

## Intrinsically Safe Output Power Supplies

### Product features

- Any output voltages between 6-24 VDC range
- 6 / 8 / 10 / 12 / 15 / 18 / 24 VDC nominal output
- Overcurrent-protection
- Overvoltage-protection
- 230 VAC power supply
- TS-35 rail mounting, 35 mm width
- 11 different types



### Type designation

DT2500

		Maximum Output Current [mA]								
		240	190	150	120	70	60	50	40	25
Output Voltage	06	5.8-6.2 V	●							
	08	5.9-8.3 V	●							
	10	7.7-10.3 V		●						
	12	9.7-12.3 V			●			●		
	15	11.7-15.3 V				●			●	
	18	14.5-18.5 V					●			●
	24	17.5-24.5 V							●	
	Nominal Value [V]									
	Adjustable Range									

The safety data depending on the output voltage / current see next page.

The **DT2500... Intrinsically Safe Output Power Supplies** provide IS power for devices operate in zone 1 potentially explosive area. The EEx classification of the power supplies is: II (2)G [Ex ib Gb] IIC or II (2)G [Ex ib Gb] IIB. A front panel potentiometer makes possible to adjust the output voltage within the ranges are shown in the above table located.


The units adapt flexibly to the user's needs (IIC, IIB gas mixture, and the Ci, Li parameters of the powered devices).

**Safety data:**

The output is galvanically isolated from the AC mains, and the isolation is in compliance with the standard EN 61010-1.

Pollution level: 2  
 Overvoltage group: II  
 Overcurrent protection in installation: 6 A

**Intrinsic safety data:**

Certification: BKI 15 ATEX 0023 X  
 Protection marking:  II (2)G [Ex ib Gb] IIC/IIB (0 °C < Ta < +50 °C )

**Safety data:**

Type	Uo [V]	Io [mA]	Po [mW]	IIC		IIB	
				Co [nF]	Lo [mH]	Co [nF]	Lo [mH]
DT2500 06 240	7.7	273	2102	300	0.15	1000	0.5
DT2500 08 240	11.2	273	3058	250	0.15	750	0.5
DT2500 10 190	12.4	224	2778	200	0.2	500	0.5
DT2500 12 150	15.1	178	2688	150	0.3	400	1.0
DT2500 12 60	15.1	80	1208	150	1.0	400	3.0
DT2500 15 120	18.8	145	2726	100	0.34	300	1.0
DT2500 15 50	18.8	70	1316	100	1.0	300	3.0
DT2500 18 70	22.4	91	2038	50	1.0	150	3.0
DT2500 18 40	22.4	58	1299	50	2.5	150	5.0
DT2500 24 50	30.0	70	2100	30	2.0	100	5.0
DT2500 24 25	30.0	42	1260	30	5.0	100	5.0

**Output parameters:**

Output voltage: see the table on the previous page  
 Output current: see the table on the previous page  
 Overvoltage protection (Uo): see the safety data  
 Overcurrent protection (Io): limiter, overload indication  
 Temperature-coefficient: 250 ppm / °C (max.)  
 Supply-voltage effect: 0.25% (max., in the whole supply voltage range)  
 Load-effect: 0.25% (max., in the whole supply voltage range)  
 Noise voltage: 10 mV+0,002 × U (max., where U is the output voltage)

**Power supply:**

Supply voltage: 230 VAC, 50/60 Hz  
 Consumption: 9 VA

**Ambient conditions:**

Operating temperature range: 0-50 °C  
 Relative humidity: 90% (max., non-condensing)  
 Place of installation: safe area, cabinet

**Electromagnetic compatibility (EMC) accordance with the standard EN 61326-1**

Immunity: industrial area  
 Noise emission: Group 1, Class B

**General data:**

Housing: terminal assembly box, rail mounting on TS-35 rail, material: polyamide PA6.6  
 Connection: screw terminal  
 Connection cable: 0.25-2.5 mm<sup>2</sup>  
 Dimensions / weight: 35 × 99 × 115 mm (width × height × depth) / 0.35 kg  
 Protection: IP 20

Detailed information see in operating instructions. The Manufacturer maintains the right to change the technical data!