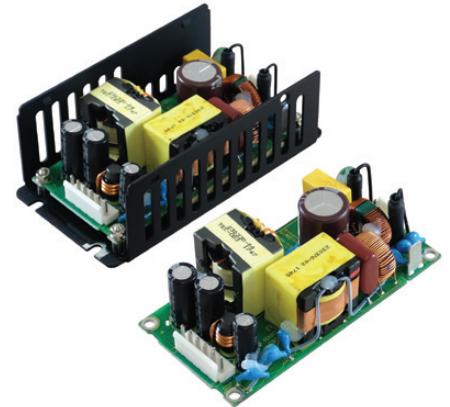




2 x 4" 100W AC-DC Power Supplies



| Features | Benefits |
|---------------------------------------------------|------------------------------------------------------|
| • 100W Convection Rating | • Quiet Operation |
| • 75W With 1m/s Airflow at 85°C Ambient | • Suitable for High Ambient Temperature Environments |
| • ITE & Medical Certifications (2 x MOPP) | • Suitable for B & BF Rated Equipment |
| • Suitable for Class I and Class II installations | • Flexible Utilisation |
| • Class B Conducted and Radiated EMI | • Easier System Compliance |



| Specification | | CUS100ME |
|---------------------------------------------|------------|------------------------------------------------------------------------------------------------------------------------------|
| Model | | CUS100ME |
| Input Voltage range | - | 85 - 264VAC (47 - 440Hz ⁽¹⁾). Derate linearly to 90% load from 90 to 85VAC input |
| Inrush Current (Cold start at 230VAC input) | A | <65A |
| Input Current (100W load) | A | 1.4A at 100VAC input |
| Hold Up Time | ms | >24ms |
| Harmonic Compliance | - | EN/IEC61000-3-2 Class A. Minimum PF 0.97/0.89 (115/230Vac, 100% load) |
| Leakage Current | µA | <250µA at 230VAC 63Hz |
| Touch Current (enclosure leakage) | µA | <100µA |
| Temperature Coefficient | %/°C | ±0.02%/°C |
| No Load Power Draw at 230VAC input | W | <0.5W |
| Output Adjustment | - | No adjustment |
| Ripple & Noise | mV (pk-pk) | <1% of nominal output for operating temperatures above 0°C At -20°C: 12V model <4%, 15V & 18V model <3%, other models <2% |
| Load Regulation | mV | ≤1% (0 - 100% load) |
| Line Regulation | mV | ≤0.5% (85 - 264VAC) |
| Short Circuit & Overcurrent Protection | % | 110 - 190%. Hiccup mode, automatic recovery |
| Overvoltage Protection | V | 115-140% of standard output voltage for each model, 48V model max 60V. Latching (unit shutdown), cycle AC input to reset |
| Efficiency | % | Up to 94% |
| Active Average Efficiency | % | >87% |
| Operating Temperature | - | -20°C to +85°C, see derating curves for operation above +50°C ⁽²⁾ |
| Storage Temperature | °C | -40°C to +85°C |
| Operational Altitude | m | 5000m |
| Humidity (non condensing) | %RH | 5 - 95 (15 - 90 for /F option), operational and non operational |
| Cooling | - | Convection, conduction (coldplate) or forced air cooling ⁽²⁾ |
| Withstand Voltage | VAC | Input to Ground 1.5kVAC (1xMOPP), Input to Output 4kVAC (2xMOPP), Output to Ground 1.5kVAC (1xMOPP) |
| Isolation Resistance | MΩ | >100MΩ at 25C & 70%RH, Output to Ground 500VDC |
| Insulation Class | - | Construction suitable for Class I or Class II installation |
| Vibration (non operating) | - | 2G, 10-500Hz for 1 hour |
| Shock (non operating) | - | 30G, 11ms half sine |
| Safety Agency Certifications ⁽³⁾ | - | IEC/EN/UL60950-1 and 60601-1. ES60601-1. IEC/EN/UL62368-1. Designed to meet IEC61010-1. |
| Conducted & Radiated EMI | - | EN55011 / EN55032-B (See application notes for conditions) |
| Immunity | - | Compliant with EN60601-1-2, 2015 (Ed4), see immunity table on page 3 |
| Weight | g | Open Frame: 180g; /U: 240g; /A: 255g; /B: 220g |
| Size (WxLxH) | mm | Open frame version: 50.8 x 101.6 x 31.5 |
| Warranty | yrs | 5 |
| Connectors | - | Input: JST B2P3-VH, Output: JST B6P-VH |

Note (1): For operation at 400-440Hz, please contact Technical Sales **Note (2):** See website for full derating curves and all case styles

Note (3): EN60335-1 Compliant versions available subject to MOQ. Please contact Sales.

Specification parameters apply at 25°C ambient temperature unless otherwise stated

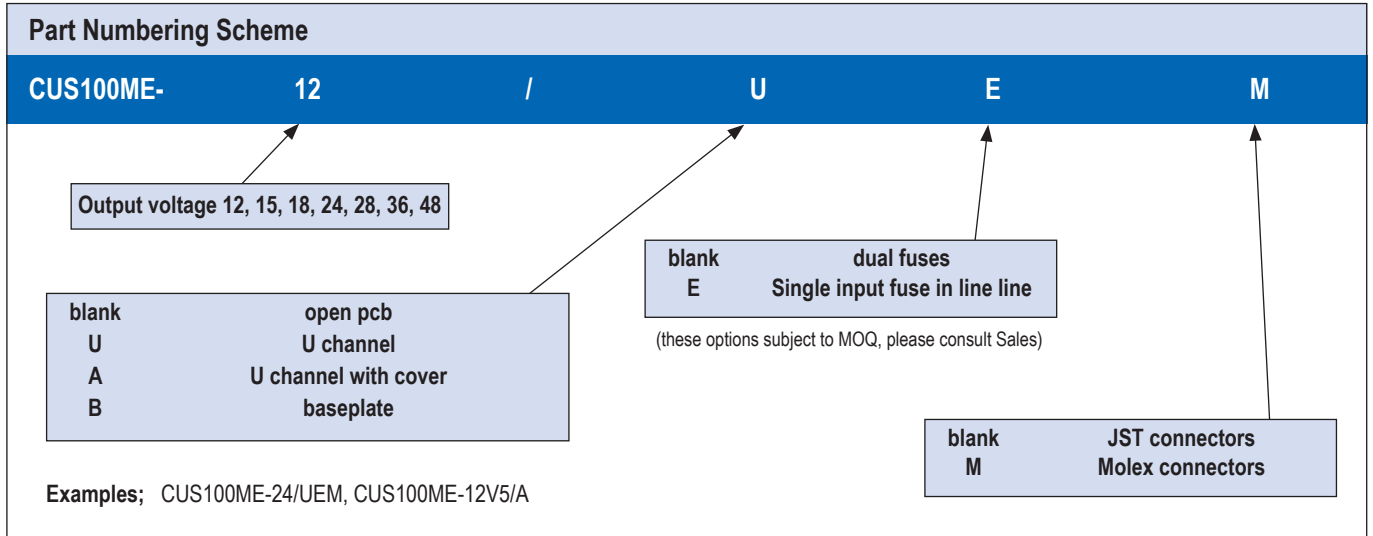
| Style | Cooling | Output Power / Ambient Temperature | | | |
|--------------|------------|------------------------------------|------|-------|------|
| | | -20 to 50°C | 70°C | 80°C | 85°C |
| Open frame | Convection | 100W | 60W | 20W | - |
| /U or /B | Conduction | 100W | 100W | 50W | - |
| All versions | 1m/s air | 100W | 100W | 83.3W | 75W |

| Model Selector | | | |
|----------------|----------------------------|--------------------------------|-------------------|
| Model | Nominal Output Voltage (V) | Maximum Current Convection (A) | Maximum Power (W) |
| CUS100ME-12 | 12 | 8.33 | 100 |
| CUS100ME-12/U | 12 | 8.33 | 100 |
| CUS100ME-12/A | 12 | 8.33 | 100 |
| CUS100ME-12/B | 12 | 8.33 | 100 |
| CUS100ME-15 | 15 | 6.66 | 100 |
| CUS100ME-15/U | 15 | 6.66 | 100 |
| CUS100ME-15/A | 15 | 6.66 | 100 |
| CUS100ME-15/B | 15 | 6.66 | 100 |
| CUS100ME-18 | 18 | 5.55 | 100 |
| CUS100ME-18/U | 18 | 5.55 | 100 |
| CUS100ME-18/A | 18 | 5.55 | 100 |
| CUS100ME-18/B | 18 | 5.55 | 100 |
| CUS100ME-24 | 24 | 4.16 | 100 |
| CUS100ME-24/U | 24 | 4.16 | 100 |
| CUS100ME-24/A | 24 | 4.16 | 100 |
| CUS100ME-24/B | 24 | 4.16 | 100 |
| CUS100ME-28 | 28 | 3.57 | 100 |
| CUS100ME-28/U | 28 | 3.57 | 100 |
| CUS100ME-28/A | 28 | 3.57 | 100 |
| CUS100ME-28/B | 28 | 3.57 | 100 |
| CUS100ME-36 | 36 | 2.77 | 100 |
| CUS100ME-36/U | 36 | 2.77 | 100 |
| CUS100ME-36/A | 36 | 2.77 | 100 |
| CUS100ME-36/B | 36 | 2.77 | 100 |
| CUS100ME-48 | 48 | 2.08 | 100 |
| CUS100ME-48/U | 48 | 2.08 | 100 |
| CUS100ME-48/A | 48 | 2.08 | 100 |
| CUS100ME-48/B | 48 | 2.08 | 100 |

Note 2: See website for full derating curves and all case styles
 Non-standard outputs can be requested within the following ranges.

| Model Voltage Range | CUS100ME-12 12 - 13.2 | CUS100ME-15 15 - 16.5 | CUS100ME-18 18 - 19.8 | CUS100ME-24 24 - 26.4 | CUS100ME-28 28 - 30.8 | CUS100ME-36 36 - 39.6 | CUS100ME-48 48 - 50 |
|---------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|------------------------|
|---------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|------------------------|

Non-standard output versions may be subject to minimum order quantities and variations to specification.
 For all non-standard output voltage settings please consult Sales.

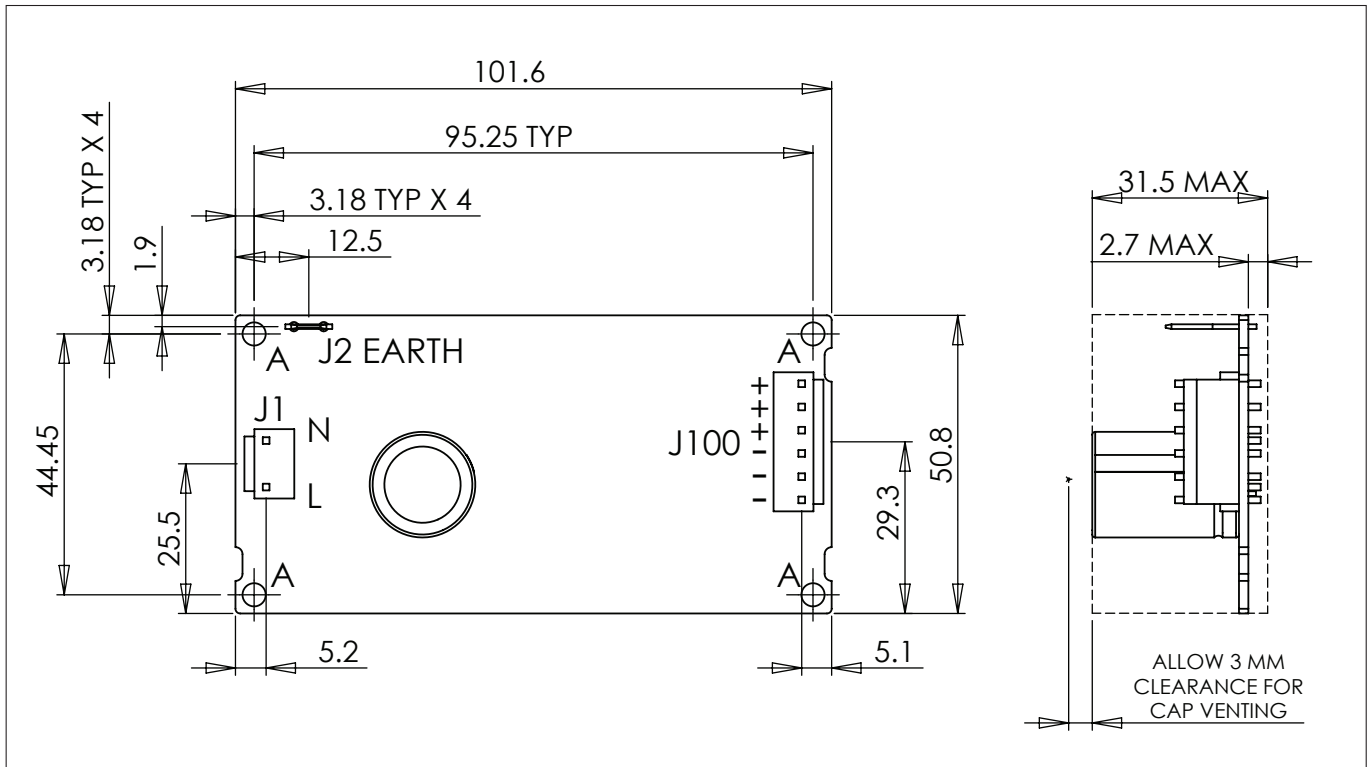


Immunity Levels

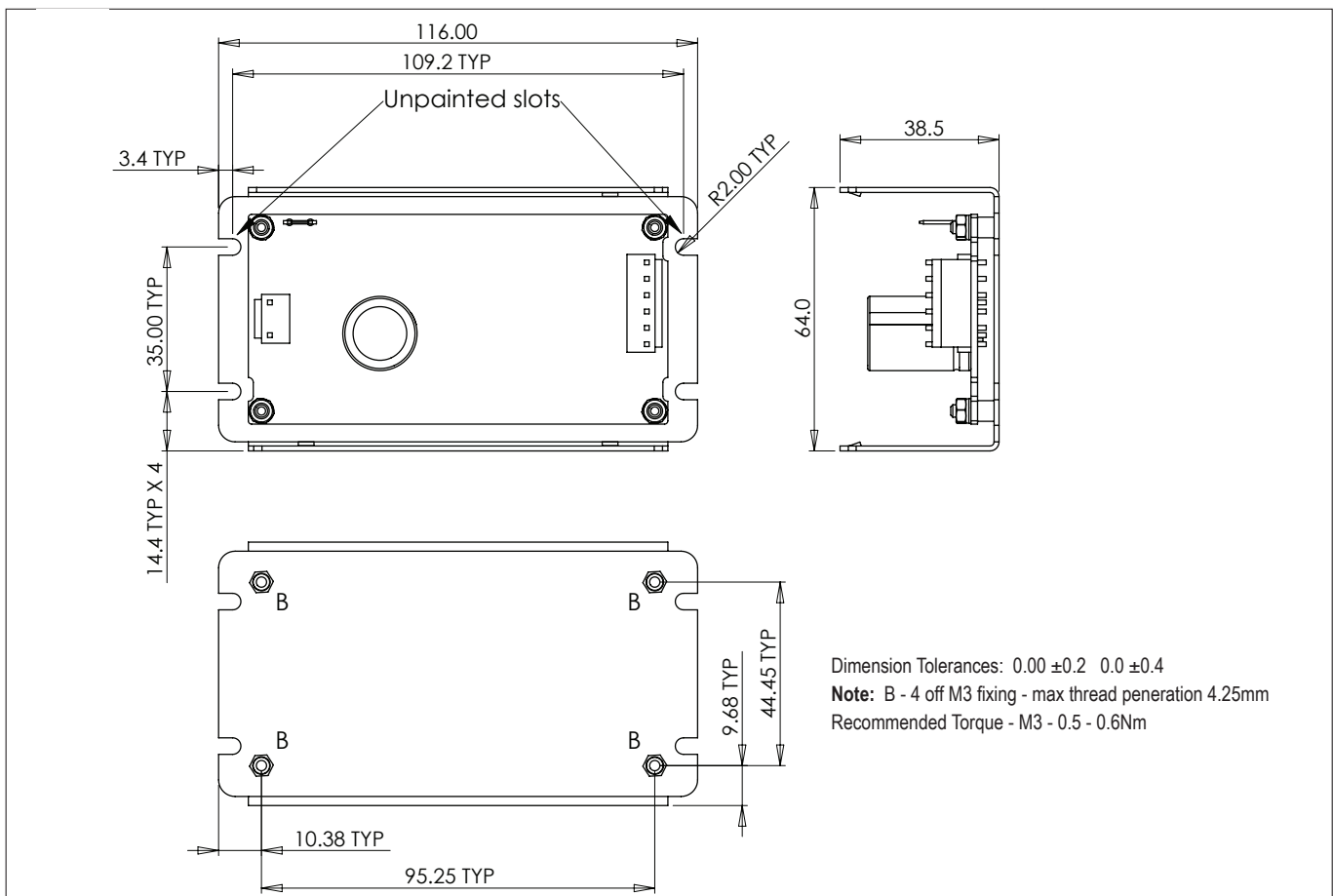
| Test | Standard | Test Level | Criteria | Notes The power stated below is total power (main output + fan output) |
|---------------------------------|---------------------------------------------------------------|------------------------|----------|------------------------------------------------------------------------------|
| ESD | EN61000-4-2 | 4 | A | |
| Radiated Susceptibility | EN61000-4-3 | 3 | A | inc proximity field requirements of EN60601-1-2:2015 |
| Electrical Fast Transient Burst | EN61000-4-4 | 4 | A | (AC Port, 5kHz and 100KHz) |
| Surge | EN61000-4-5 | 3 | A | - |
| Conducted Susceptibility | EN61000-4-6 | 3 | A | - |
| Magnetic fields | EN61000-4-8 | 4 | A | - |
| Voltage Dips & Interruptions | EN61000-4-11 Class 3 Industrial inc EN55024 (100VAC) | 0% for 1/2 cycle | A | - |
| | | 0% for 1 cycle | A | - |
| | | 40% for 10/12 cycles | B | - |
| | | 70% for 25/30 cycles | A | - |
| | | 80% for 250/300 cycles | A | - |
| | EN61000-4-11 Class 3 Industrial inc EN55024 (240VAC) | 0% for 250/300 cycles | B | - |
| | | 0% for 1/2 cycle | A | - |
| | | 0% for 1 cycle | A | - |
| | | 40% for 10/12 cycles | A | - |
| | | 70% for 25/30 cycles | A | - |
| | EN60601-1-2:2015 (100VAC) | 80% for 250/300 cycles | A | - |
| | | 0% for 250/300 cycles | B | - |
| | | 0% for 1/2 cycle | A | - |
| | EN60601-1-2:2015 (240VAC) | 0% for 1 cycle | A | - |
| | | 70% for 25/30 cycles | A | - |
| | | 0% for 250/300 cycles | B | - |
| Ringwave Test | EN61000-4-12 | 3 | A | - |
| Voltage Fluctuations | EN61000-4-14 | Class 3 | A | - |

Criteria A definition: the output stays within +/-5% of regulation

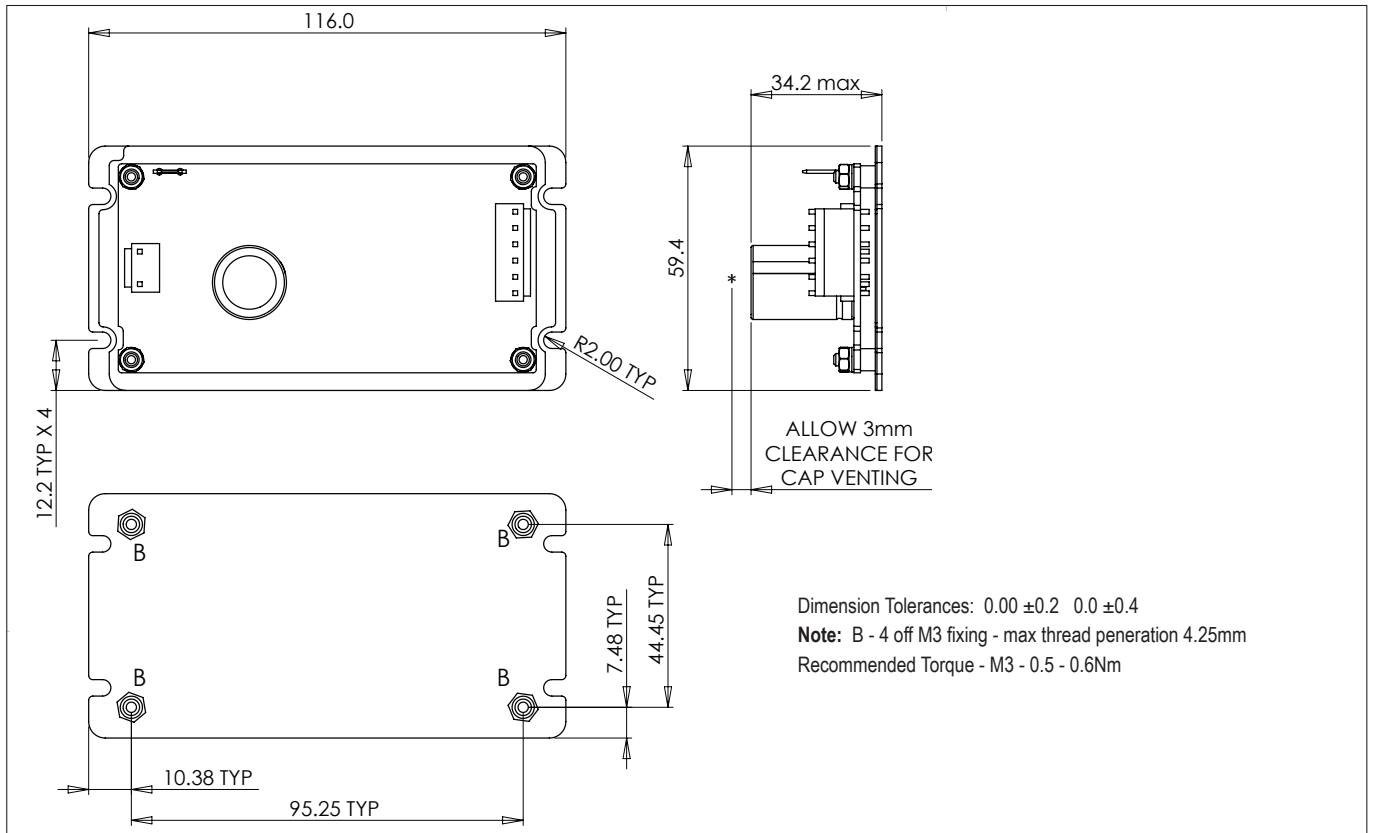
Outline drawing CUS100ME (Open Frame unit)



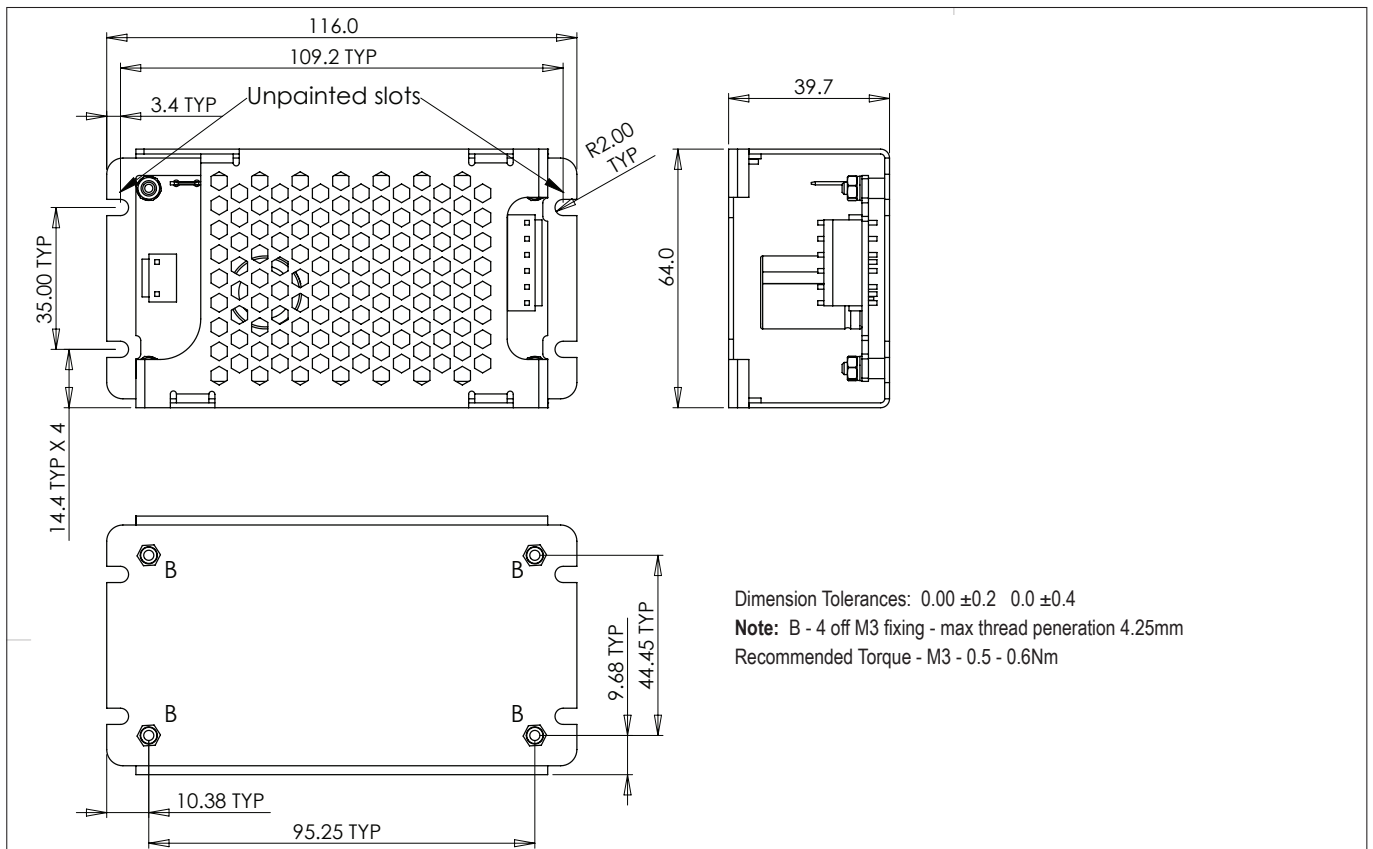
Outline drawing CUS100ME/U (U Channel) Option



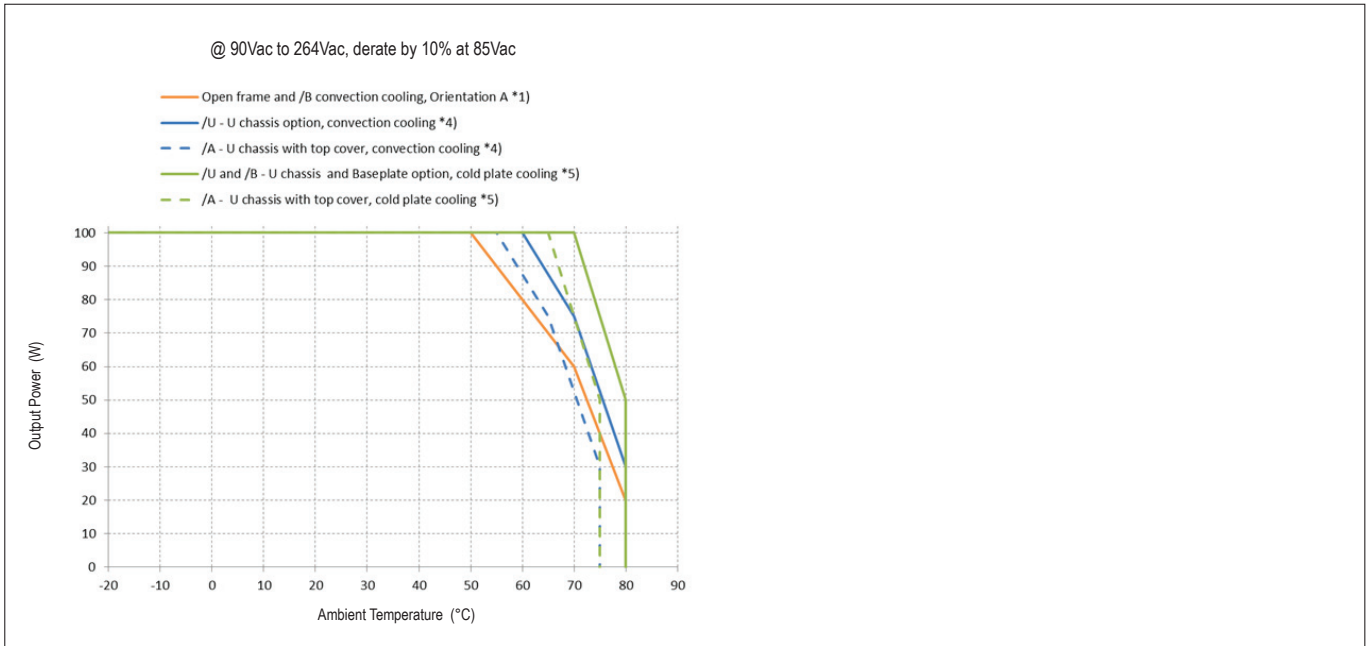
Outline drawing CUS100ME/B (Baseplate) Option



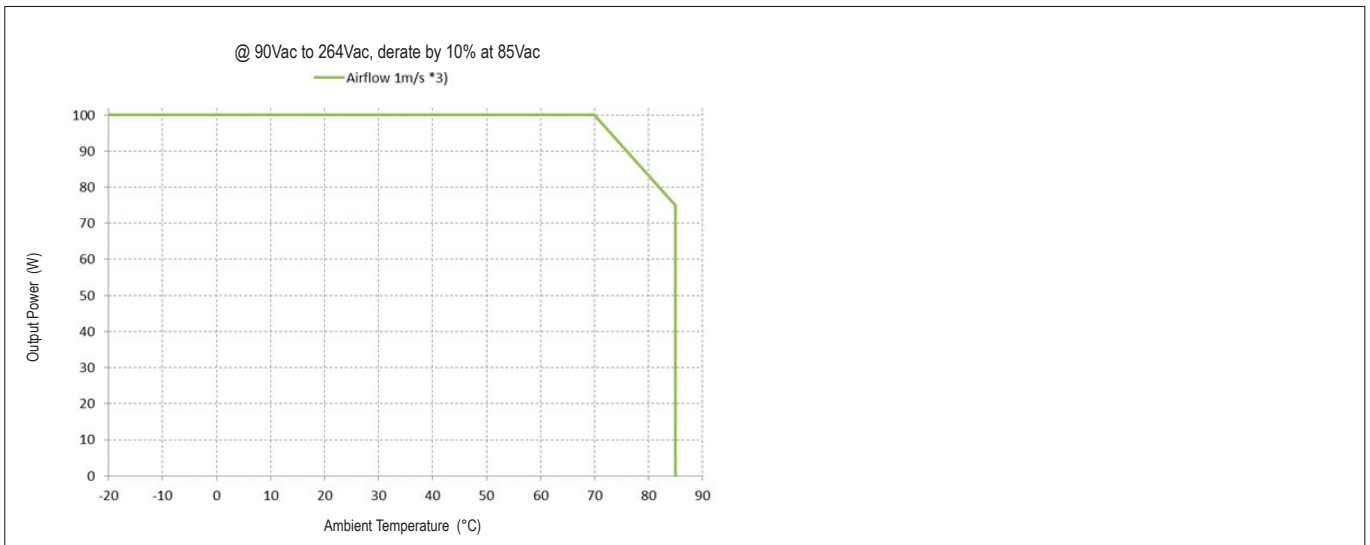
Outline drawing CUS100ME/A (U Channel with cover) Option



Output Power vs Ambient Temperature (Convection/Conduction Cooled)



Output Power vs Ambient Temperature (Forced Air Cooled)



Notes:

- 1) 50mm above surface
- 2) Not applicable
- 3) Tested with airflow direction G (see Application Note)
- 4) 50mm above surface, orientation A (see Application Note) no additional coldplate
- 5) U chassis or Baseplate fixed on a coldplate (system chassis), orientation A (see Application Note)
/B baseplate option performance is the same as with the U chassis option for coldplate cooling



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