

AC/DC power supplies

MAA Family MAA250, 250 W



Basic specifications

Power	250 W
Input current	up to 10.4 A
Input voltage	~220 (100...264) VAC
Output voltage	=24 VDC, =28 VDC
Efficiency.....	89-90%
Case operating temperature.....	-40...+85 °C; -50...+85 °C
Dimensions	134x84x33 mm
Warranty	2 years

Advantages

- ◀ Design to meet MIL-STD-810G and MIL-STD-461E
- ◀ Series operation
- ◀ Conductive cooling



Description of MAA250 on the manufacturer's website:
eng.kwsystems.ru/catalog/acdc/models/7

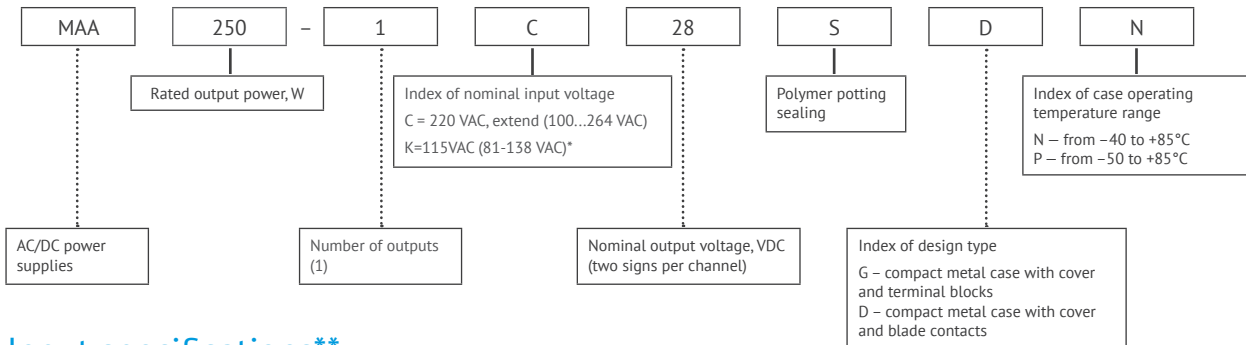
Order registration

+7 473 200 87 80, Global Operations Team

Technical support

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Ordering information



Input specifications**

Parameter		Value
Input voltage range, VAC	C	~100...264 (=141...372)
Transient deviation range, VAC	C	~100...264
Transient time	C	-
Mains frequency range, Hz	C	47...440

Output specifications**

Parameter		Value
Nominal output voltage, VDC		24 28
Efficiency, %		89 90
Rated output current, A		10.41 8.92
Ripple and noise (peak-to-peak)	ambient temperature +25 °C	<0.5%
	ambient temperature range -50...+70 °C	<2%
Line and load regulation		max 2%
Start-up time, ms		<500
Remote on/off		Off at 3.5...4.5 VDC (15...30 mA) output «REMOTE OFF»
Maximum load capacity		10000 µF

* Input voltage range K=115VAC (81-138 VAC) - call

**All specifications are valid for normal climatic conditions (ambient temp. +15...+35°C; relative humidity 45...80%; air pressure 8.6*10⁴...10.6*10⁴ Pa), U_{in}. nom., I_{out}. nom., unless otherwise noted.

Protections

Type of protection	
Short-circuit protection*	auto recovery
Overload protection	$P_{max} < 1.2 P_{nom}$
Overvoltage protection level*	$< 125\% U_{out, nom.}$
Overheat protection	triggers at case temperature $> 85^{\circ}\text{C}$

Basic specifications**

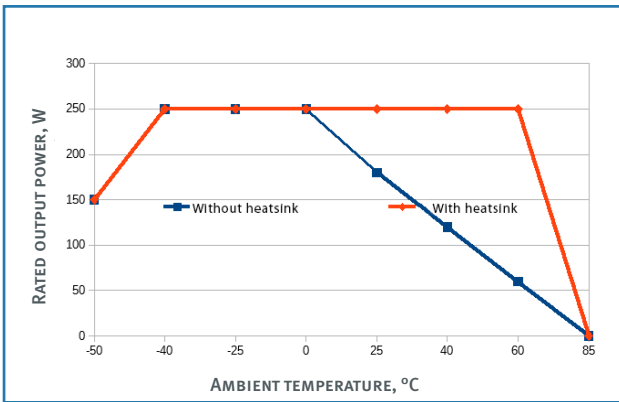
Parameter		Value
Type of connection		screw terminals and blade contacts
Protection level		IP20
Case temperature, operating	«N»	$-40 \dots +85^{\circ}\text{C}$
	«P»	$-50 \dots +85^{\circ}\text{C}$
Case temperature, storage		$-50 \dots +70^{\circ}\text{C}$
Humidity		98% / 35°C
Isolation voltage	in /case	$\sim 1500 \text{ VAC}$
	in /out	$\sim 1500 \text{ VAC}$
	out /case, out/out	$\sim 500 \text{ VAC}$
Isolation resistance @ 500 VDC		$\geq 20 \text{ MOhm min}$
Cooling		conductive, forced air
Environmental influence standards		design to meet MIL-STD-810G
EMC standards		EN55022 (CISPR22) class B; design to meet MIL-STD-461E
Thermal resistance case-ambient		$2.7^{\circ}\text{C} / \text{W}$
Typical MTBF		3 000 000 Hrs
Case material		metal
Dimensions, mm		134×84×33
Weight, kg		< 0.6
Warranty		2 year

* Parameters are stated for the information purposes and could not be used at long term work, exceeding maximum output current, operating outside of a working temperatures range or when output voltage is over the range of adjustment.

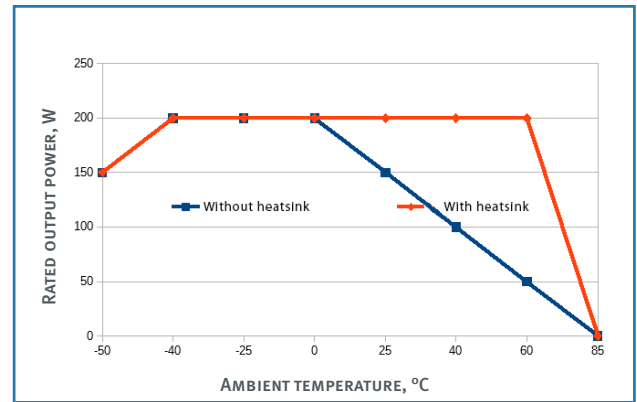
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Derating

vs Temperature (input voltage 230 VAC)

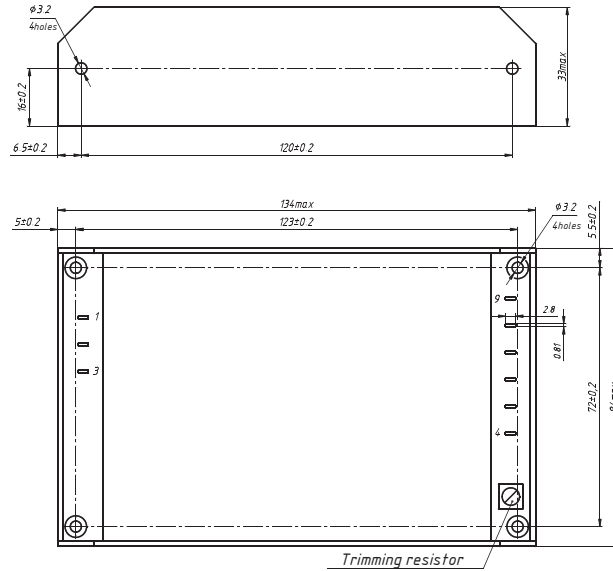


vs Temperature (input voltage 110 VAC)



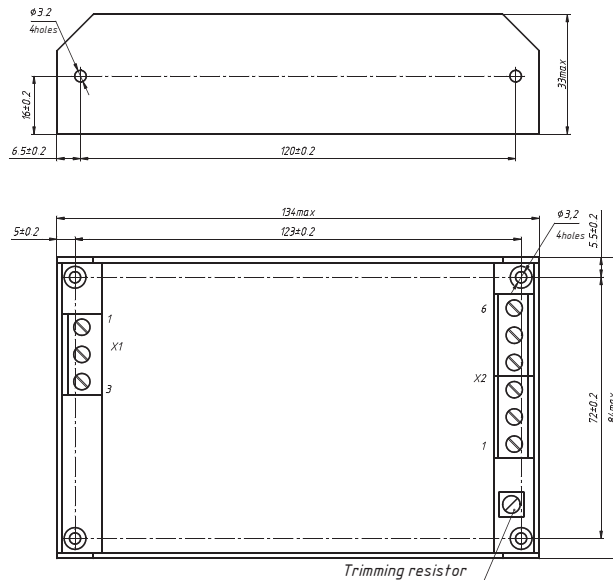
Dimensions

Single-channel design with blade contacts



PIN #	1	2	3	4	5	6	7	8	9	10	11	12	13
SINGLE-CHANNEL		L	N	-REMOTE OFF	+REMOTE OFF	-OUT1	-OUT1	+OUT1	+OUT1	-	-	-	-

Single-channel design with terminal blocks



PIN #	X1.1	X1.2	X1.3	X2.1	X2.2	X2.3	X2.4	X2.5	X2.6	X2.7	X2.8	X2.9	X2.10
SINGLE-CHANNEL		L	N	-REMOTE OFF	+REMOTE OFF	-OUT1	-OUT1	+OUT1	+OUT1	-	-	-	-



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KW Systems, LLC is the leading Russian developer and manufacturer of AC/DC converters and power supply systems for mission critical applications.

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This datasheet is valid for the following units: MAA250-1C24CXX, MAA250-1C28CXX.