

AC/DC power supplies

MAA Family

**MAA800, 800 W;
MAA1000, 1000 W**



Basic specifications

Power	800/1000 W
Input current	up to 66.6A
Input voltage	~220 (100...264) VAC
Output voltage	=15 VDC, =24 VDC, =28 VDC, =48 VDC
Efficiency.....	84-89%
Case operating temperature.....	-40...+85 °C; -50...+85 °C
Dimensions	211x117x41 mm
Warranty	2 years

Advantages

- ◀ Design to meet MIL-STD-810G and MIL-STD-461E
- ◀ Parallel and series operation
- ◀ Output voltage adjustment
- ◀ Conductive cooling



Description of MAA800 on the manufacturer's website:
eng.kwsystems.ru/catalog/acdc/models/10



Description of MAA1000 on the manufacturer's website:
eng.kwsystems.ru/catalog/acdc/models/11

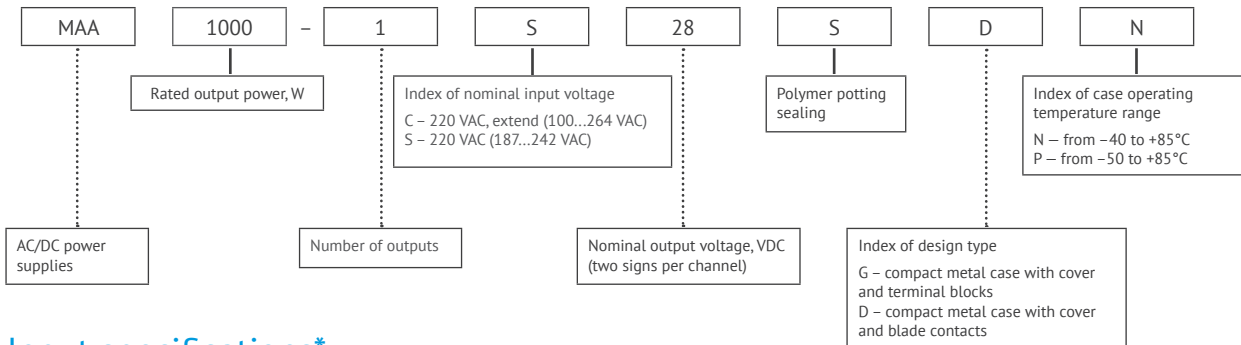
Order registration

+7 473 200 87 80, Global Operations Team

Technical support

Mikhail Timokhin, mtimohin@kwsystems.ru

Ordering information



Input specifications*

Parameter	Value
Input voltage range, VAC**	C ~100...264 (=141...372)
	S ~187...242 (=263...340)
Transient deviation range, VAC	C ~100...264
	S ~176...264
Transient time	S 1 s.
	C -
Mains frequency range, Hz	C, S 47...440
Power factor corrector	+

Output specifications*

Parameter	Value
Nominal output voltage, VDC	15 24 28 48
Output voltage adjustment	10 %
Efficiency, %	84 88 88 89
Rated output current, A	MAA800 53.3 33.3 28.6 16.6
	MAA1000 66.6 41.55 35.7 20.83
Ripple and noise (peak-to-peak)	<2%
Line and load regulation	max 2%
Start-up time, ms	<1500
Parallel operation	redundancy, and boost of power
Remote on/off	Off at 3.5...4.5 VDC (15...30 mA) output «REMOTE OFF»
Maximum load capacity	78000 µF (Uout=15 VDC)

* 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), Uin. nom., Iout. nom., unless otherwise noted.

** Maximum output power for input voltage range C (wide range) at Uout 100...187 VDC is reducing according to power derating VS input voltage diagram.

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**

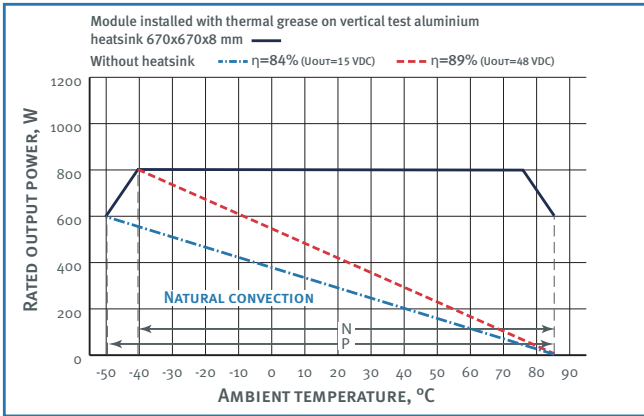
Parameter		Value
Type of connection		screw terminals and blade contacts
Protection level		IP20
Case temperature, operating	«N»	$-40 \dots +85^{\circ}\text{C}$
	«P»	$-50 \dots +85^{\circ}\text{C}$
Case temperature, storage		$-50 \dots +70^{\circ}\text{C}$
Humidity		98% / 35°C
Isolation voltage	in /case	$\sim 1500 \text{ VAC}$
	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); design to meet MIL-STD-461E
Typical MTBF		3 000 000 Hrs
Case material		metal
Dimensions, mm		211×117×41
Weight, kg		< 1.9
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.

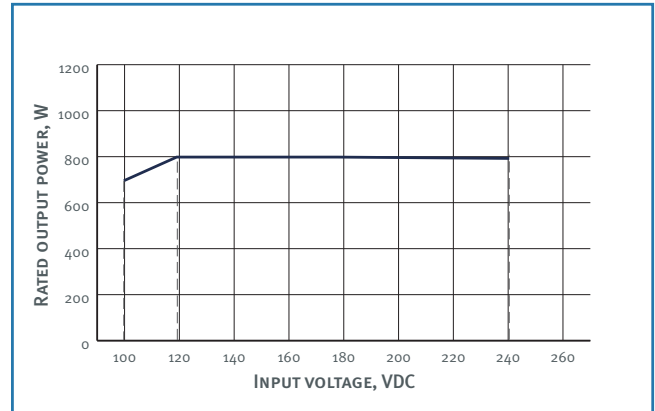
** All specifications are valid for normal climatic conditions, $U_{in, nom.}$, $I_{out, nom.}$, unless otherwise noted.

Derating

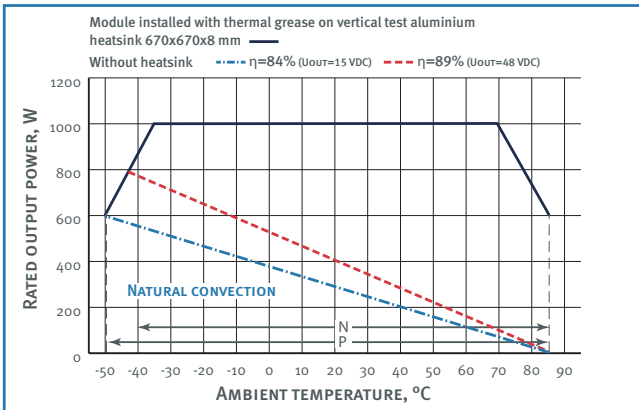
vs Temperature. MAA800



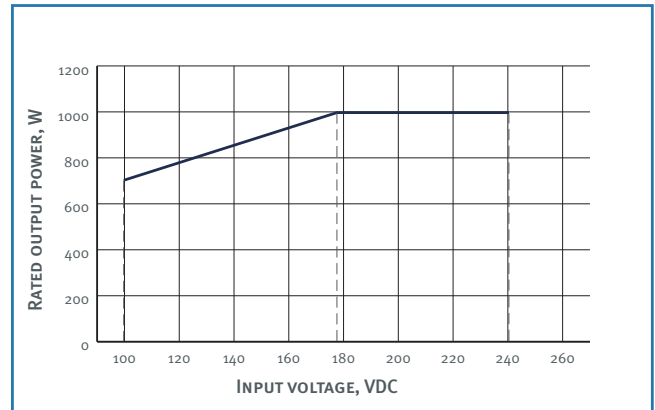
vs Input Voltage. MAA800



vs Temperature. MAA1000

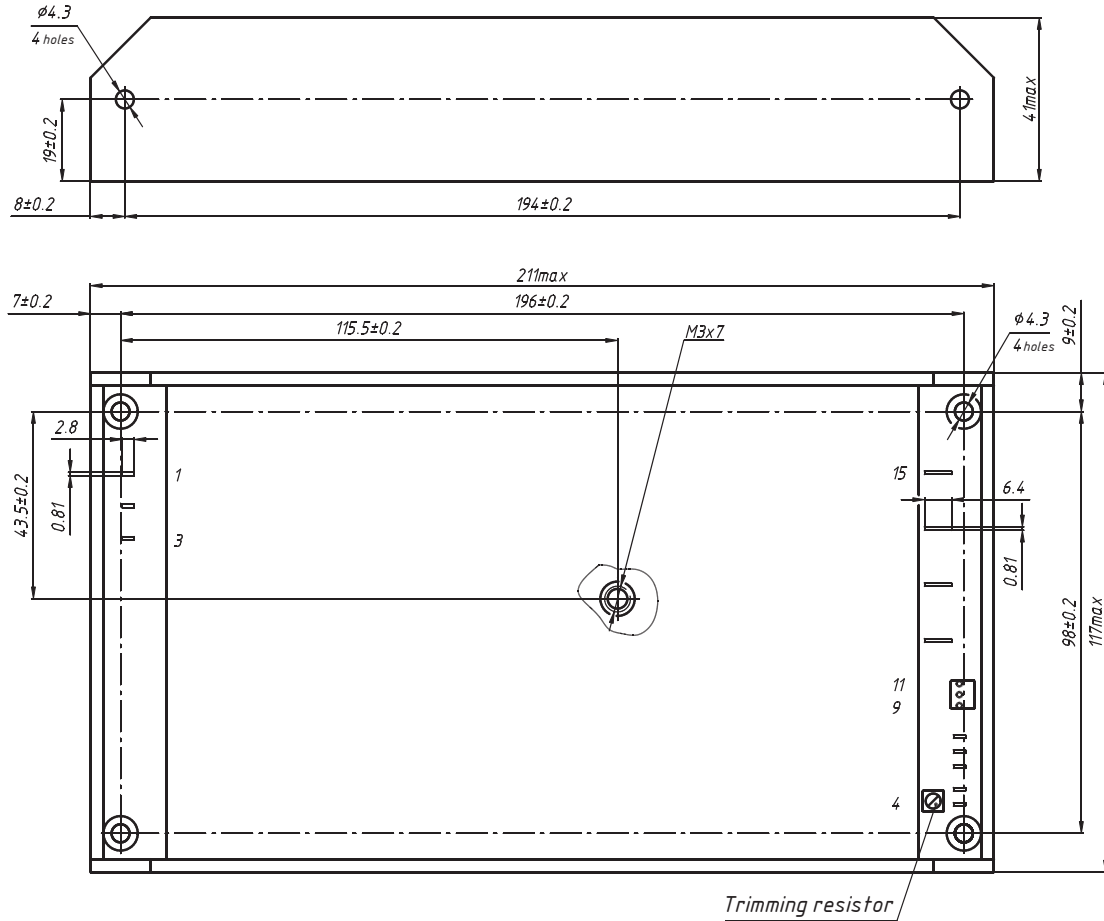


vs Input Voltage. MAA1000



Dimensions

Single-channel design with blade contacts

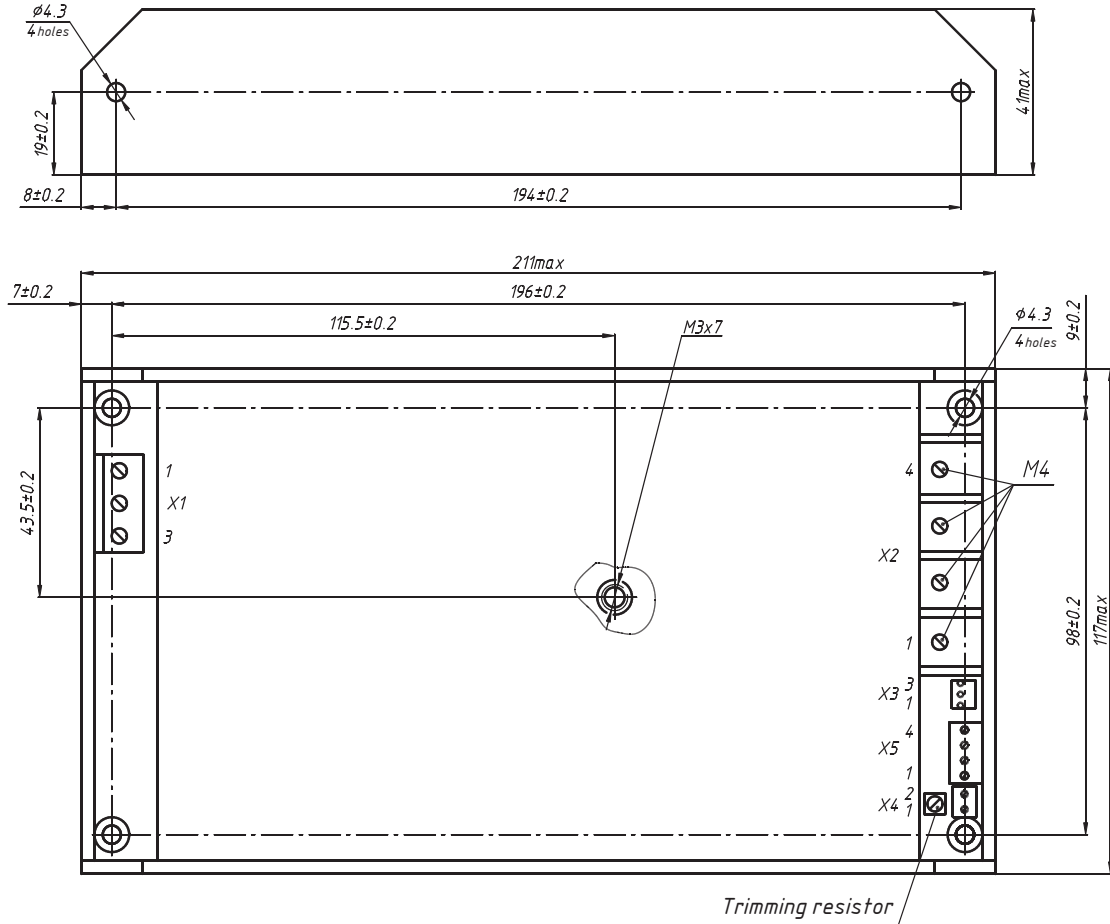



PIN #	1	2	3	4	5	6	7
SINGLE-CHANNEL	L	N		-REMOTE OFF	+REMOTE OFF	+RS	-RS

PIN #	8	9	10	11	12	13	14	15
SINGLE-CHANNEL	PARAL	+U FAN	-U FAN	NOT USE	+ OUT 1	+ OUT 1	-OUT 1	-OUT 1

Dimensions

Single-channel design with terminal blocks



PIN #	X1.1	X1.2	X1.3	X2.1	X2.2	X2.3	X2.4	X3.1
SINGLE-CHANNEL	L	N		+ OUT 1	+ OUT 1	-OUT 1	-OUT 1	+U FAN

PIN #	X3.2	X3.3	X4.1	X4.2	X5.1	X5.2	X5.3	X5.4
SINGLE-CHANNEL	-U FAN	NOT USE	-REMOTE OFF	+REMOTE OFF	+RS	-RS	PARAL	NOT USE



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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: MAA800-1S24-Cxx; MAA800-1S28-Cxx; MAA800-1S48-Cxx; MAA800-1C15-Cxx; MAA800-1C24-Cxx; MAA800-1C28-Cxx; MAA800-1C48-Cxx; MAA1000-1S15-Cxx; MAA1000-1S24-Cxx; MAA1000-1S28-Cxx; MAA1000-1S48-Cxx; MAA1000-1C15-Cxx; MAA1000-1C24-Cxx; MAA1000-1C28-Cxx; MAA1000-1C48-Cxx.