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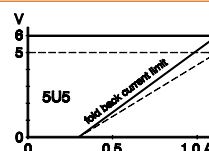
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**DELTA ELEKTRONIKA B.V.**



## U - Series LINEAR MODULAR DC POWER SUPPLIES

Models	Voltage range	Current range
5 U 5 (voltage source)	5 - 6 V	1 A
5 U 15 - 15 (voltage source)	2 x 12 - 15 V	0 - 200 mA



- Input : 230 / 115 V AC 48 - 62 Hz
- Transformer : Split bobbin, potted, safety transformer According to, VDE0551, EN60742
- Test voltage
  - Input / Output : 4000 Vrms (output case shorted)
  - Input / Case : 4000 Vrms (output case shorted)
  - Output / Case : 500 VDC
  - Output / Output : 500 VDC ( 5 U 15-15)
- Input to output
  - Leakage current : Typical 5 mA
  - Coupling capacitance : Less than 60 pF
  - Insulation resistance : 1000 MOhm
  - Attenuation input spikes : Better than 100 dB



### Specifications

- Regulation
  - Load 0 - 100% : 5 mV
  - Line  $\pm$  10% : 5 mV (at 4 W output)
- Ripple and noise (BW=20 MHz) : 0.5 mV rms, 2 mV pp
- Temp. coeff., per  $^{\circ}$ C : 0.01%
- Output impedance up to 100 kHz : 0.5 Ohm
- Recovery time 10 - 100% load step : 25  $\mu$ s
- Operating ambient temp. : - 20 to + 50  $^{\circ}$ C
- MTBF : 1.000.000 hrs
- Current limited : Foldback Characteristic

### Accessories

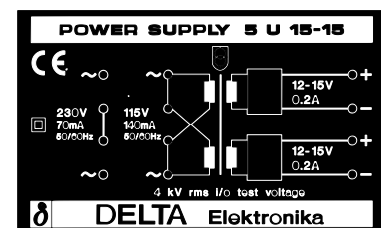
P500 Eurocard for the 2 U-units  
Front panel F 10-3 for P500

Models with a screw terminals for the rail and wall mounting ( including 2 two clamps for 35 mm rail)

- 5 U 5 B
- 5 U 15-15 B

The 5 U 15-15 has two isolated, regulated outputs which are independently adjustable from 12 -15 V (also unequal voltage) It can be used in 4 different configurations.

- Two isolated outputs, each : 12-15 V / 0.2 A
- Outputs in parallel : 12-15 V / 0.4 A
- Outputs in series : 24-30 V / 0.2 A
- Outputs in series, dual : 12-15 V / 0.2 A  $\pm$



### Dimensions and weight

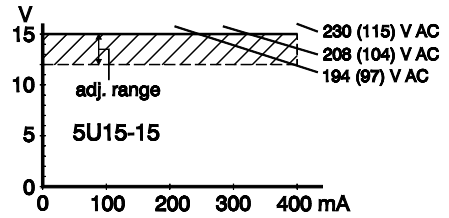
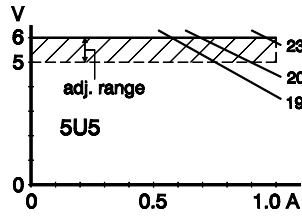
- Height : 35 mm
- Width : 58 mm
- Depth : 94 mm
- Weight : 0,4 kg

### Safety

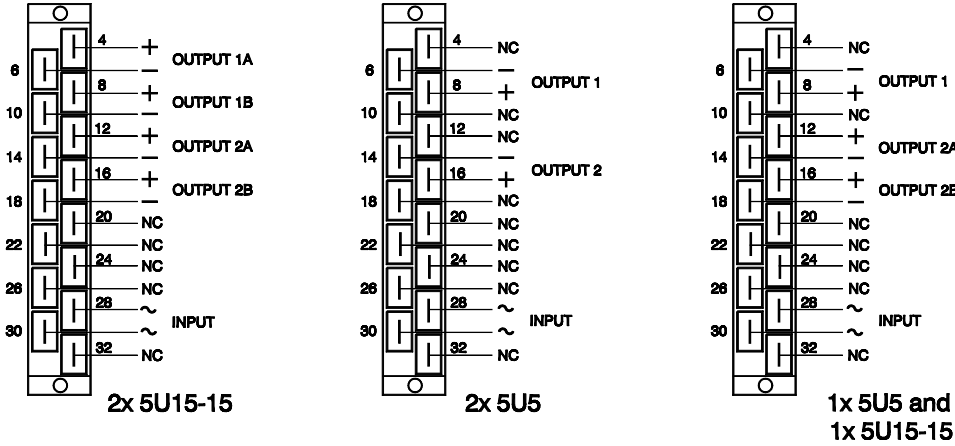
- EN 60950
- EN 61010

### EMC

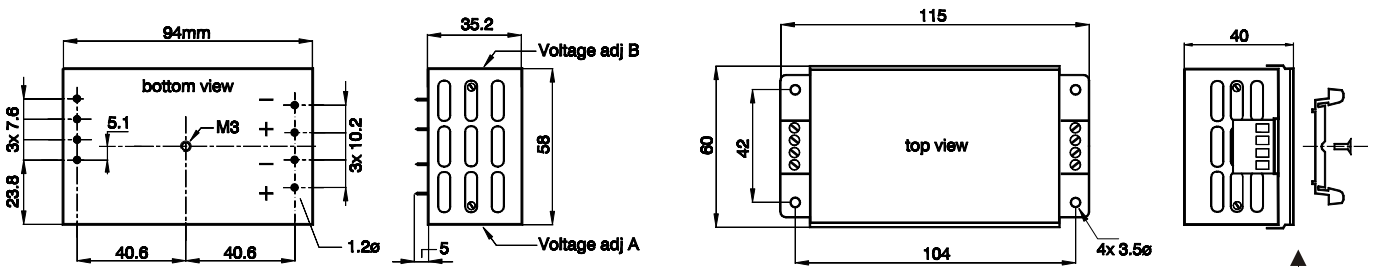
- EN 61204-3
- EN 61000-6-3 (EN55022B)
- EN 61000-6-2



Output voltage and current derating at low AC input voltage

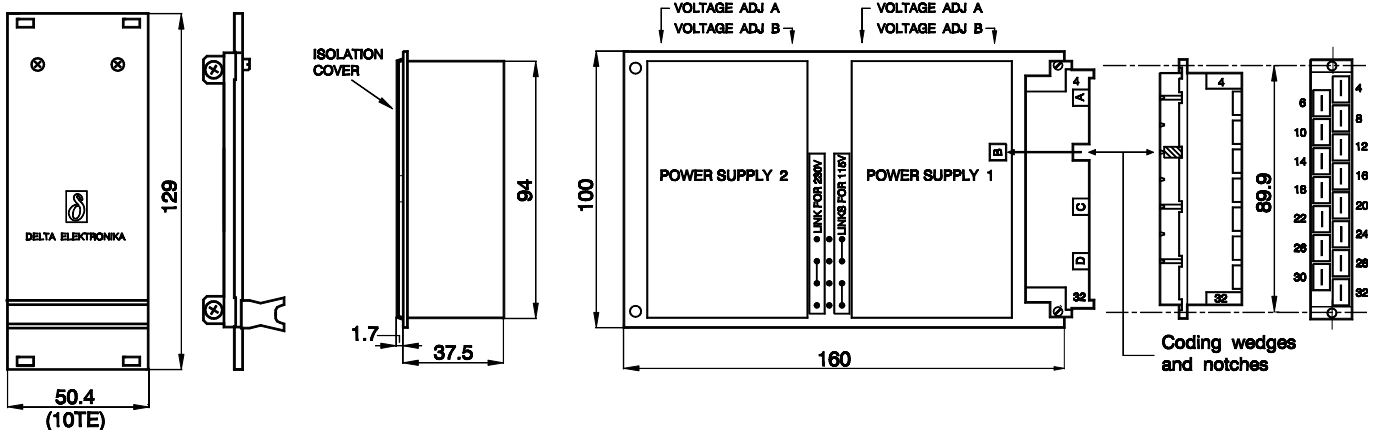


Input and output connections of P 500



Standard U-model has solder pins of 1.2 mm φ for PCB mounting

B-model with screw terminals for wall or rail mounting, incl. 2 clamps for 35 mm DIN rail



F 10-3 front panel

P 500 Eurocard for 1 or 2 U-units, incl. contra connector H15



UCS 50

UCS 50B

## U - Series UCS 50 CONSTANT CURRENT SOURCE

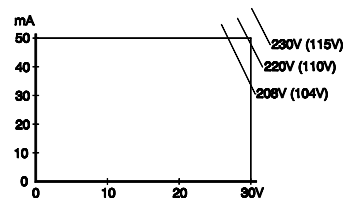
Models	Voltage range	Current range
UCS 50 (current source)	30 V	0 - 50 mA



- Input : 230 / 115 V AC 48 - 62 Hz
- Transformer : Split bobbin, potted, safety transformer According to VDE0551, EN60742
- Test voltage
  - Input / Output : 4000 Vrms (output case shorted)
  - Input / Case : 4000 Vrms (output case shorted)
  - Output / Case : 500 VDC
- Input to output
  - Leakage current : Typical 5  $\mu$ A
  - Coupling capacitance : Less than 60 pF
  - Insulation resistance : 1000 MOhm
  - Attenuation input spikes : Better than 100 dB
- Current adjustment : 0-50 mA
  - : By a 20-turn screwdriver adjustment
  - : By external potmeter 10 k $\Omega$
  - : By 0-5 V analog programming
- Programming input : 0-5 V, full scale error  $\pm$  0.2%, offset error  $\leq$  20  $\mu$ A
  - : Input impedance 500 kOhm.
- Current regulation
  - Load 600 - 0 Ohm : 3  $\mu$ A
  - Line  $\pm$  10 % : 3  $\mu$ A



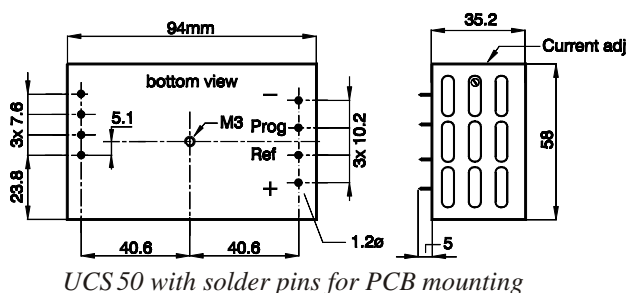
- Ripple + noise : 30  $\mu$ A pp, measured across 600 Ohm // 0.1  $\mu$ F (BW=20 Mhz)
- Temperature coeff. : 0.005% per  $^{\circ}$ C
- Stability : 0.01% per 8 hrs after 20 min warm up.
- Output impedance
  - DC : 10 MOhm
  - 1 kHz : 33 kOhm
  - 10 kHz : 3.3 kOhm
  - 100 kHz : 0.33 kOhm
- Recovery time
  - 600 - 60 Ohm : 10  $\mu$ s
  - Open voltage limit : 33 V  $\pm$  5%
  - Ambient temperature : -20 to +50  $^{\circ}$ C
- Accessories : P500 Eurocard for 2 units  
Front panel F10-3 for P500.  
For more details see also U-series



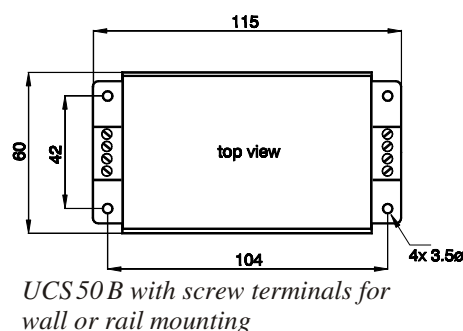
*Derating of max. voltage at low line voltage*

### Dimensions and Weight

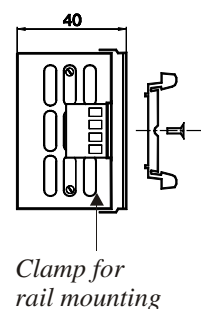
- Height : 35 mm
- Width : 58 mm
- Weight : 0.4 kg
- Depth : 94 mm



UCS 50 with solder pins for PCB mounting



UCS 50B with screw terminals for wall or rail mounting



Clamp for rail mounting