

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

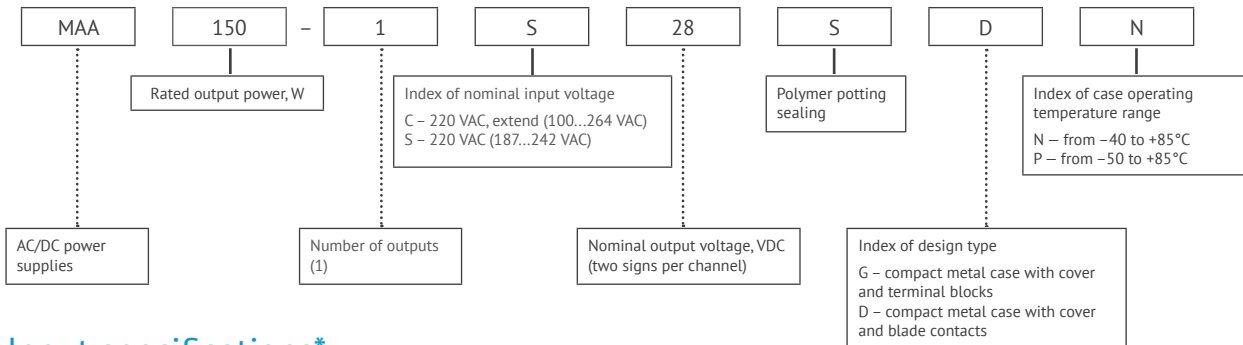


Description of MAA150 on the manufacturer's website:
eng.kwsystems.ru/catalog/acdc/models/5

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)
	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*10⁴...10.6*10⁴ Pa), U_{in}. nom., I_{out}. nom., unless otherwise noted.

** Maximum output power for input voltage range C (wide range) at U_{out} 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**

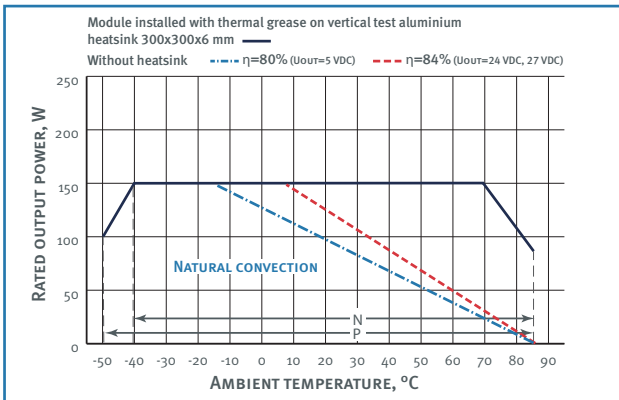
Parameter		Value
Type of connection		screw terminals and blade contacts
Protection level		IP20
Case temperature, operating	«N»	$-40 \dots +85^{\circ}\text{C}$
	«P»	$-50 \dots +85^{\circ}\text{C}$
Case temperature, storage		$-50 \dots +70^{\circ}\text{C}$
Humidity		98% / 35°C
Isolation voltage	in /case	$\sim 1500 \text{ VAC}$
	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
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.

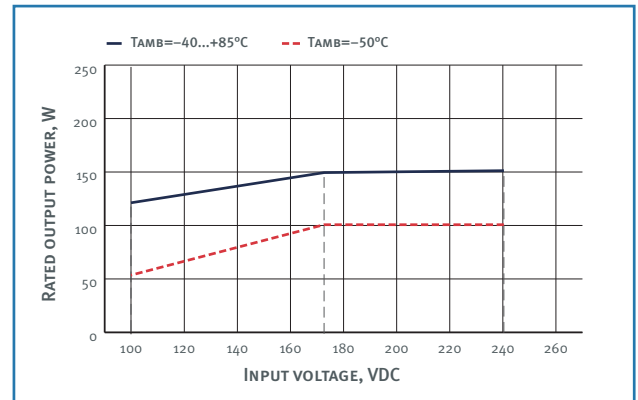
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Derating

vs Temperature. MAA150

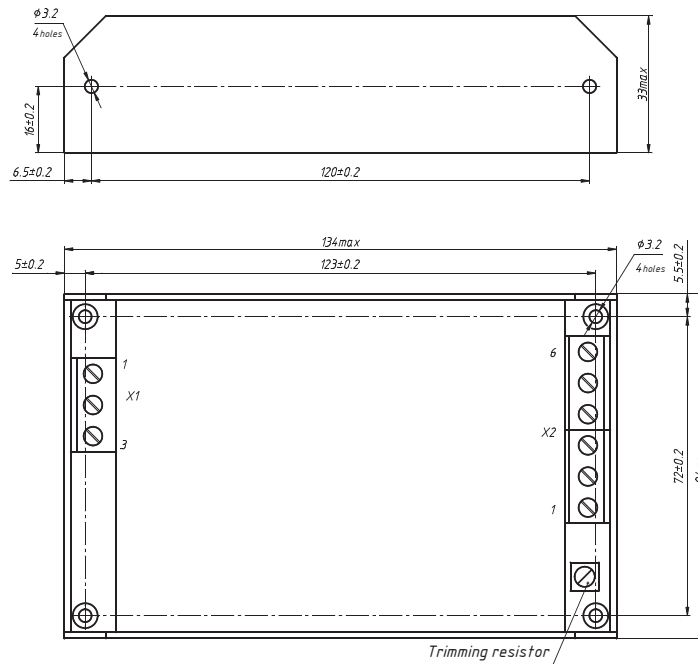



vs Input Voltage. MAA150



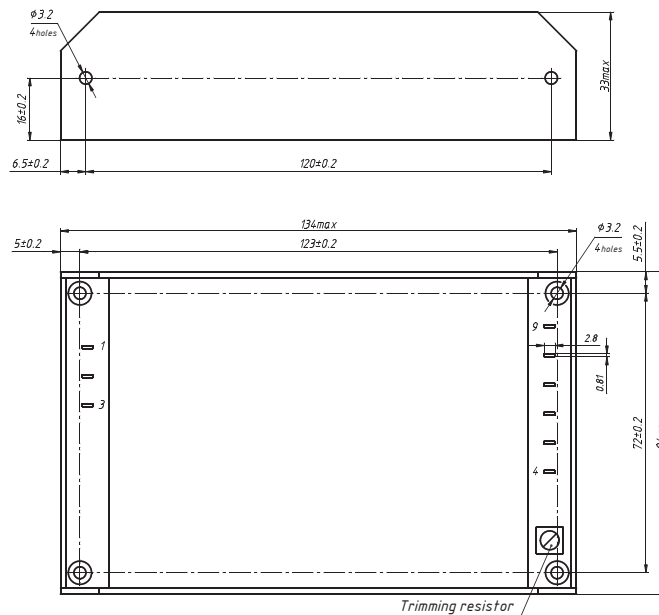
Dimensions


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



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