

TRANSFORMER MODULES 115VAC AND 230VAC

Description

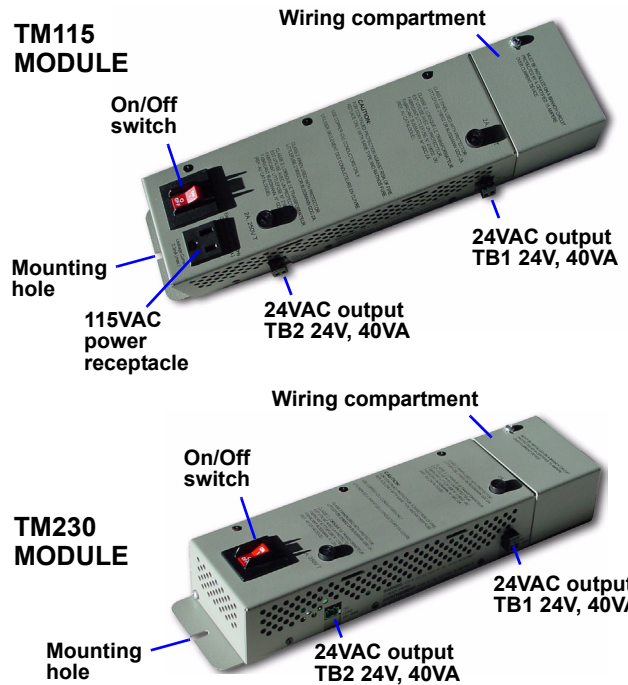
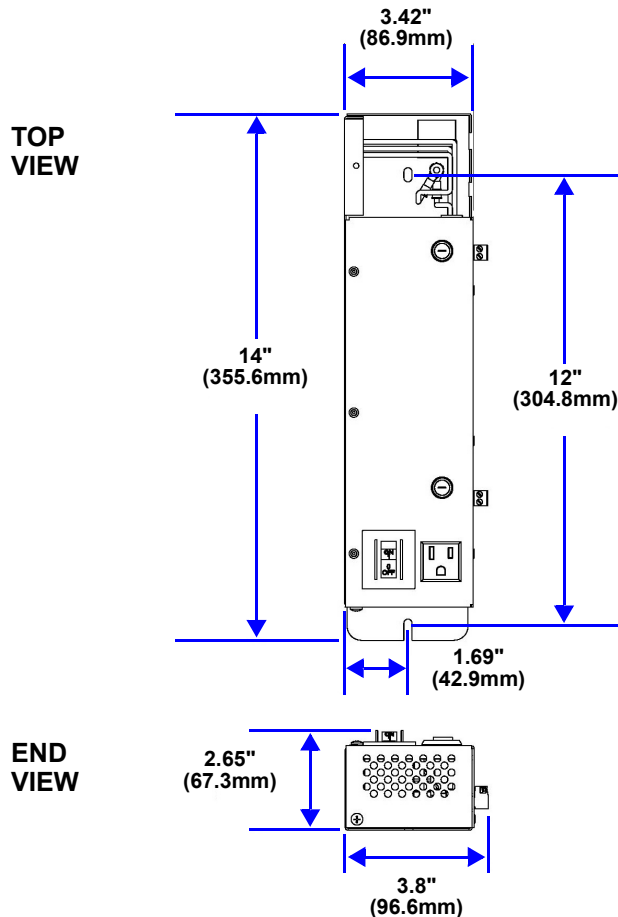
The TM115 and TM230 transformer modules are designed as self-contained, stand-alone devices.

- The **TM115 module** converts 115VAC to two 24VAC outputs. The unit includes an On/Off switch and a 115VAC power receptacle.
- The **TM230 module** converts 230VAC to two 24VAC outputs. The unit includes an On/Off switch.

Each of the 24VAC outputs for the TM115 and TM230 has a replaceable fuse for circuit protection.

Dimensions

The dimensions shown below are identical for both the TM115 (illustrated in the figure below) and the TM230 units.



Specifications

	TM115	TM230
Power Input Requirements	115VAC ±10% of nominal; 50/60 Hz, 3.9A, 450VA	230VAC ±10% of nominal; 50/60 Hz, 0.5A, 115VA
Power Outputs (2)	24VAC ±10% of nominal; 1.67A, 40VA each output	24VAC ±10% of nominal; 1.67A, 40VA each output
Receptacle Output	115VAC ±10% of nominal; 50/60 Hz, 3A Leakage Current: 0.3mA max	N/A
Dimensions WxDxH in.(mm)	3.8 x 2.65 x 14 (96.6 x 67.3 x 355.6)	
Weight (Assembled)	7.0 lbs. (3.6 kg)	
Enclosure Type	NEMA 1	
Ambient Operating Environment	32°F to 104°F (0°C to 40°C) 0% RH to 95% RH (non-condensing)	
Agency Listings		
UL	UL1012 UL1310	UL1012 UL1310
CSA	C22 No. 66 C22 No. 107.1	C22 No. 66 C22 No. 107.2
CE	Yes	Yes
Fuses (2)	2A, 250VT; replace with LITTLEFUSE 218002 or BUSSMANN GDC-2A	

Termination and Mounting



CAUTION

The 115VAC Transformer Module must be connected to a branch circuit with 15A branch circuit protection.

This equipment is intended to be installed by a qualified and certified electrician who must review and approve customer supplied wiring and circuit breakers, verify correct input and grounded connections to ensure compliance with the technical standards and national and local electrical codes.

The Transformer Module shall be used only as indicated by the manufacturer.



WARNING

Be sure that the Power On/Off switch is set to OFF before installing any wiring to this unit. The switch is at the bottom of the unit.

Input Power Connections

To connect electrical power to the Transformer Module:

1. Mount the Transformer Module, if required, using the hole in the electrical wiring compartment and the mounting flange at the bottom of the unit.
2. Install electrical wiring from utility power to the Transformer Module.
3. Use copper wires only; proper wiring to use for power is 14/2 AWG solid copper wire with ground. Strip wire 1/2".
4. Connect the wiring as follows:

TM115	TM230	Connection Type
White wire	Neutral (L2)	Neutral
Black wire	Line (L1)	Power (Line)
Green wire	Ground lead	Ground

5. Secure the incoming electrical service wires to the TM115 input wires with wire nuts as shown in **Figure 1** or to the TM230 connectors as shown in **Figure 2**.

24 VAC Output Power Connections

To connect to the 24VAC outputs:

1. Install electrical wiring from device requiring 24VAC power to the Transformer Module.
2. Use copper wire only; proper wiring to use for power is 18, 20 or 22 AWG copper wire. Strip wire 1/4".
3. There are two 24 VAC output connectors (TB1 and TB2). Terminate wires to the connector as shown in **Figures 1** and **2**. TB1 and TB2 are NOT polarity sensitive.
4. Secure the wires to the connector.

Ordering Information

Quantity	Part #	Description
	TM115	Transformer Module 115VAC with two 24VAC outputs (40VA each) and 115VAC receptacle
	TM230	Transformer Module 230VAC with two 24VAC outputs (40VA each)

Figure 1 Power wiring to TM115

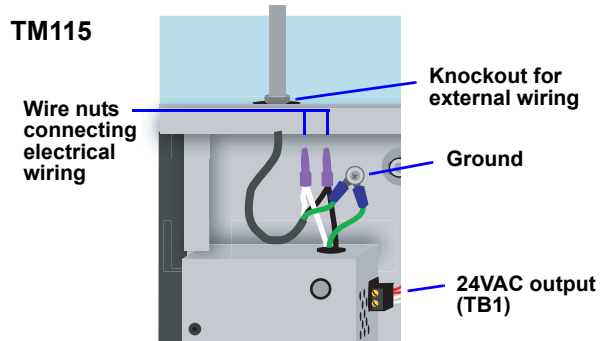
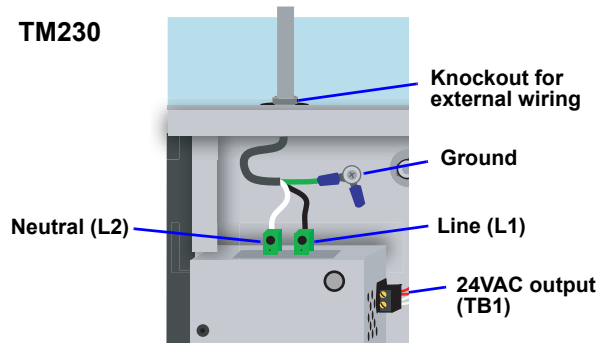


Figure 2 Power wiring to TM230



Troubleshooting

A common problem and possible solution are shown in the table below. For further information or if you have other problems with the unit, consult your local dealer, Liebert representative or the Liebert Worldwide Support Group.

Problem	Possible Solution
24VAC power not available from TB1 or TB2	Check fuse for respective output (TB1 or TB2). Replacement fuse part numbers are: • LITTLEFUSE 218002 or • BUSSMANN GDC-2A