



TORUS POWER

Engineered to perform
& protect like no other

**Toroidal Isolation
Power Conditioners**

25kVA & 35kVA Isolation Transformer



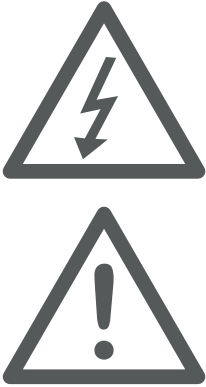
Owner's Manual

Model Number	Maximum Available Output Current	Maximum Output Power	Input Voltage	Output Voltage
FM-35K-230	146A	35,000VA	230VAC	240VAC (L-L)
FM-35K-240			240VAC	120VAC (L-N)
FM-25K-230	104A	25,000VA	230VAC	240VAC (L-L)
FM-25K-240			240VAC	120VAC (L-N)
FM-35K-230-TVSS	146A	35,000VA	230VAC	240VAC (L-L)
FM-35K-240-TVSS		(with TVSS)	240VAC	120VAC (L-N)
FM-25K-230-TVSS	104A	25,000VA	230VAC	240VAC (L-L)
FM-25K-240-TVSS		(with TVSS)	240VAC	120VAC (L-N)

Warning:

User is responsible for installing this unit in accordance with all local, provincial/state and federal electrical code requirements. The installation of this unit requires inspection and approval by local electrical safety authority. This wall mount unit is not equipped with a power safety interlock.

Important Safety Instructions



CAUTION! To reduce the risk of electric shock and fire, do not remove the cover of this device. There are no user serviceable parts inside. Please refer all servicing to licensed service technicians.

CAUTION! The international symbol of a lightning bolt inside a triangle is intended to alert the user to uninsulated "dangerous voltage" within the device's enclosure. The international symbol of an exclamation point inside a triangle is intended to alert the user to the presence of important operating, maintenance and servicing information in the manual accompanying the device.

CAUTION! To reduce the risk of electrical shock, do not expose this equipment to rain or moisture.

1. Read Instructions—All safety and operating instructions should be read before operating the device.
2. Retain Instructions—The safety and operating instructions should be retained for future reference.
3. Heed Warnings—All warnings on the device and in the operating instructions should be adhered to.
4. Follow Instructions—All operating and safety instructions should be followed.
5. Water & Moisture—The device should never be used in, on or near water for risk of fatal shock.
6. Heat—Never locate the device near heat sources such as radiators, floor registers, stoves or other heat-generating devices.
7. Dangerous Entry—Care should be taken that no foreign objects or liquids fall or are spilled inside the device.

8. Damage Requiring Service—The device should be serviced by licensed technicians when:

- Objects have fallen or liquid has spilled inside the device.
- The device has been exposed to moisture.
- The device does not appear to be operating properly or exhibits a marked change in performance.
- The device has been dropped or the enclosure becomes damaged.

9. Service—The device should always be serviced by licensed technicians. Only replacement parts specified by the manufacturer should be used. The use of unauthorized substitutions may result in fire, shock, or other hazards.

10. If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

11. **CAUTION** Some units can be very heavy, please use safe practices when lifting.



≥18 kg (39.7 lb)



≥32 kg (70.5 lb)



≥55 kg (121.2 lb)

Description

Torus Power Isolation Transformer

The Torus Power Isolation Transformer offers large scale power isolation and conditioning for high end audio video applications in home theater, 2-channel home audio, professional studios and commercial theaters.

Torus Power toroidal Isolation Transformers come in 25kVA and 35kVA, providing complete isolation from the external power grid.

Low Source Impedance

Torus Power Isolation Transformers have a low output impedance. The 25kVA and 35kVA can offer high instantaneous output current, each drawing from the service line or sub panel (230V or 240V). Low Source Impedance enhances total system performance.

Noise Filtration

Torus Power Isolation Transformers filter noise with Plitron's Narrow Bandwidth Technology (NBT). NBT uses controlled leakage inductance and capacitances within the transformer

to significantly reduce common mode and differential mode noise. NBT operates from 2kHz to 1MHz at 12dB/decade up to 500kHz.

Efficiency

The toroidal transformer operates above 97% efficiency making the Torus Power Isolation Transformer environmentally friendly by minimizing wasted power consumption.

Surge Suppression (optional device)

The Floor Mount Torus Power series is available with a TVSS device built in to its signal path. This UL certified Panel TVSS has a sub-nanosecond response time and manages surges beyond 120,000 Amps. The TVSS also offers additional noise filtration of EMI and RFI (40dB typical).

Shipping Carton & Packing Material

Please keep the original shipping box and all packing material. This will ensure the unit is protected in future transport.

In the unlikely event you have a problem and must return it for service you must use the proper packing material.

Ship the unit only in the original packing material, as the unit is not insurable by carriers otherwise.

Warranty

Torus Power products are warranted to be free from manufacturing defects for five years from the original date of sale. This includes parts, labour and return shipping to the first registered owner and all subsequent registered owners. Warranty coverage is extended to applicable products registered or having proof-of-purchase (sales invoice, etc.).

In the event of a defect or malfunction, Torus Power will remedy the problem by repair or replacement, as we deem necessary, to restore the product to full performance.

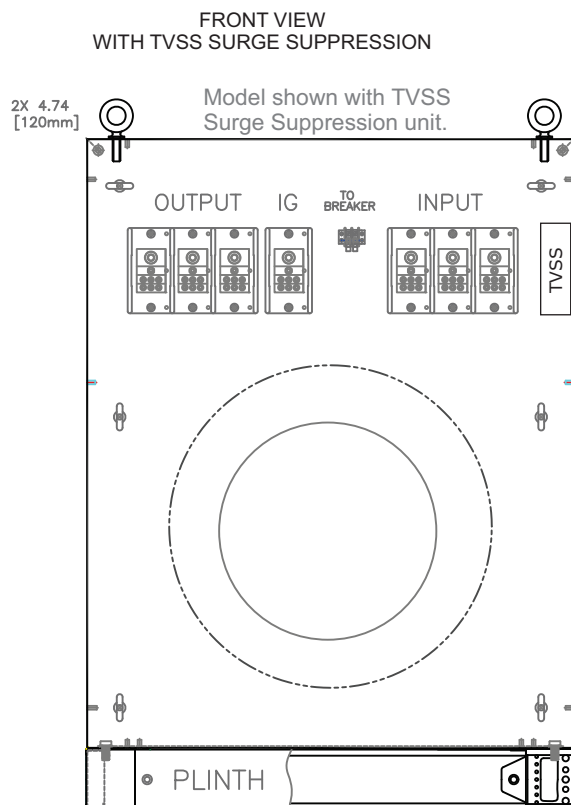
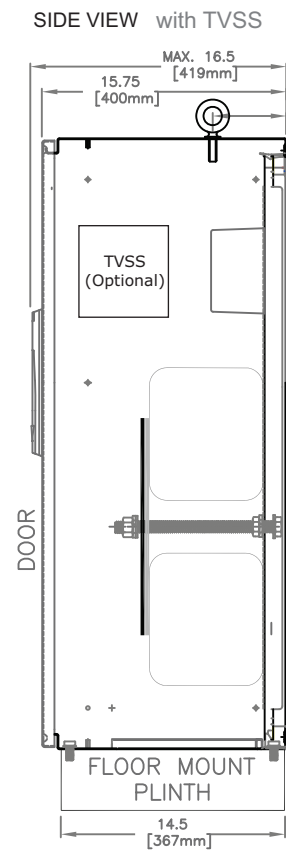
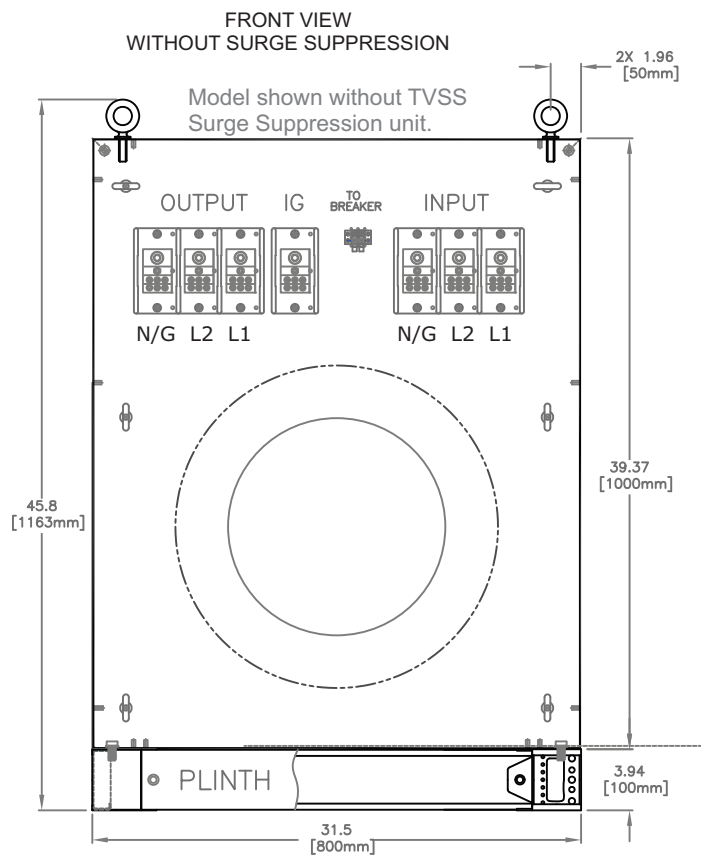
This warranty is considered void if the defect, malfunction or failure of the product or any component part was caused by damage (not resulting from a defect or malfunction) or abuse while in the possession of the customer. Failure to fully comply with Torus Power operating instructions, voids the warranty.

TVSS Surge Suppression

TVSS

The Floor Mount Torus Power is available with a TVSS device built in to its signal path. This UL certified Panel TVSS has a sub-nanosecond response time and manages surges beyond 120,000 Amps. The TVSS also offers additional noise filtration of EMI and RFI (40dB typical).

25kVA & 35kVA Torus Power Isolation Transformer Enclosure



Electrical/Mechanical Specifications

Model Number	Input Voltage	Maximum Available Output Current	Output Voltage	Output Power	Surge Suppression	Weight	Size (w x d x h)
FM-35K-230	230VAC, 50/60Hz	146A	240VAC (L-L)	35,000VA		724 lbs.	31.5 x 15.75 x 45.8 inch
FM-35K-240	240VAC, 50/60Hz		120VAC (L-N)			329 kg	800 x 400 x 1163 mm
FM-25K-230	230VAC, 50/60Hz	104A	240VAC (L-L)	25,000VA		612 lbs.	31.5 x 15.75 x 45.8 inch
FM-25K-240	240VAC, 50/60Hz		120VAC (L-N)			278 kg	800 x 400 x 1163 mm
FM-35K-230-TVSS	230VAC, 50/60Hz	146A	240VAC (L-L)	35,000VA	✓	730 lbs.	31.5 x 15.75 x 45.8 inch
FM-35K-240-TVSS	240VAC, 50/60Hz		120VAC (L-N)		✓	332 kg	800 x 400 x 1163 mm
FM-25K-230-TVSS	230VAC, 50/60Hz	104A	240VAC (L-L)	25,000VA	✓	618 lbs.	31.5 x 15.75 x 45.8 inch
FM-25K-240-TVSS	240VAC, 50/60Hz		120VAC (L-N)		✓	281 kg	800 x 400 x 1163 mm

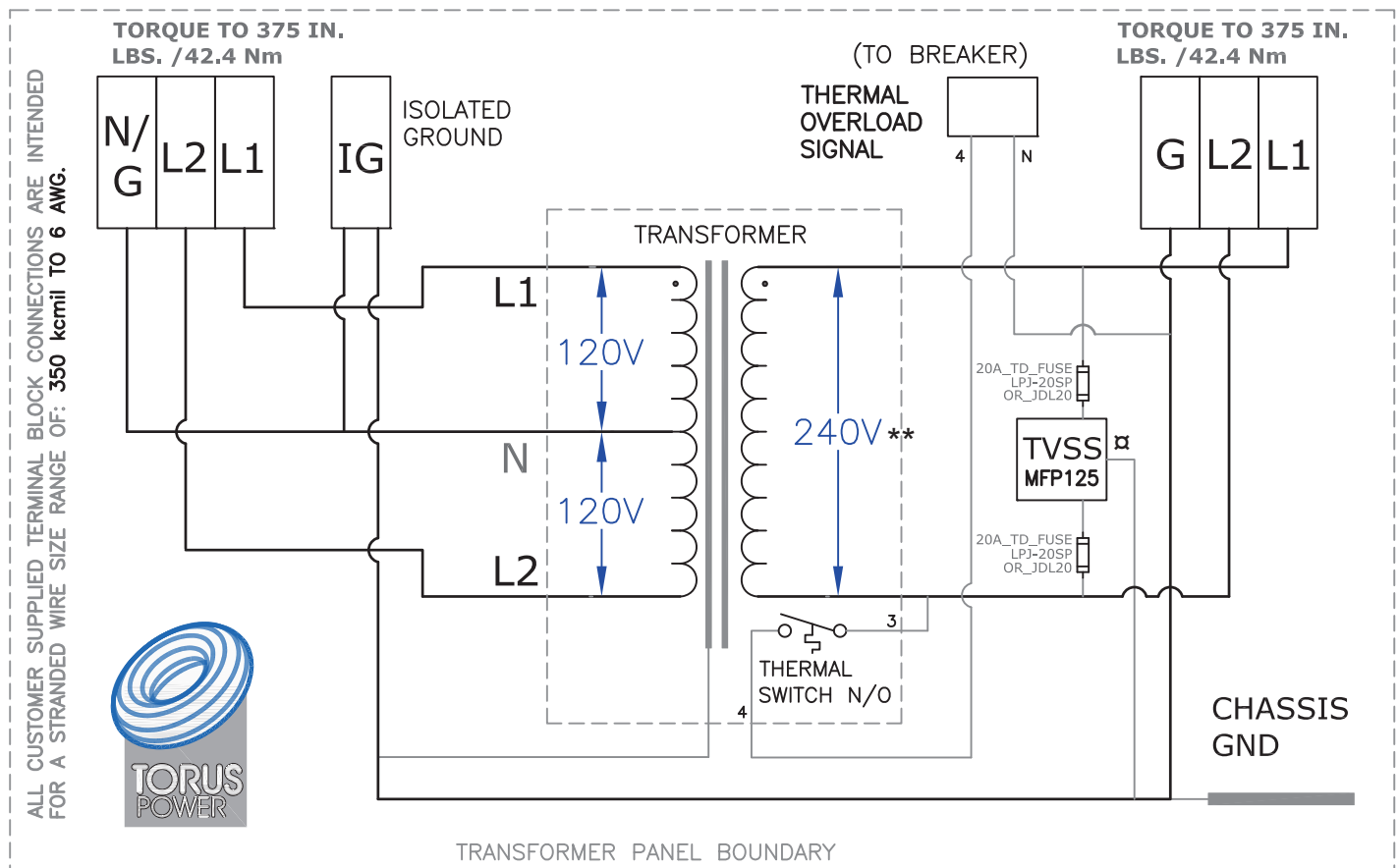
Note: Height includes PLINTH and eye bolts.

Schematic

Input and Output terminal blocks will accept wire gauge #6 up to 350kcmil

OUTPUT

INPUT



CAUTION: DO NOT SHORT ROUND TRANSFORMER RETAINING PLATE OR BOLTS TO ANY OTHER PART OF THE CABINET.

CAUTION: WHEN DRILLING CABINET, PROTECT THE INTERNAL COMPONENTS FROM DEBRIS.

The terminal identified as "TO BREAKER", if used, is intended to signal an external circuit breaker that an over-temperature condition exists. In the event of such a condition, the L2 voltage will appear across the 2-pole terminal. In normal operation, this signal is open-circuit.

*** Voltage inputs of 230 and 240 are available. See Electrical Specifications above.

⌘ Diagram is shown with the optional TVSS. See Electrical Specifications above.

Torus Power products are marketed worldwide through Plitron Manufacturing Inc.

For sales contact:

torussales@plitron.com

Phone: 416-667-9914

Toll free: 1-800-754-8766

Fax: 416-667-8928

Technical inquiries:

torustechnical@plitron.com

Phone: 416-667-9914



TORUS POWER

Engineered to perform
& protect like no other

**Toroidal Isolation
Power Conditioners**

Torus Power
#8 601 Magnetic Drive
Toronto, ON M3J 3J2
Canada
416-667-9914

www.TorusPower.com

Specifications subject to change without notice.
© Torus Power 2014