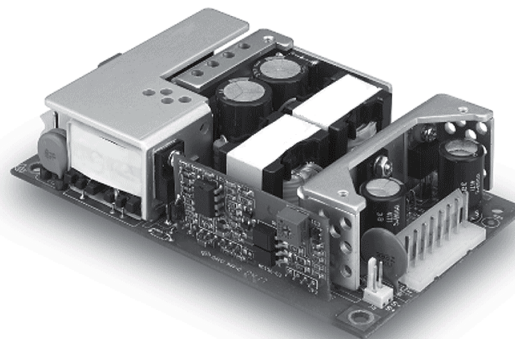


**PART NUMBER:** VFM100 series**DESCRIPTION:** open frame ac-dc power supply**features**

- universal input: 90~264VAC
- efficiency at 85% typical
- conductive EMI meets CISPR/FCC, class B/EN61204-3 class B
- power factor correction
- single output



| model number | output voltage | max. load | min. load | ripple & noise <sup>1</sup> | voltage accuracy | line regulation <sup>2</sup> | load regulation <sup>3</sup> |
|--------------|----------------|-----------|-----------|-----------------------------|------------------|------------------------------|------------------------------|
| VFM100-S5    | 5V             | 20A       | 0A        | 2%                          | ±1%              | ±0.5%                        | ±1%                          |
| VFM100-S9    | 9V             | 11.2A     | 0A        | 1%                          | ±1%              | ±0.5%                        | ±1%                          |
| VFM100-S12   | 12V            | 8.4A      | 0A        | 1%                          | ±1%              | ±0.5%                        | ±1%                          |
| VFM100-S15   | 15V            | 6.7A      | 0A        | 1%                          | ±1%              | ±0.5%                        | ±1%                          |
| VFM100-S18   | 18V            | 5.6A      | 0A        | 1%                          | ±1%              | ±0.5%                        | ±1%                          |
| VFM100-S24   | 24V            | 4.2A      | 0A        | 1%                          | ±1%              | ±0.5%                        | ±1%                          |
| VFM100-S48   | 48V            | 2.1A      | 0A        | 1%                          | ±1%              | ±0.5%                        | ±1%                          |

**INPUT**

|                |                   |
|----------------|-------------------|
| voltage        | 90-264VAC         |
| frequency      | 47 to 63Hz        |
| inrush current | 50A max. @ 264VAC |

**OUTPUT**

|                          |                    |
|--------------------------|--------------------|
| hold up time             | 20mS typ. @ 115VAC |
| short circuit protection | continuous         |
| over voltage protection  | auto recovery      |

**ENVIRONMENTAL CHARACTERISTICS**

|                       |            |
|-----------------------|------------|
| operating temperature | 0°C-40°C   |
| storage temperature   | -20°C-85°C |

**MECHANICAL OUTLINE**

|            |                                  |
|------------|----------------------------------|
| dimensions | 5x3x1.34 inches (127x76.2x34 mm) |
|------------|----------------------------------|

**GENERAL and SAFETY**

|                            |                                                      |                        |
|----------------------------|------------------------------------------------------|------------------------|
| isolation voltage (HI-POT) | input to output                                      | 4242 V dc for 1 minute |
| safety approvals           | approved to UL 60950 E210311, TUV, CE                |                        |
| EMI standard               | conducted emissions comply with CISPR22, FCC class B |                        |
| leakage current            | 3.5mA max.                                           |                        |
| RoHS                       | yes                                                  |                        |

**NOTES:**

1. add a 0.1µF ceramic capacitor and a 10µF E.L. capacitor to output for ripple and noise measuring @20MHz BW.
2. line regulation is measured from 100VAC to 240VAC with full load.
3. load regulation is measured from 60% to 100% full load and from 60% to 20% full load (60% ±40% full load).



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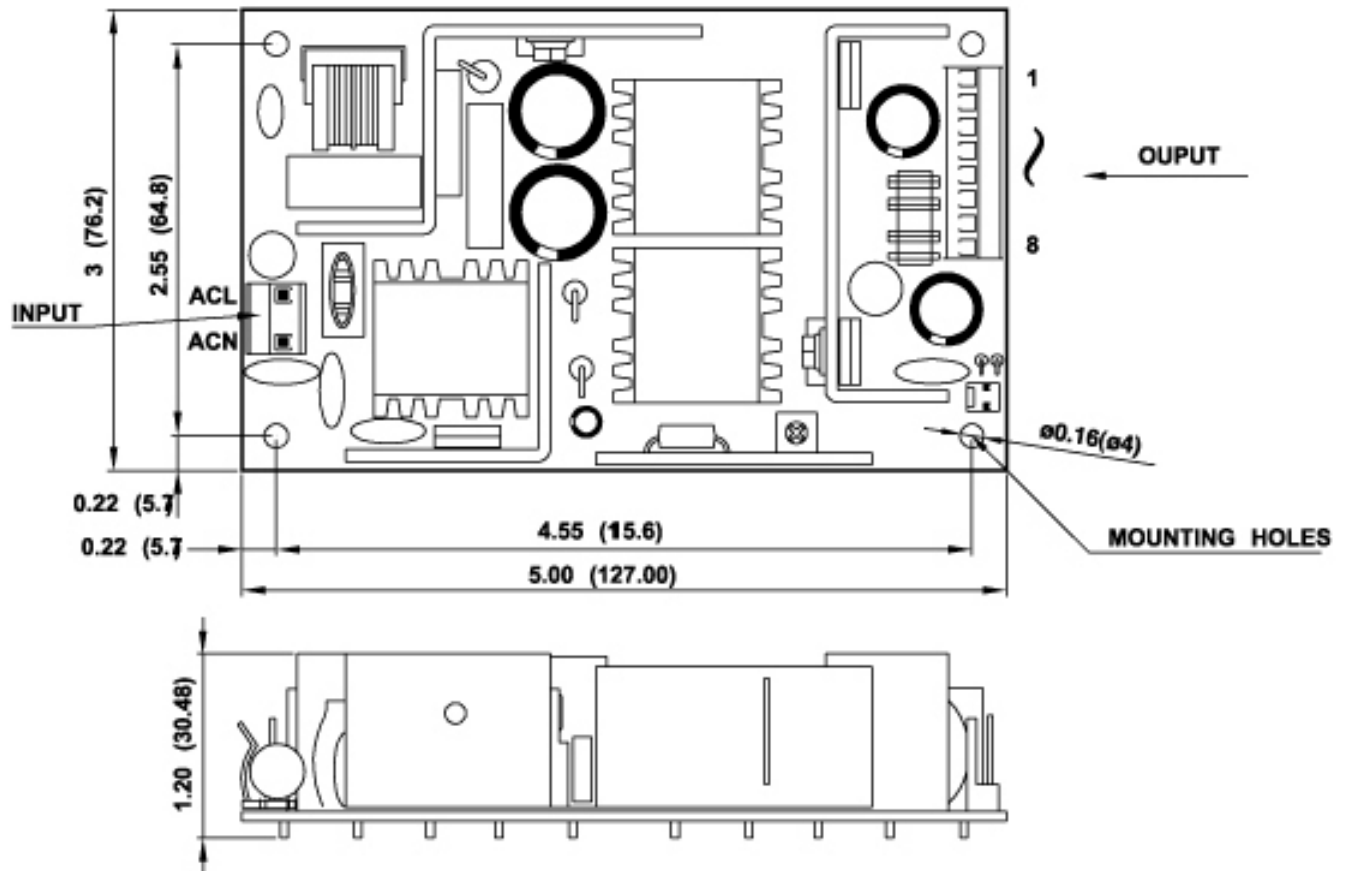
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date 11/2008

**PART NUMBER:** VFM100 series

**DESCRIPTION:** open frame ac-dc power supply

## DIMENSIONS (mm)



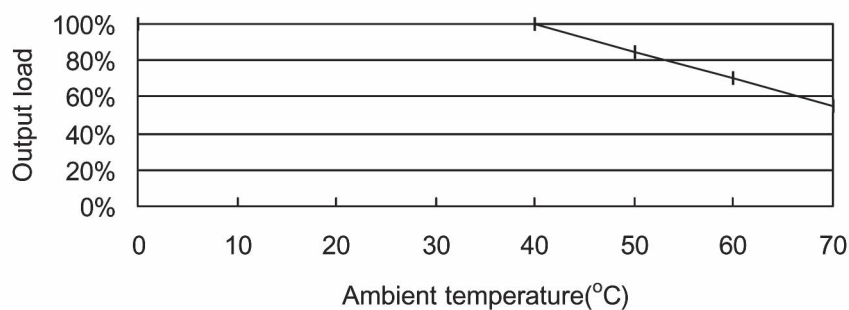
### NOTES:

4. Dimensions tolerance:  $\pm 1$  mm
5. Connectors: ac input: Molex 5277 or equivalent  
dc output: Molex 5273 or equivalent
6. dc output pin 1, 2, 3, 4: Vout (+)  
dc output pin 5, 6, 7, 8: Vout (-)

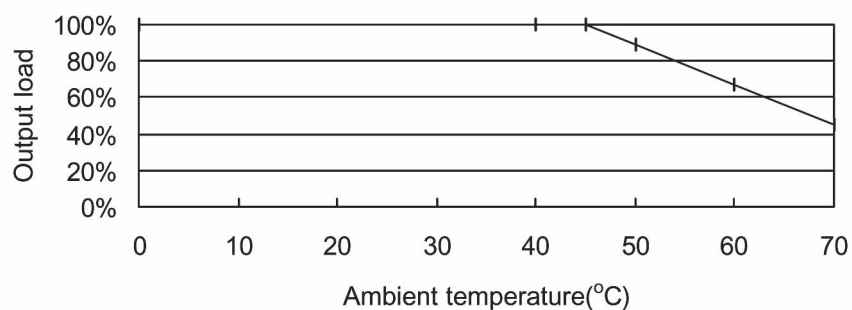
**PART NUMBER:** VFM100 series**DESCRIPTION:** open frame ac-dc power supply

## DERATING CURVES

VFM100 series derating curve

**Models: VFM100-S9, VFM100-S24, VFM100-S28, VFM100-S48**

VFM100 series derating curve

**Models: VFM100-S12, VFM100-S15, VFM100-S18**

VFM100 series derating curve

