

DESCRIPTION

PRODUCT COVERED:

\*USR, CNR: Component Power Supplies, Models VI-IAM, VI-AIM, VI-ARM, FiltMod, IAM, FIAM and FARM Series. All models may be followed by additional suffixes as indicated below.

GENERAL CHARACTER AND USE:

These products are nonisolating power supplies incorporating semi-conductor components. They are provided with input and output terminals for connection to the end use equipment.

The power supplies have been investigated to the Standard for Information \*Technology Equipment Including Business Equipment, CAN/CSA C22.2 No. 60950-00, UL60950, CAN/CSA C22.2 No. 950-95, UL 1950 3<sup>rd</sup> Edition, and UL 544, The Standard for Medical and Dental Equipment, Third Edition.

ELECTRICAL RATINGS: Refer to Ill. 8.

## ENGINEERING CONSIDERATIONS (NOT FOR UL REPRESENTATIVE USE):

General - For use only in equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.

\* Special Considerations -The following items are considerations that were used when evaluating these products.

\* USR - Indicates investigation to the U.S. Standards of Safety of Information Technology Equipment, Including Electrical Business, UL1950, Third Edition, dated July 1, 1997, for building in, Class I, (Earthed).

Conditions of Acceptability - Where installed in the end-use equipment, the following are among the considerations to be made.

- \*1. This component has been judged on the basis of the required spacings in the Standard for Safety of Information Technology Equipment, Including Electrical Business Equipment, CAN/CSA C22.2 No. 950-95 \*UL1950, Third Edition, including revisions through revision date March 1, 1998, which are based on the Fourth Amendment to IEC 950, Second Edition, Sub. Clause 2.9, which would cover the component itself, if, submitted for Listing.
2. The power supply should be installed in compliance with the enclosure, mounting, spacing, casualty and segregation requirements of the ultimate application.
3. Consideration should be given to measuring the temperatures on power electronic components, coils and transformer windings when the power supply is installed in the end-use equipment.
4. Output circuits are not isolated and provide operational insulation only.
5. The unit should be located within an overall enclosure so that live parts are suitably enclosed.
6. The input/output connectors have not been evaluated for field-wiring applications. They are intended only for factory-wiring connections within an end-product.



VI-IAM / VI-AIM / IAM / FIAM / FiltMOD / M-FIAM5 / VI-ARM / FARM Family Tree  
**VI-Aaabc-defg-xx**

**VI** = Product Type (Vicor); **IP** (Vicor Japan)

**Note:**

VI-IAM model Designation – **VI-Aaa-de-xx**, (**aabc-defg-xx** is replaced by **aa-de-xx**)

VI-AIM model Designation – **VI-Abc-df-xx**, (**aabc-defg-xx** is replaced by **bc-df-xx**)

IAM model Designation – **IAMaaedfg**, (**VI-A** is replaced with **IAM**, and **aabc-defg-xx** is replaced by **aaedfg**)

FIAM, 48V model Designation – **FIAMeedfg**, (**VI-A** is replaced with **FIAM**, and **aabc-defg-xx** is replaced by **aaedfg**)

FiltMOD model Designation – **FMaaedfg**, (**VI-A** is replaced with **FM**, and **aabc-defg-xx** is replaced by **aaedfg**)

M-FIAM5, 28V model Designation – **M-FIAM5eedfg**, (**VI-A** is replaced with **M-FIAM5**, and **aabc-defg-xx** is replaced by **aaedfg**)

VI-ARM model Designation – **VI-Abc-dfg-xx**, (**aabc-defg-xx** is replaced by **bc-dfg-xx**)

FARM model Designation – **FARMbdgf**, (**VI-A** is replaced with **FARM**, and **aabc-defg-xx** is replaced by **bdgf**)

**aa** Denotes a Input configuration for the VI-IAM, FiltMOD, IAM, FIAM, M-FIAM5. The Input Configuration maybe replaced by "aaa" for inputs greater than 48Vdc

= 11	24Vdc Nominal @ 200Wmax	VI-IAM
= WW	24Vdc Nominal @ 200Wmax	VI-IAM
= 33	48Vdc Nominal @ 400Wmax	VI-IAM
= NN	48Vdc Nominal @ 400Wmax	VI-IAM
= 66	300Vdc Nominal @ 400Wmax	VI-IAM
= 48	48Vdc Nominal @ 20A max, IAM; 48Vdc Nominal @12A max FiltMOD	

**b** Denotes Input configuration for the VI-AIM, VI-ARM, FARM

= I	85-264 Vac In	100-400Vdc Out @ 250Wmax	VI-AIM
= R	90-264 Vac In	100-400Vdc Out @ 1500Wmax	VI-ARM
= 1	90-264 Vac In	100-400Vdc Out @ 750Wmax	FARM
= 2	90-264 Vac In	100-400Vdc Out @ 1000Wmax	FARM

**c** Denotes Input configuration for the VI-AIM, VI-ARM

= M

**e** Denotes Module Output. The Output Configuration maybe replaced by "ee".

= U	200 Watts	VI-IAM	= 10	10 Amps	IAM
= Q	400 Watts	VI-IAM	= 8	8 Amps	FiltMOD
= 20	20 Amps	IAM	= 1	10 Amps	FIAM
= 12	12 Amps	FiltMOD	= 2	20 Amps	FIAM

**d** Denotes Product Grade

= C	Commercial	-20°C to 100°C	47-63Hz
= I or T	Industrial	-40°C to 100°C	47-440Hz
= M	Military	-55°C to 100°C	47-440Hz
= E	Economy	0°C to 100°C	47-63Hz

**x** Denotes Module Specials

= F1-F4	(FinMOD, Heatsink assembly)
= S	(SlimMOD, Flangeless Package)
= B1	(BusMOD, Screw / lug wiring harness)
= 0-99	(Non Safety Related Changes)

**f** Denotes Vicor Assigned Baseplate configuration codes

= 1 Slotted, 2 Threaded, 3 Thru-hole

**g** Denotes Vicor Assigned Pin options

= 1 Short, 2 Long

**Examples**

**IAM4810C12 IAM Family**

48 = 48Vdc In, 10 = 10Amp, C = Commercial, 1 = Configuration Code, 2 = Pin Option

**VI-A33-EQ-01 VI-IAM Family**

33 = 42-60Vdc, E = Economy, Q = 400 Watts, 01 = Module Special