

SWITCHMODE VOLTAGE REGULATOR



- AC/DC input voltage
- Adjustable output 5...24 VDC, max. 40 W
- Adjustable from external potentiometer
- Short-circuit protection
- Thermal overload protection
- Standard 11-pole relay socket



Applications:

General voltage regulator for external transformer used in connection with measurement systems requiring fixed stabilised 24 VDC or supply for any other sensors, transmitters or a general variable voltage regulator in the range 5...24 VDC. ● Used as a power efficient pre-regulator for 5 VDC linear regulator (e.g. from 32 V to 8 V). ● Used as adjustable power supply controlled from external potentiometer.

Technical characteristics:

The unit is based on switchmode technology enabling an adjustable output with a minimum loss of power. A rectifier bridge in the input allows free choice of polarity for the DC input.

Mounting:

The 2229 is for standard 11-pole socket mounting in all positions. To achieve maximum cooling of the module, mounting in a vertical position at a distance of minimum 10 mm between neighbouring units is recommended.

Input:

AC or DC input voltages in accordance with the specifications. Input is not galvanically isolated from output.

Output:

The output is adjustable from front potentiometer in the range 5...24 VDC or from an external potentiometer (potm. 20 k Ω). Using external potentiometer, the front potentiometer must be adjusted to the maximum wanted output plus 20%. A green LED indicates active output. Short-circuit protection limits the current to typ. 5.8 Amp. Short-circuit will zero the voltage to minimise the power. When removing the short-circuit, the output will turn back to the adjusted value.

Electrical specifications:

Specifications range:

-20°C to +60°C

Common specifications:

Internal consumption max..... 10 W
 Temperature coefficient..... 0.05%/°C
 Mains effect ($\pm 10\%$)..... < ± 30 mV
 Transient stability (10%-max. load).... < 250 mV
 EMC immunity influence..... < $\pm 0.5\%$
 Relative air humidity..... < 95% RH (non-cond.)
 Dimensions (HxWxD)..... 80.5 x 35.5 x 84.5 mm
 Protection degree..... IP30
 Weight..... 170 g

Input:

Input voltage (AC)..... Max. 28 VAC
 Min. VAC = $(V_{out} + 5) / 1.2$
 Input voltage (DC)..... Max. 40 VDC
 Min. VDC = $(V_{out} + 5)$
 Frequency..... 50...60 Hz

Output:

Output voltage..... 4.5...26.4 VDC
 Output power..... Max. 40 W
 Output current..... Max. 2.5 A / 5 VDC
 Max. 2.5 A / 12 VDC
 Max. 2.5 A / 15 VDC
 Max. 1.7 A / 24 VDC
 Load effect, (0-max. load)..... < 1.5% / A
 Current limit (short circuit)..... Typ. 5.8 A
 Output ripple..... < 20 mVRMS

GOST R approval:

VNIIM, Cert. no..... Ross DK.ME48.V01899

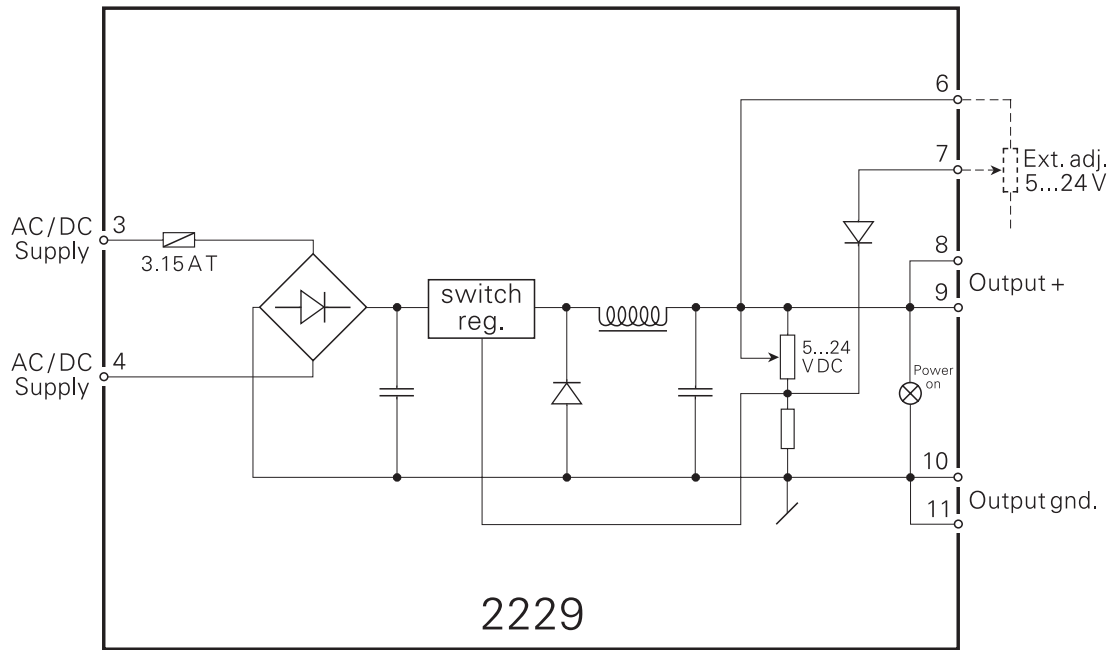
Observed authority requirements: Standard:

EMC 2004/108/EC
 Emission and immunity..... EN 61326-1

Order: 2229

Type	Version	Output
2229	AC or DC : A	Special (5...24 V) : 0
		24 VDC : 1
		15 VDC : 2
		12 VDC : 3
		5 VDC : 4

Block diagram:



Front Layout:

