

PART NUMBER: VSUU-120

DESCRIPTION: Single Output Power Supply

Features

- Universal Input Voltage 90-264 VAC, 130-370 VDC, 47-63 Hz
- Internal EMI filter
- Input connector mates with Molex housing 09-50-3051 and Molex 2478 and 2578 series crimp terminal
- Output connector mates with Molex housing 09-50-3131 and Molex 2478 and 2578 series crimp terminal
- Input Surge current, over voltage and over load protection
- Power factor correction
- Power fail detect (optional)
- Class I Insulation
- Size : 3" x 5" x 1.54"
- Two Year Warranty



| Model Number | Output ¹ Voltage | Preset Voltage | Output ² Current | Total Regulation | Max Output Power |
|--------------|-----------------------------|----------------|-----------------------------|------------------|------------------|
| VSUU-120-3.3 | 3~5 VDC | 3.3 VDC | 22.00 A | ±5% | 100 W |
| VSUU-120-5 | 5~6 VDC | 5 VDC | 22.00 A | ±5% | 110 W |
| VSUU-120-7.5 | 6~9 VDC | 7.5 VDC | 19.16 A | ±5% | 115 W |
| VSUU-120-9 | 9~11 VDC | 9 VDC | 13.33 A | ±4% | 120 W |
| VSUU-120-12 | 11~13 VDC | 12 VDC | 10.90 A | ±3% | 120 W |
| VSUU-120-15 | 13~16 VDC | 15 VDC | 9.23 A | ±3% | 120 W |
| VSUU-120-18 | 16~21 VDC | 18 VDC | 7.50 A | ±3% | 120 W |
| VSUU-120-24 | 21~27 VDC | 24 VDC | 5.71 A | ±2% | 120 W |
| VSUU-120-30 | 27~33 VDC | 30 VDC | 4.44 A | ±2% | 120 W |
| VSUU-120-36 | 33~40 VDC | 36 VDC | 3.63 A | ±2% | 120 W |
| VSUU-120-48 | 40~50 VDC | 48 VDC | 3.00 A | ±2% | 120 W |

Notes:

- 1 Customer must specify output voltage.
- 2 Output current is limited by output power.
- 3 Suffix "P" for power fail direct option.

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Electrical Characteristics

| Parameter | Test Conditions | Min. | Typ. | Max. | Unit |
|-------------------------------|--|-------|------|------|------|
| Input Voltage | | 90 | | 264 | VAC |
| | | 130 | | 370 | VDC |
| Input Frequency | | 47 | | 63 | Hz |
| Power Factor Correction | Full load at 90~260VAC | 0.95 | 0.97 | 1.0 | |
| Output Power Range | at 90 to 264 VAC | 0 | | 120 | W |
| Input Current (low line) | Full load at 115VAC | | | 1.7 | A |
| Input Current (high line) | Full load at 230VAC | | | 1.0 | A |
| Low Line Inrush Current | Full load, 25°C, cool start, at 115VAC | | 12 | 15 | A |
| High Line Inrush Current | Full load, 25°C, cool start, at 230VAC | | 26 | 30 | A |
| Efficiency | Full load, at 230VAC | 70 | 80 | 88 | % |
| Line Regulation | Full load | | 0.5 | 1 | % |
| Load Regulation | at 230VAC | | 3 | 5 | % |
| Over Voltage Protection | | 112 | | 132 | % |
| Over Current Protection | | 110 | | 150 | % |
| Transient Response | Full load to Half load, at 100VAC | | | 4 | mS |
| Hold-Up Time | Full load, at 110VAC | 16 | | | mS |
| Start up time | Full load, at 100VAC | 0.3 | 1 | 2 | S |
| Ripple & Noise (Peak to Peak) | Full load, at 90VAC | | 0.2 | 1 | % |
| Safety Ground Leakage Current | Full load, at 240VAC | | 0.4 | 0.75 | mA |
| Temperature Coefficient | All output | -0.04 | | 0.04 | %/°C |

Environmental

| Parameter | Test Conditions | Min. | Typ. | Max. | Unit |
|-----------------------|--|------|------|------|------|
| Operating Temperature | | 0 | | 70 | °C |
| Storage Temperature | | -40 | | 85 | °C |
| Relative Humidity | | 5 | | 95 | % |
| Derating | Derate linearly from 100% load at 50°C to 50% load at 70°C | | | | |

Safety Specifications

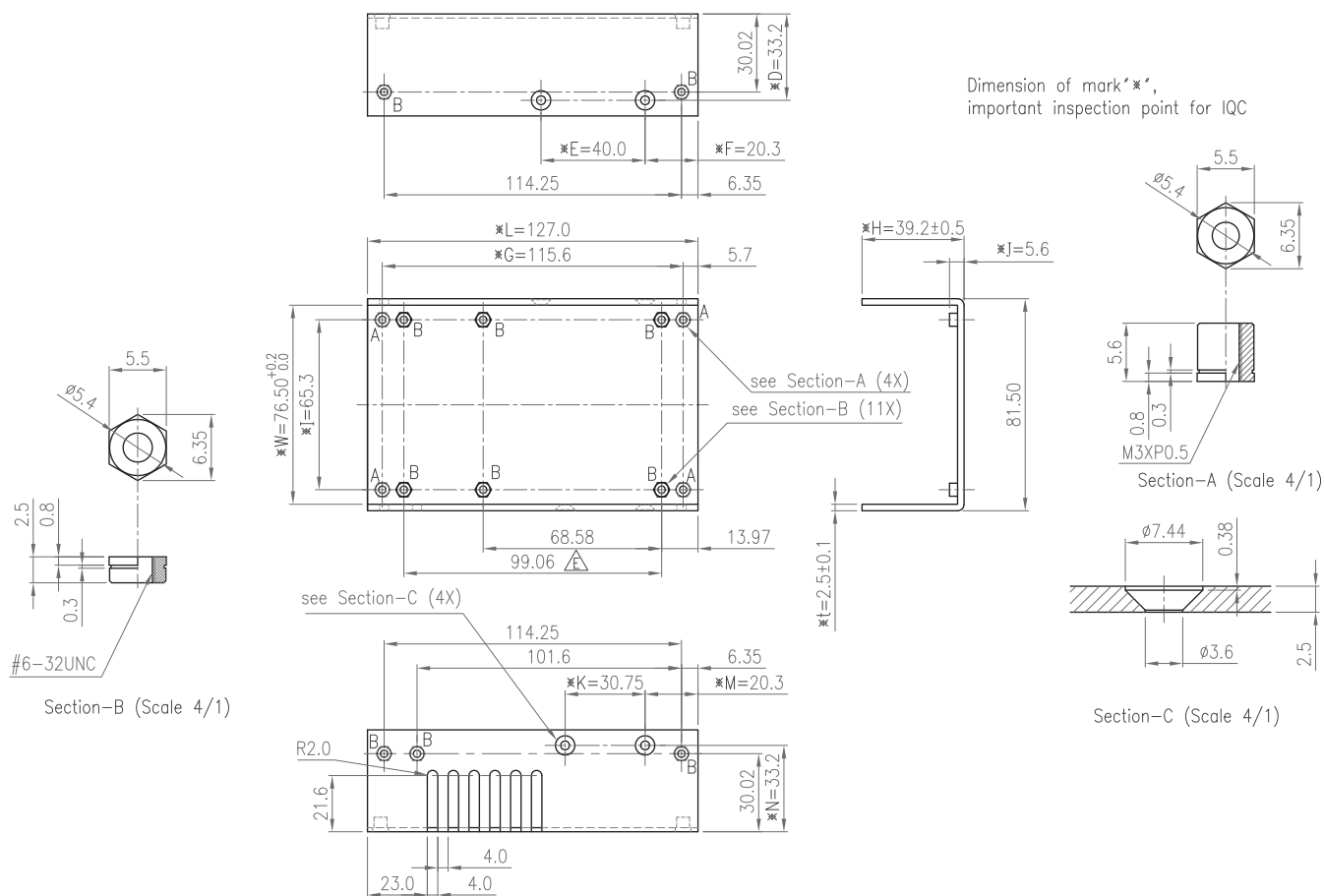
| Parameter | Test Conditions | Min. | Typ. | Max. | Unit |
|----------------------------------|----------------------|------|------|------|-------|
| Dielectric withstanding voltage | Primary to secondary | 4242 | | | VDC |
| Dielectric withstanding voltage | Primary to ground | 2121 | | | VDC |
| Isolation resistance | Test voltage=500VDC | 50 | | | MΩ |
| EMI requirements for CISPR-22 | at 220VAC | B | | | Class |
| EMI requirements for FCC part-15 | at 110 VAC | B | | | Class |
| uL approved to EN6095 | | | | | |

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Mechanical Specifications


Note:

1. Dimensions are shown in mm (inches).
2. Weight: 330~380 g (approx.)
3. Input connector mates with Molex housing 09-50-3051 and Molex 2478 or 2578 series crimp terminal.
4. Output connector mates with Molex housing 09-50-3131 and Molex 2478 or 2578 series crimp terminal.

| Model \ Pin | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 (optional) |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|
| VSUU-120-XX | OUT | OUT | OUT | OUT | OUT | OUT | COM | COM | COM | COM | COM | COM | PFD |

