

File E135493  
Project 01ME22852

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REPORT  
on

COMPONENT-POWER SUPPLIES

Vicor Corporation  
Andover, MA

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D E S C R I P T I O NPRODUCT COVERED:

Component - Power Supply, 2<sup>nd</sup> Gen, AC or DC Configurable Front End, Model VIPAC, PowerStick Series. The power supplies are for use with data processing equipment, office appliances, and Electrical Business Equipment.

GENERAL CHARACTER AND USE:

The Model Power Supplies are built incorporating 1 QQGQ2 2<sup>nd</sup> Generation Concept DC-DC input module, Vicor Corp. Series part number FIAM, 1 QQGQ2 2<sup>nd</sup> Generation Concept AC-DC input module, Vicor Corp. Series part number FARM, 1-3 QQGQ2 48V 2<sup>nd</sup> Generation DC-DC Converter Modules Vicor Corp. part number Viiisxxyzzzw, which provide primary to secondary isolation. It can be configured by selecting the desired output configuration described in the nomenclature section of this report (up to three outputs), See Ill 1. Units share the same front-end primary circuitry. They are intended to be factory wired.

The PowerStick Model is a switching type power supply incorporating semiconductor components in the primary circuit. It is provided with input and output terminals for connection to the end use equipment.

NOMENCLATURE BREAKDOWN:

Refer to Ill. 1

ELECTRICAL RATING : Input 115/230 Vac 14.8 A 47-63 Hz or 48Vdc

Output: Refer to Ill 1

## ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

For use in (or with) complete equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.

This product was investigated under the Standard for Information Technology Equipment, Including Electrical Business Equipment, CAN/CSA-C22.2 No. 60950/UL 60950, Third Edition

For use in (or with) complete equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.

Conditions of Acceptability - When installed in the end-use equipment, consideration shall be given to the following:

1. The power supply should be installed in compliance with the enclosure, mounting, spacings, temperature, and casualty and segregation requirements of the ultimate application.
2. The baseplate temperatures should be measured in the end-use equipment, and should not exceed 100°C.
3. The input and output terminals are not acceptable for field connections and are only intended for connection to mating connectors of the internal wiring inside the end-use system. The acceptability of these mating connectors/terminals relative to secureness, insulating materials and temperature should be considered in the end product evaluation.
4. This product has been evaluated as Class I, Component Supply for building-in.
5. Secondary outputs 2V-48V comply with SELV requirements; higher voltage outputs are non-SELV.
6. The unit should be installed within an overall enclosure so that uninsulated current carrying parts are suitably enclosed.
7. When baseplate is accessible, ground baseplate to earth/chassis ground in end product.
8. The unit is provided with reinforced isolation between primary and secondary and Basic insulation from primary to chassis.

CONSTRUCTION DETAILS: Refer to section General.

Model Differences - All models are similar, but different in the amount of models provided, size, number of outputs and output ratings. Refer to Ill. 1

Models are described as follows:

<u>VIPAC Series</u>	<u>No. of Modules</u>	<u>Max. Current</u>	<u>Max. Power</u>	<u>Size(in.)</u>
1 Micro	One	25A	150W	3.15 x 6.8
2 Micro	Two	50A	300W	3.15 x 6.8
1 Mini	One	50A	250W	3.15 x 6.8
1 Maxi	One	80A	500W	3.15 x 9.1
3 Micro	Three	75A	450W	4.96 x 6.8
2 Mini	Two	100A	500W	4.96 x 6.8
1. 2 Maxi	Two	160A	900W	4.96 x 9.1