

NEW FROM MICRON



Power where you need it!
MICRON ImperviPOWER 67 Series
IP-67 Power Supplies

Micron ImperviPOWER 67™ Power Supply Selection Guide

Model	Output Power (Watts)	Input Voltage (VAC)	Output Voltage (VDC)	Efficiency Rating	Ambient Temp Rating	Size WxDxH(mm)
MIP67-50-24	50	90-264	24	>89%	-40C to +50C	166x85x35
MIP67-100-24	100	90-264	24	>89%	-40C to +50C	166x85x35

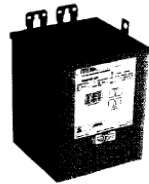
ALL UNITS HAVE AN ISOLATION RATING OF 3.3KVAC
CONTACT MICRON FOR SPECIFIC DETAILS ON THE IMPERVIPOWER 67 LINE

DRY TYPE TRANSFORMERS GENERAL INFORMATION



**Single Phase
Type 1-E Encapsulated**

Type 1-E general purpose transformers are single phase, resin encapsulated designs suitable for indoor or outdoor applications. Its totally-enclosed, non-ventilated enclosure make it ideally suited for use in areas that contain dust, moisture, or corrosive fumes. Available in ratings through 25 kVA, type 1-E transformers can be mounted in any position for indoor installations and in upright positions only for outdoor installations.



**Three Phase
Type 3-E Encapsulated**

Type 3-E resin encapsulated, 3-phase transformers are available in ratings of 3-75 kVA. Its totally enclosed non-ventilated enclosure makes the 3-E ideally suited for outdoor as well as indoor locations. Type 3-E transformers utilize the 185°C insulation system with 115°C rise. 3-E transformers 3-15 kVA are T-T connected.

Units installed outdoors must be mounted in upright position.



**Single Phase
Type 1-V Ventilated**

1-V general purpose transformers are single phase ventilated units designed primarily for indoor locations (also for outdoor for 600 volt class with the addition of weathershields). The 1-V utilizes a 220°C insulation system with 150°C rise and is available in ratings of 15-167 kVA.



**Three Phase
Type 3-V Ventilated**

The 3-phase 3-V ventilated dry-type is available in ratings of 15-750 kVA. Its 220°C insulation system (150°C rise) is self-extinguishing. 3-V enclosures are designed for indoor locations for outdoors for 600 volt class with addition of weathershields.

General Information

Industry Standards

All Micron dry-type distribution and control transformers are built and tested in accordance with applicable NEMA, ANSI and IEEE standards. All 600 volt class transformers are UL listed unless otherwise noted.

Seismic Qualified

The Micron family of dry-type distribution transformers is seismically tested, seismically qualified and exceeds requirements of the Uniform Building Code (UBC) and California Code Title 24.

Frequency

Micron standard dry-type distribution transformers are designed for 60 Hertz operation. Transformers required for other frequencies must be specifically designed.

Overload Capability

Short term overload is designed into transformers as required by ANSI. Basically, dry-type distribution transformers will deliver 200% nameplate load for one-half hour; 150% load for one-hour; and 125% load for four-hours without being damaged provided that a constant 50% load precedes and follows the overload. See ANSI C57.96-01.250 for additional limitations.

Continuous overload capacity is not deliberately designed into a transformer because the design objective is to be within the allowed winding temperature rise with nameplate loading.

Insulation System & Temperature Rise

Industry standards classify insulation systems and rise as shown below:

Insulation System Classification

Ambient	+ Winding Rise	+ Hot Spot	= Temp. Class
40°C	55°C	10°C	105°C
40°C	80°C	30°C	150°C
40°C	115°C	30°C	185°C

The following pages provide listings for standard transformer ratings and styles. For other ratings or styles not shown, or for special enclosure types (including stainless steel) contact Micron.

● Applies to general purpose transformers only.

The design life of transformers having different insulation systems is the same — the lower temperature systems are designed for the same life as the higher temperature systems.

Sound Levels

All Micron 600 volt class dry-type distribution transformers are designed to meet NEMA ST-20 levels listed here.

kVA	NEMA Average ⁰ Sound Level in db ⁰
0 - 9	40
10 - 50	45

Winding Terminations

Primary and secondary windings are terminated in the wiring compartment. Encapsulated units have copper leads or stabs brought out for connections. Micron recommends external cables be rated 90°C (sized at 75°C ampacity) for encapsulated designs.

Series-Multiple Windings

Series-multiple windings consist of 2 similar coils in each winding which can be connected in series or parallel (multiple). Transformers with series-multiple windings are designated with an "X" or "I" between the voltage ratings, such as primary voltage of "120/240" or "240 X 480". If the series-multiple winding is designated by an "X", the winding can be connected only for a series or parallel. With the "I" designation, a mid-point also becomes available in addition to the series or parallel connection. As an example, a 120 X 240 winding can be connected for either 120 (parallel) or 240 (series), but a 120/240 winding can be connected for 120 (parallel), or 240 (series), or 240 with a 120 mid-point.

Micron can provide a general purpose or buck-boost transformer to satisfy your industrial or commercial application. Please refer to Catalog number LVGP-904 for further information



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