

# AC/DC power supplies

## MAA Family

### MAA150, 150 W



#### Basic specifications

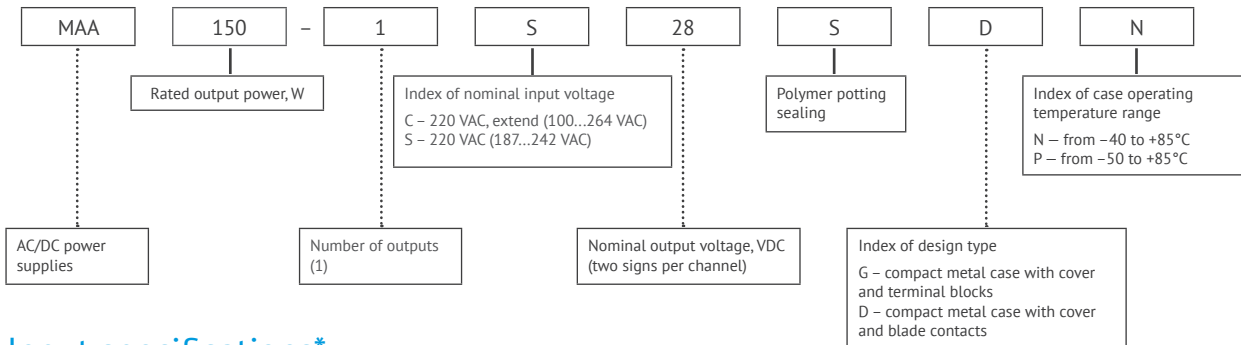
Power .....	150W
Output current .....	up to 30A
Input voltage .....	~220 (187...264) VAC
Output voltage .....	=5 VDC, =24 VDC, =28 VDC
Efficiency.....	82-89%
Case operating temperature.....	-40...+85 °C; -50...+85 °C
Dimensions .....	134x84x33 mm
Warranty .....	2 years

#### Advantages

- ◀ Design to meet MIL-STD-810G and MIL-STD-461E
- ◀ Remote OFF/ON
- ◀ 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

### Output specifications\*

Parameter	Value
Nominal output voltage, VDC	5      12      15      24      28
Output voltage adjustment	10 %
Efficiency, %	82      85      86      88      89
Rated output current, A	30      12.5      10      6.25      5.36
Ripple and noise (peak-to-peak)	<2%
Line and load regulation	max 2%
Start-up time, ms	<500
Remote on/off	Off at 3...5 VDC (≤5 mA) output «REMOTE OFF»
Maximum load capacity	135000 µF (Uout=5 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\*\*

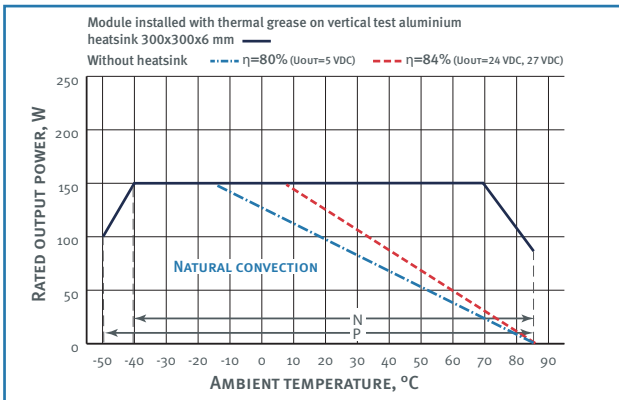
Parameter		Value
Type of connection		screw terminals and blade contacts
Protection level		IP20
Case temperature, operating	«N»	$-40 \dots +85^{\circ}\text{C}$
	«P»	$-50 \dots +85^{\circ}\text{C}$
Case temperature, storage		$-50 \dots +70^{\circ}\text{C}$
Humidity		98% / $35^{\circ}\text{C}$
Isolation 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
Thermal resistance case-ambient		$6.4^{\circ}\text{C} / \text{W}$
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.

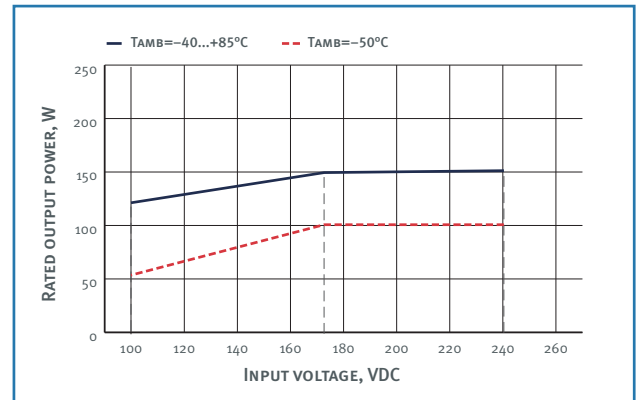
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## Derating

vs Temperature. MAA150

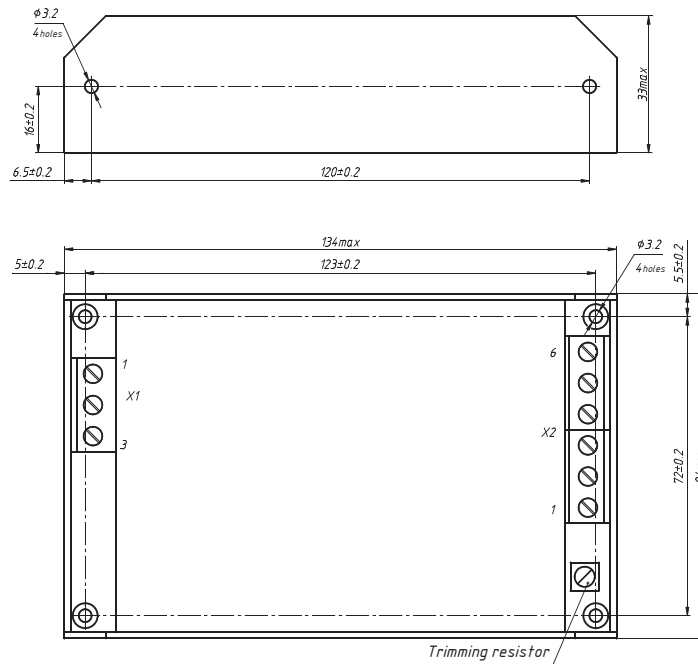



vs Input Voltage. MAA150



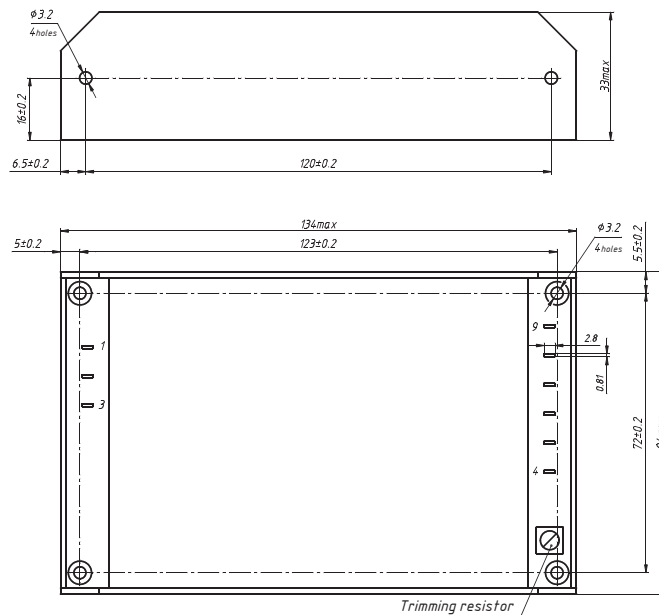
### Dimensions


#### 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
SINGLE-CHANNEL		N	L	-REMOTE OFF	+REMOTE OFF	-OUT 1	-OUT 1	+OUT 1	+OUT 1

#### Single-channel design with blade contacts



PIN #	1	2	3	4	5	6	7	8	9
SINGLE-CHANNEL		N	L	-REMOTE OFF	+REMOTE OFF	-OUT 1	-OUT 1	+OUT 1	+OUT 1



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:** MAA150-1C05CXX, MAA150-1C12CXX, MAA150-1C15CXX, MAA150-1C24CXX, MAA150-1C27CXX, MAA150-1S05CXX, MAA150-1S09CXX, MAA150-1S12CXX, MAA150-1S15CXX, MAA150-1S24CXX, MAA150-1S27CXX.