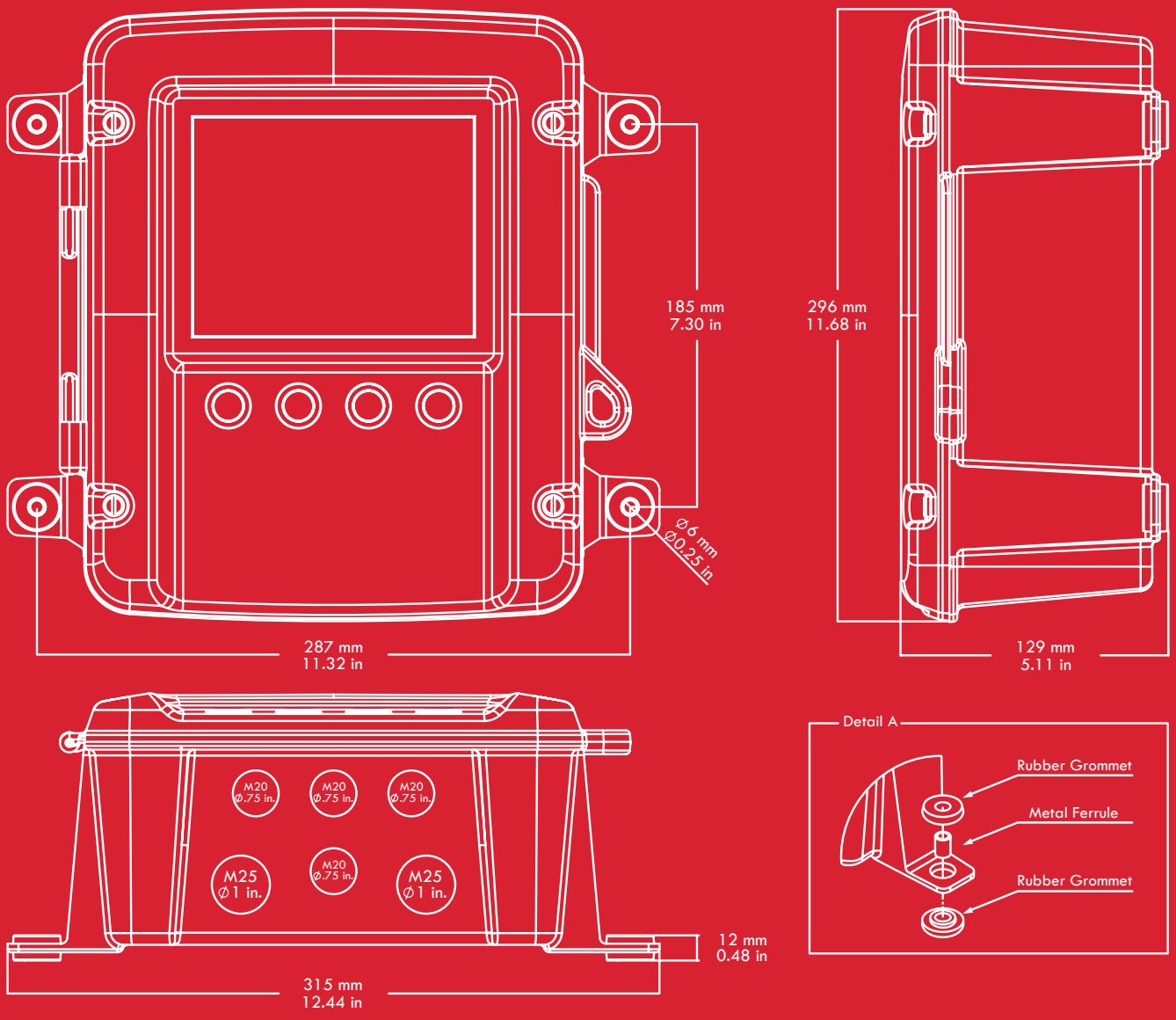
[2] A separate inductive coupler is required.

Product Specifications

Power Requirements:	48 - 240 VDC or 110 - 240 VAC (50 – 60 Hz)
Dimensions:	187 mm Wide x 296 mm Tall x 129 mm Deep (11.32” x 11.68” x 5.07”)
Temperature Range:	-40°C to 70°C (-40°F to 158°F)
Ingress Protection:	IP66 (NEMA-4 equivalent)
Communications:	USB, Ethernet, RS485 (optional), Serial Fiber (optional), DNP, Modbus, IEC 61850

The B100 Series Electronic Temperature Monitor is easily programmable from Windows 7 or later.

Dimensions



Americas / Europe
+1 262 746-1230
sales.us@dynamicratings.com

Asia / Africa / Oceania
+61 3 9574-7722
sales.asia@dynamicratings.com

www.dynamicratings.com