

AC/DC power supplies

MAA Family

MAA1500, 1500 W



Basic specifications

Power	1500 W
Input current	up to 80 A
Input voltage	~220 (187...264) VAC
Output voltage	=24 VDC, =28 VDC, =48 VDC, =60 VDC
Efficiency.....	89-92%
Case operating temperature.....	-40...+85 °C; -50...+85 °C
Dimensions	250x140x41 mm
Warranty	2 years

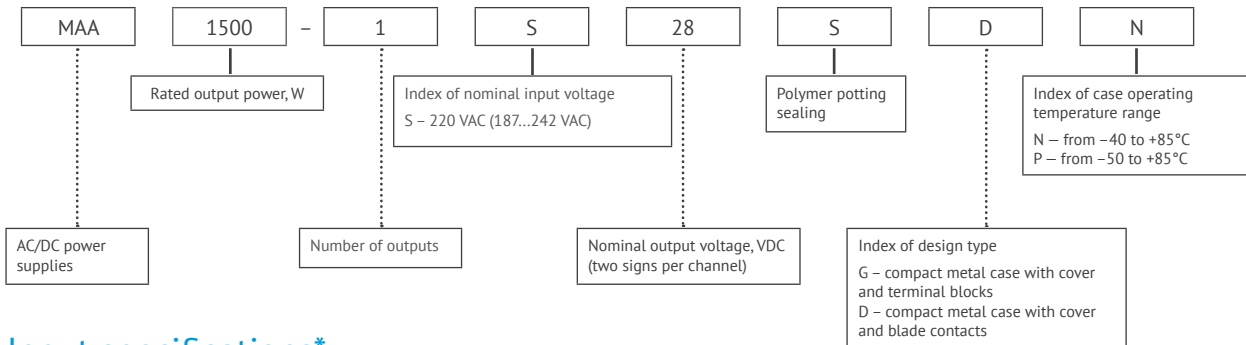
Advantages

- ◀ Design to meet MIL-STD-810G and MIL-STD-461E
- ◀ Parallel and series operation
- ◀ Output voltage adjustment
- ◀ Conductive cooling
- ◀ DC OK
- ◀ Stand-by power supply



Description of MAA1500 on the manufacturer's website:
eng.kwsystems.ru/catalog/acdc/models/13

Ordering information



Input specifications*

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

Output specifications*

Parameter	Value			
Nominal output voltage, VDC	24	28	48	60
Output voltage adjustment	10 %			
Efficiency, %	89	89	90	92
Rated output current, A	62.5	53.57	31.25	25
Ripple and noise (peak-to-peak)	<2%			
Line and load regulation	max 2%			
Start-up time, ms	<2000			
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	33000 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 $> 85^{\circ}C$

Basic specifications**

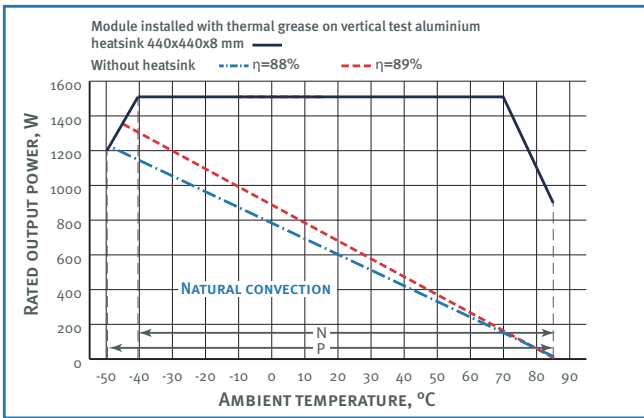
Parameter		Value
Type of connection		screw terminals and blade contacts
Protection level		IP20
Case temperature, operating	«N»	$-40...+85^{\circ}C$
	«P»	$-50...+85^{\circ}C$
Case temperature, storage		$-50...+70^{\circ}C$
Humidity		98% / $35^{\circ}C$
Isolation voltage	in /case	~ 1500 VAC
	in /out	~ 1500 VAC
	out /case, out/out	~ 500 VAC
Isolation resistance @ 500 VDC		≥ 20 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		250x140x41
Weight, kg		< 2.4
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.

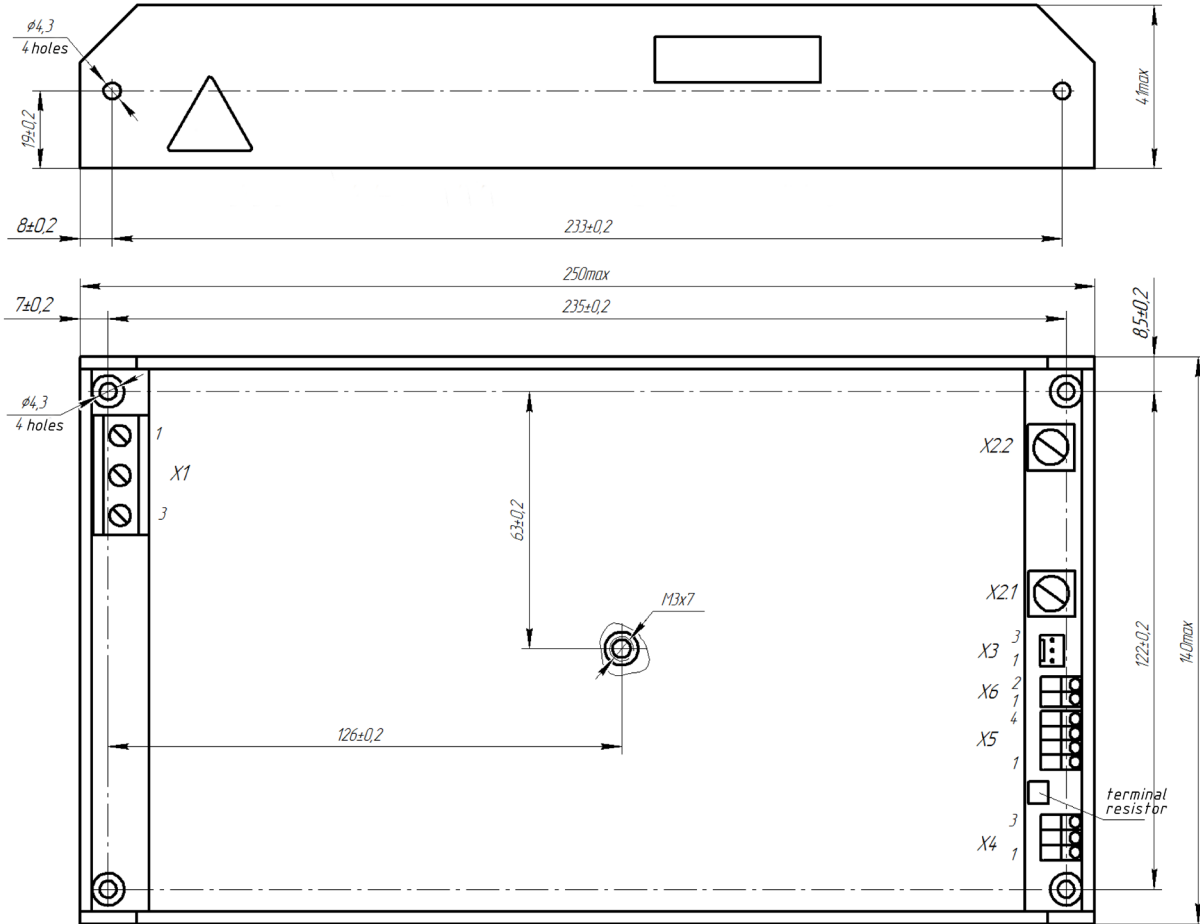
Derating

vs Temperature



Dimensions

Single-channel design with terminal blocks

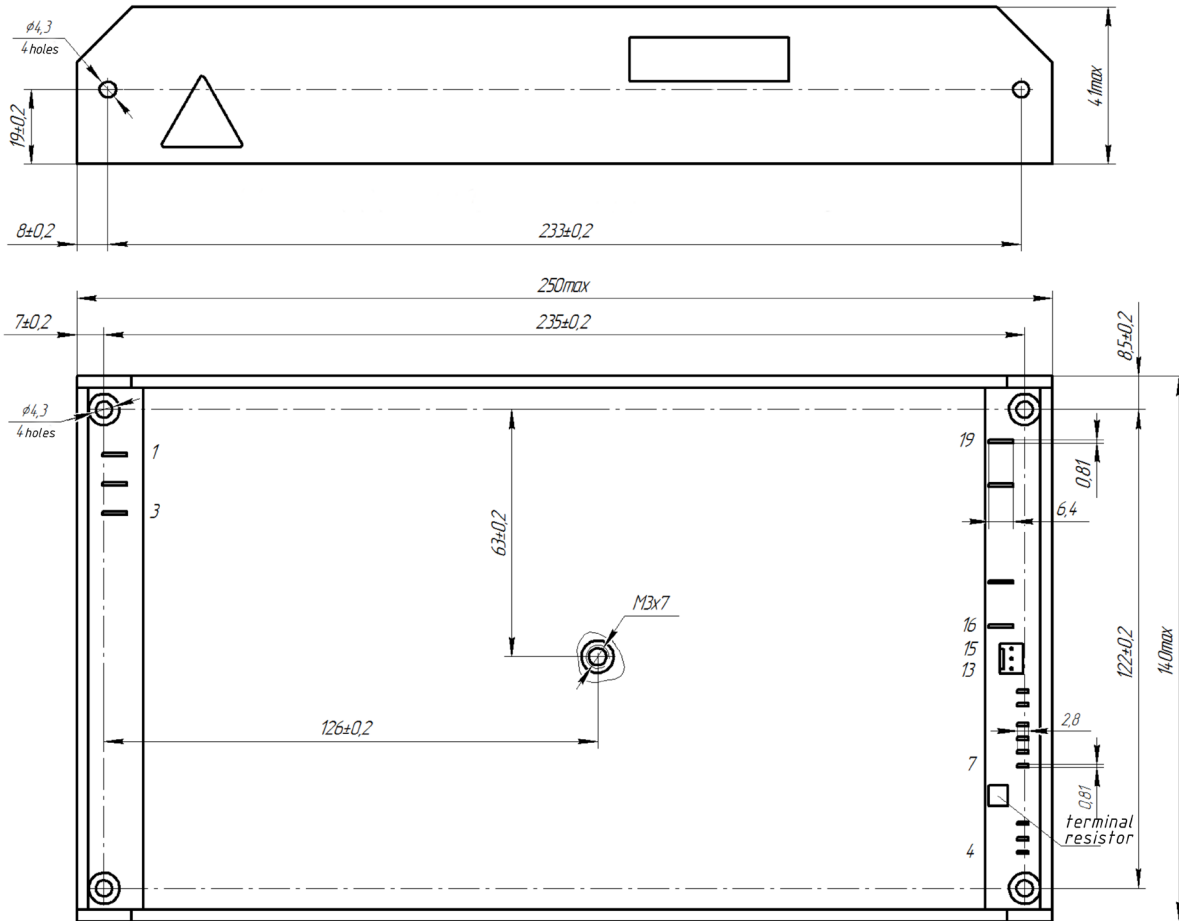



PIN #	X1.1	X1.2	X1.3	X2.1	X2.2	X3.1	X3.2	X3.3
SINGLE-CHANNEL	L	N	⊥	+ OUT 1	- OUT 1	+U.FAN	-U.FAN	NOT USE

PIN #	X4.1	X4.2	X4.3	X5.1	X5.2	X5.3	X5.4	X6.1	X6.2
SINGLE-CHANNEL	-REMOTE OFF	+REMOTE OFF	NOT USE	+RS	-RS	PARAL	TRIM	+DC OK	-DC OK

Dimensions

Single-channel design with blade contacts



PIN #	1	2	3	4	5	6	7	
SINGLE-CHANNEL	L	N		-REMOTE OFF	+REMOTE OFF	NOT USE	+RS	
PIN #	8	9	10	11	12	13	14	15
SINGLE-CHANNEL	-RS	PARAL	TRIM	+DC OK	-DC OK	+U FAN	-U FAN	NOT USE
PIN #	16	17	18	19				
SINGLE-CHANNEL	+OUT	+OUT	-OUT	-OUT				



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