

# AC/DC power supplies

## MAA Family

**MAA800, 800 W;**

**MAA1000, 1000 W**



### Basic specifications

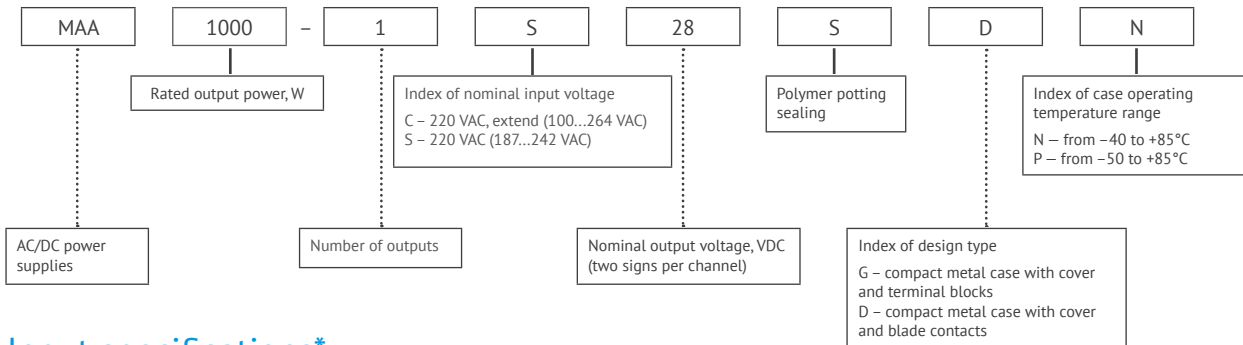
Power .....	800/1000 W
Input current .....	up to 66.6A
Input voltage .....	~220 (100...264) VAC
Output voltage .....	=15 VDC,=24 VDC, =28 VDC, =48 VDC
Efficiency.....	84-89%
Case operating temperature.....	-40...+85 °C; -50...+85 °C
Dimensions .....	211x117x41 mm
Warranty .....	2 years

### Advantages

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



### 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
	MAA1000	66.6	41.55	35.7
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\*10<sup>4</sup>...10.6\*10<sup>4</sup> Pa), U<sub>in</sub>. nom., I<sub>out</sub>. nom., unless otherwise noted.

\*\* Maximum output power for input voltage range C (wide range) at U<sub>out</sub> 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\*\*

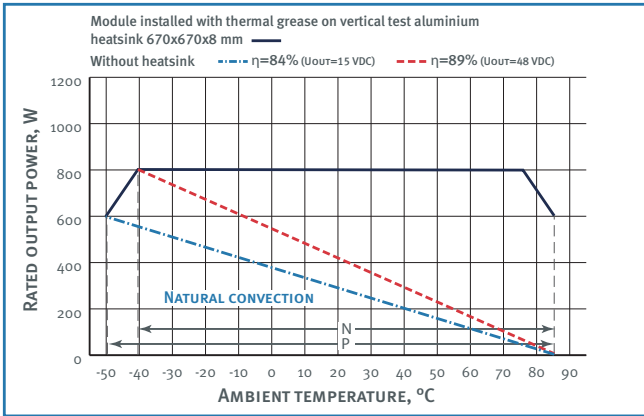
Parameter		Value
Type of connection		screw terminals and blade contacts
Protection level		IP20
Case temperature, operating	«N»	$-40 \dots +85^{\circ}\text{C}$
	«P»	$-50 \dots +85^{\circ}\text{C}$
Case temperature, storage		$-50 \dots +70^{\circ}\text{C}$
Humidity		98% / $35^{\circ}\text{C}$
Isolation 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.

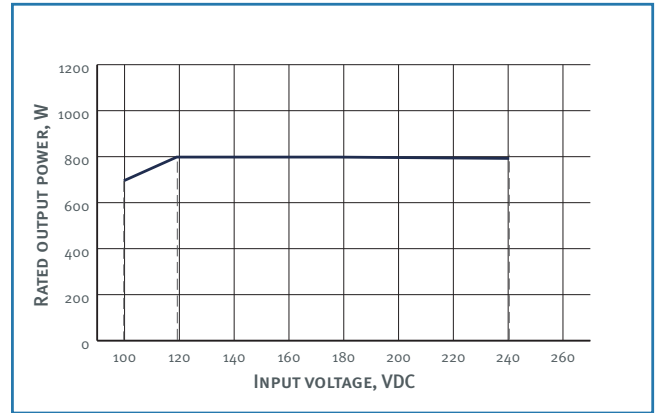
\*\* All specifications are valid for normal climatic conditions,  $U_{in, nom.}$ ,  $I_{out, nom.}$ , unless otherwise noted.

## Derating

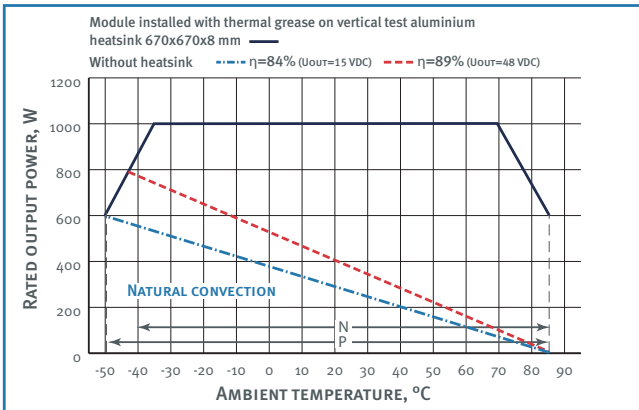
vs Temperature. MAA800



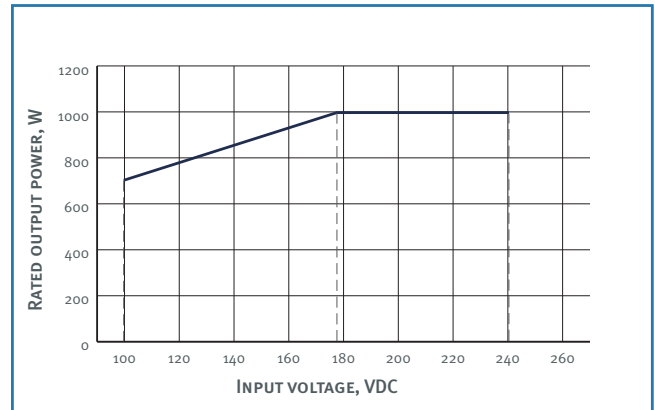
vs Input Voltage. MAA800



vs Temperature. MAA1000

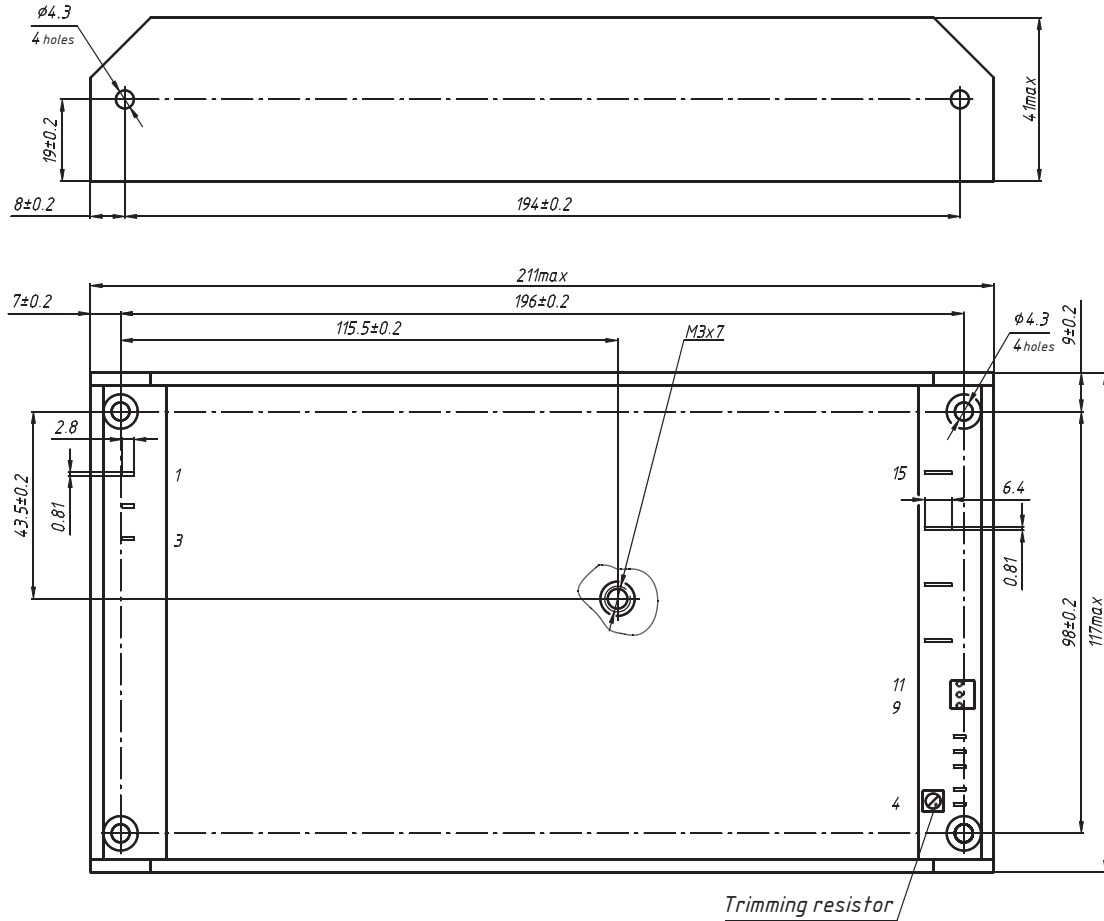


vs Input Voltage. MAA1000



## Dimensions

Single-channel design with blade contacts

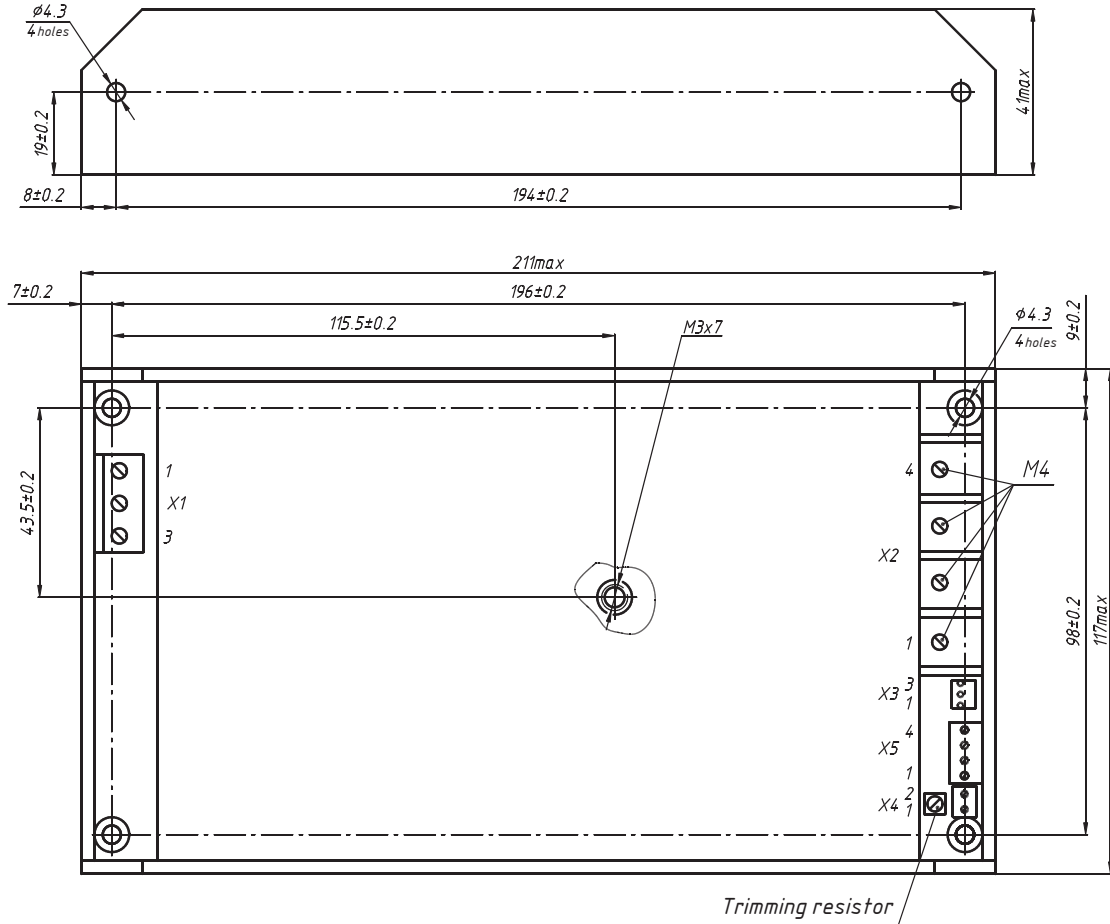



PIN #	1	2	3	4	5	6	7
SINGLE-CHANNEL	L	N		-REMOTE OFF	+REMOTE OFF	+RS	-RS

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



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

**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.