

SERIES: VSUU-120C-T | **DESCRIPTION:** AC-DC POWER SUPPLY**FEATURES**

- universal input (90 ~ 264 Vac)
- up to 120 W continuous power
- active power factor correction
- IEC/EN/UL 62368 certified
- over voltage, over current, short circuit protection



| MODEL | | output voltage | output current | | output power | ripple and noise | efficiency |
|-----------------|-----|----------------|----------------|---------|--------------|------------------|------------|
| | | (Vdc) | min (A) | max (A) | max (W) | max (mVp-p) | typ (%) |
| VSUU-120C-T512A | Vo1 | 5.0 | 1.5 | 15.0 | 120 | 50 | 80 |
| | Vo2 | 12.0 | 0.8 | 6.0 | | 120 | |
| | Vo3 | -12.0 | 0.0 | 0.8 | | 120 | |

PART NUMBER KEY**VSUU-120C - TXXX**

Base Number

Output Voltage

INPUT

| parameter | conditions/description | min | typ | max | units |
|----------------|---|------|-----|------|-------|
| voltage | | 90 | | 264 | Vac |
| frequency | | 47 | | 63 | Hz |
| current | at 100 Vac, full load | | | 1.75 | A |
| | at 240 Vac, full load | | | 0.72 | A |
| inrush current | at 100 Vac, 25°C, full load, cold start | | | 37 | A |
| | at 240 Vac, 25°C, full load, cold start | | | 88 | A |
| power factor | full load at 240 Vac | 0.95 | | 1.0 | |

OUTPUT

| parameter | conditions/description | min | typ | max | units |
|-------------------------|-----------------------------------|-----|-----|--------|-------|
| line regulation | full load at 100 ~ 120 Vac | | | 1 | % |
| load regulation | at 230 Vac, 10 ~ 90% load | | | 5 | % |
| temperature coefficient | all output models, 100 ~ 240 Vac | | | ± 0.04 | %/°C |
| transient response | full load to half load at 110 Vac | | | 4 | ms |
| start-up | full load at 100 ~ 240 Vac | | | 3 | s |
| hold-up | full load at 100 Vac | 16 | | | ms |

PROTECTIONS

| parameter | conditions/description | min | typ | max | units |
|--------------------------|------------------------|-----|-----|-----|-------|
| over voltage protection | | 112 | | 132 | % |
| over current protection | auto recovery | 110 | | 150 | % |
| short circuit protection | auto recovery | | | | |

SAFETY & COMPLIANCE

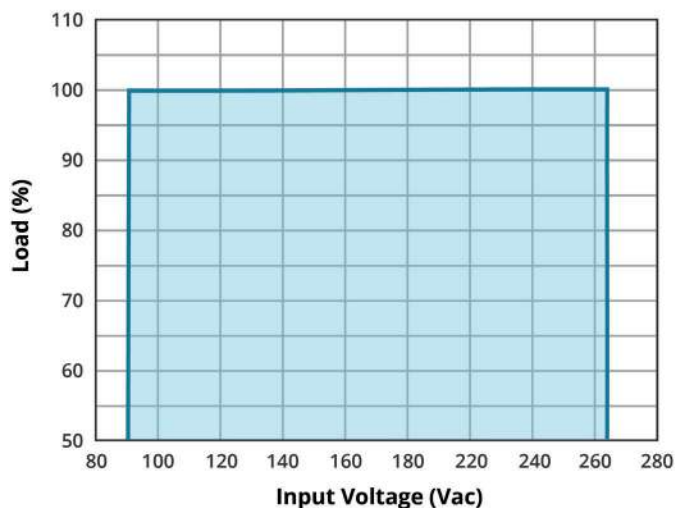
| parameter | conditions/description | min | typ | max | units |
|-------------------|--|-------|-----|------|-------|
| isolation voltage | input to output | 4,242 | | | Vdc |
| | input to earth ground | 2,121 | | | Vdc |
| safety approvals | certified to 62368: IEC/EN/UL UKCA | | | | |
| EMI/EMC | CISPR-32/EN 55032:2012/AC:2013 Class B EN 61000-3-2:2014 EN 61000-3-3:2013 | | | | |
| leakage current | full load at 240 Vac | | | 0.75 | mA |
| RoHS compliant | yes | | | | |

ENVIRONMENTAL

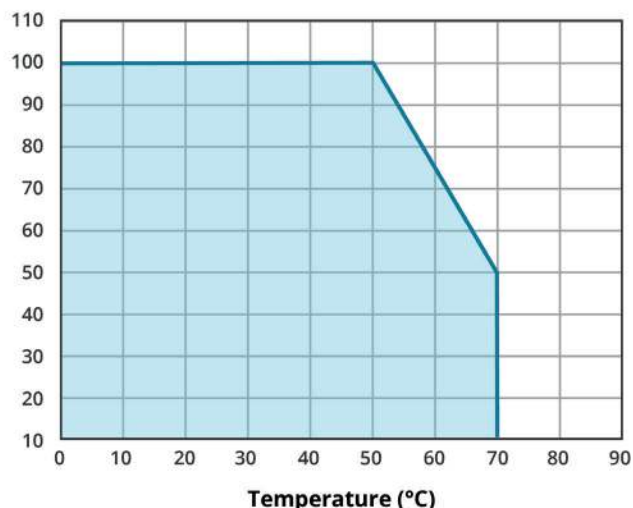
| parameter | conditions/description | min | typ | max | units |
|-----------------------|------------------------|-----|-----|-----|-------|
| operating temperature | see derating curves | 0 | | 70 | °C |
| storage temperature | | -40 | | 85 | °C |
| operating humidity | non-condensing | 0 | | 95 | % |
| storage humidity | | 0 | | 95 | % |

DERATING CURVES

INPUT VOLTAGE DERATING CURVE



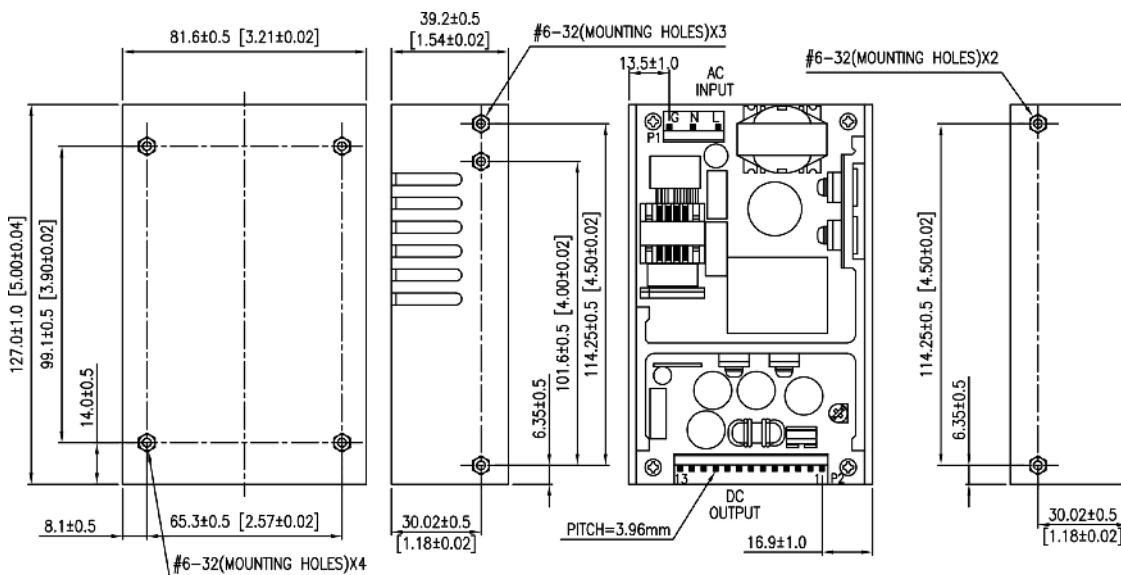
TEMPERATURE DERATING CURVE



MECHANICAL DRAWING

units: mm[inches]
tolerance: ±0.5mm

| PIN | Function |
|-----|------------|
| 1 | V2 |
| 2 | V2 |
| 3 | V1 |
| 4 | V1 |
| 5 | V1 |
| 6 | V1 |
| 7 | COM |
| 8 | COM |
| 9 | COM |
| 10 | V3 |
| 11 | COM |
| 12 | COM |
| 13 | no connect |



Note:
1. Input connector mates with Molex housing 09-52-4054 and Molex 2478 series crimp terminal.
2. Output connector mates with Molex housing 09-52-4134 and Molex 2478 series crimp terminal.

REVISION HISTORY

| rev. | description | date |
|------|-----------------------------|------------|
| 1.0 | initial release | 12/14/2020 |
| 1.01 | mechanical drawing updated | 04/20/2021 |
| 1.02 | mechanical drawing updated | 08/27/2021 |
| 1.03 | derating curves updated | 02/02/2022 |
| 1.04 | UKCA added to specification | 02/24/2022 |

The revision history provided is for informational purposes only and is believed to be accurate.



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