



**100 Watt
AC/DC Modules, PCB mounting
Series DVC100-F**



Feature

- Wide Input Range 90 – 264 VAC
- Active PFC Meets EN61000-3-2
- No Load Input Power Consumption <0,5W
- Operating Temp. Range -40°C to +85°C
- 17mm Ultra Low Profile Package
- Safety Meets IEC/EN/UL62638-1
- Full Load with Baseplate Cooled and No Fan Required
- Efficiency up to 93% Typical
- Over Temperature Protection
- Over Voltage Protection
- Over Current Protection
- Meets EN55032 Class B
- Meets Class I

| MODEL NUMBER | OUTPUT VOLTAGE [VDC] | OUTPUT VOLTAGE [VDC] | VOLTAGE ACCURACY [%] (Note 1) | RIPPLE & NOISE [mV] (Note 2) | EFFICIENCY [%] TYP. (Note 3) | LOAD CAPACITANCE [μ F] MAX. (Note 6) |
|--------------|------------------------|------------------------|-----------------------------------|----------------------------------|----------------------------------|--|
| DVC100-F-S12 | 12 | 8,4 | $\pm 1,0$ | 120 | 92 | 8400 |
| DVC100-F-S24 | 24 | 4,2 | $\pm 1,0$ | 240 | 92 | 4200 |
| DVC100-F-S28 | 28 | 3,6 | $\pm 1,0$ | 280 | 92 | 3600 |
| DVC100-F-S36 | 36 | 2,8 | $\pm 1,0$ | 360 | 93 | 2800 |
| DVC100-F-S48 | 48 | 2,1 | $\pm 1,0$ | 480 | 93 | 2100 |

Note:

1. Voltage Accuracy is Set at 60% Load.
2. Add a 0.1 μ F Ceramic Capacitor and a 10 μ F E.L. Capacitor to Output for Ripple & Noise Measuring @20MHz BW.
3. Line Regulation is Measured from 90Vac to 264Vac with Full Load.
4. Load Regulation is Measured from 60% \pm 40% Rated Load.
5. Typical Efficiency at 230 VAC and Full Load at 25°C.
6. Input Voltage is 115VAC and 230VAC, Output is max. Load

INPUT SPECIFICATIONS:

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|--------------------------------------|---|
| Input Voltage Range..... | 90 – 264 VAC / 120 – 370 VDC |
| Input Frequency..... | 47-63Hz |
| Input Current..... | 100% Load, Vin=100Vac 1,5A max. |
| Leakage Current..... | 3,5mA max. |
| Inrush Current..... | Vin=240Vac,Cold Start at 25°C 100A max. |
| No Load Input Power Consumption..... | <0,5W |

OUTPUT SPECIFICATIONS:

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| Hold-up Time | Vin=115Vac 12msec. typ. |
| Line Regulation (Note 3) | (Vin=High Line to Low Line) ±0,5% max. |
| Load Regulation (Note 4) (60% Load to100% Load & 60% Load to 20% Load) | ±1,0% max. |
| Over Current Protection | Hiccup Mode, Auto Recovery 110% min. / 190% max. |
| Short Circuit Protection | Auto Recovery |
| Over Voltage Protection | Latch off(AC Recycle to Restart) |

GENERAL SPECIFICATIONS:

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| Efficiency | see table |
| Isolation Voltage I/O..... | 1 minute 3000 VAC max. |
| Isolation Resistance | Input to Output 100MΩ min. |
| Switching Frequency | TBD KHz typ. |
| Operating Case Temperature Range | -40°C to +85°C |
| Storage Temperature Range | -40°C to +100°C |
| Humidity | Non condensing 93% RH max. |
| MTBF | Io=100%; Ta=25°C per MIL-HDBK-217F 100K hrs min. |
| Operating Altitude..... | 5000m max. |
| Shock | Meet MIL-STD-810F 75g typ. |
| Vibration..... | Meet MIL-STD-810F 4g typ. |

SAFETY & EMISSION:

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|--|--|
| Safety Meets..... | Class I, IEC/EN/UL62368-1 |
| EMC Emission | EN55032 ClassB,47 CFR FCC Part 15 Subpart B EN61000-3-2, EN61000-3-3, EN61000-6-3 |
| Conducted Disturbance..... | EN55032,EN61000-6-3,Class B, 47 CFR FCC Part 15 Subpart B |
| Radiated Disturbance..... | EN55032,EN61000-6-3,Class B, 47 CFR FCC Part 15 Subpart B |
| Harmonic Current Emissions | EN 61000-3-2 |
| Voltage Fluctuations & Flicker | EN 61000-3-3 |
| EMC Immunity | EN55035,EN61000-6-1 |
| Electrostatic Discharge (ESD) | IEC 61000-4-2, Air Discharge: ±8KV, Contact Discharge: ±4KV |
| Radio-Frequency, Continuous , Radiated Disturbance | IEC 61000-4-3 |
| Electrical Fast Transient (EFT) | IEC 61000-4-4, ±1kV, ±2KV |
| Surge | IEC 61000-4-5, L-N: ±0.5kv, ±1kv, L-E(ground): ±0.5kv, ±1kv, ±2kv |
| Conducted Disturbances, Induced by RF Fields..... | IEC 61000-4-6 |
| Power Frequency Magnetic Field | IEC 61000-4-8 |
| Voltage Dips | IEC 61000-4-11, Dip: 30% Reduction, Dip >95% Reduction |
| Voltage Interruptions | IEC 61000-4-11, >95% Reduction |

MECHANICAL SPECIFICATIONS:

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|-------------------------------|--|
| Dimension (L x W x H) | 116,80x61,00x17,00 (mm) / 4,60x2,4x0,67 (Inches) |
| Case Material | Aluminum Baseplate with Plastic Case |
| Weight..... | 236g typ. |

Typical at 25°C, 230Vac and 75% rated load, unless otherwise Specified

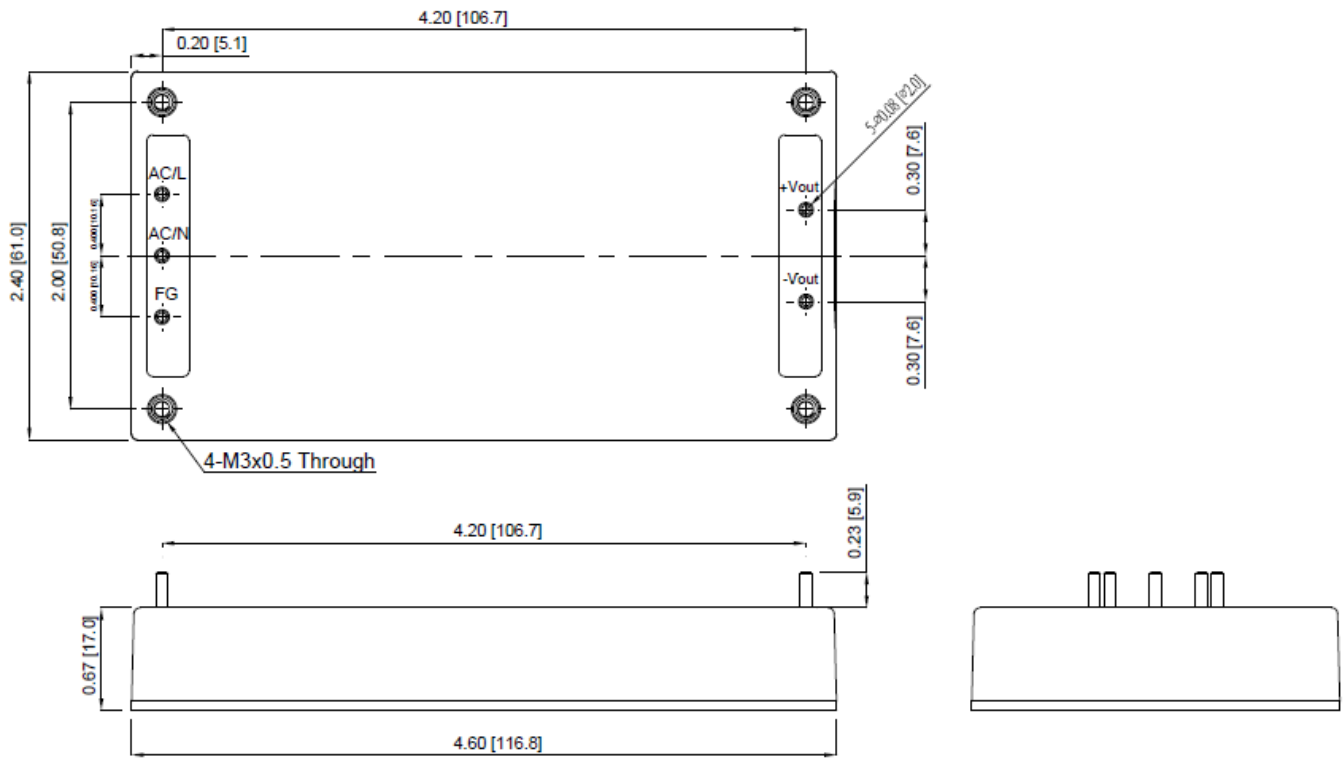
MECHANICAL SPECIFICATIONS preliminary

Series DVC100-F

All Dimensions in inches(mm)

Tolerance: Inches: $\pm x.xx = \pm 0.02$, $\pm x.xxx = \pm 0.010$

Millimeters: $x.x = \pm 0.5$, $x.xx = \pm 0.25$



Technische Änderungen vorbehalten / Technical change reserved