

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
Tightness.....	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
------------	-------------------------------

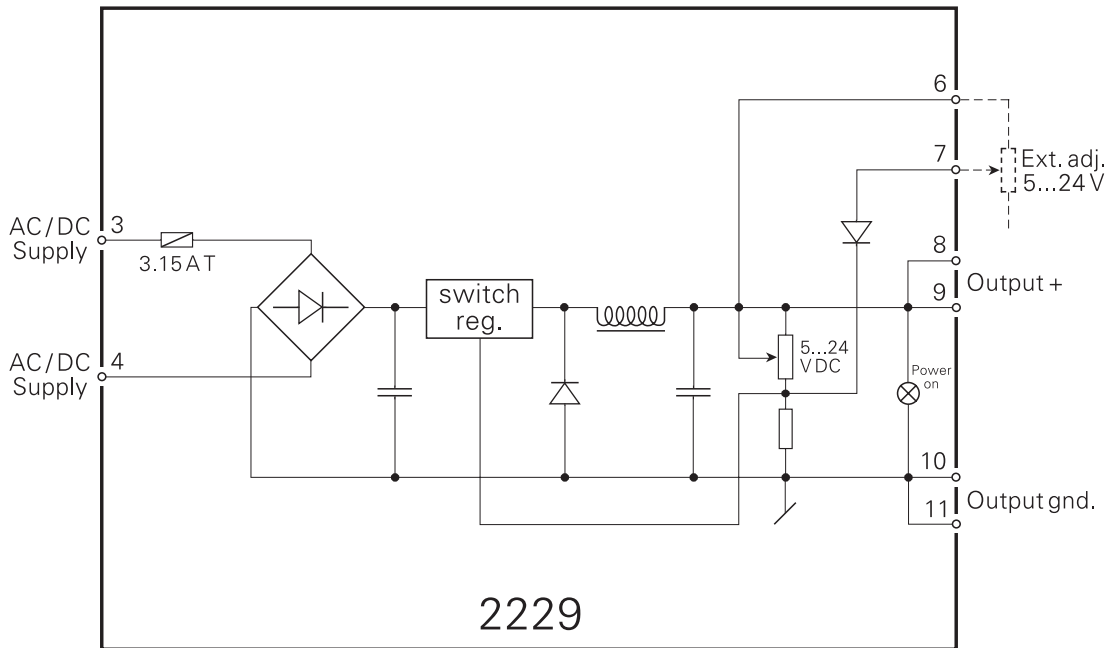
Observed authority requirements: Standard:

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

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:

