

## AC/DC power supplies

### MAA Family MAA500-SG(SD), 500W threephase



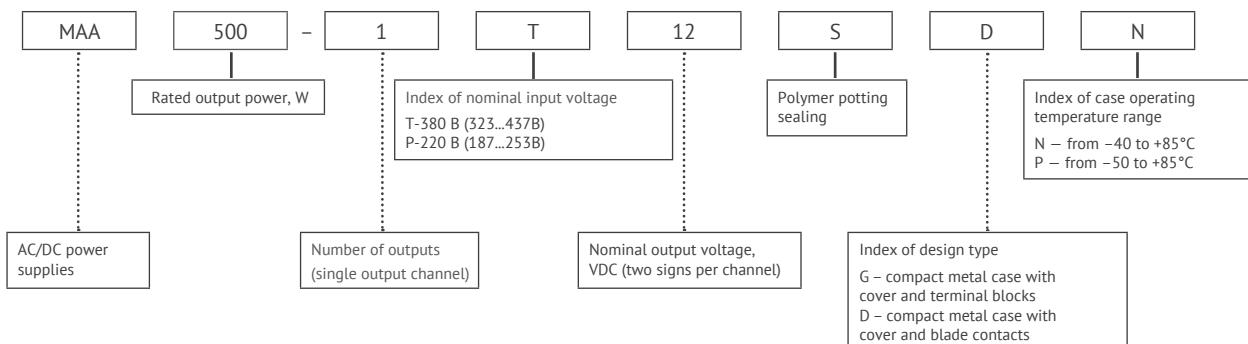
#### Features

Input voltage.....	~323...437(=455...616) ~187...253(=263...356)
Output voltage.....	=24 V;=28 V
Efficiency.....	no more than 80%
Case operating temperature.....	-40...+85°C;-50...+85°C
Dimentions .....	175x93x35 mm
Warranty.....	2 years

#### Advantage

- ◀ Parallel operation
- ◀ Output voltage regulation
- ◀ Parallel and series
- ◀ Conductive cooling

## Ordering information



## Output specifications\*

Parameter	Value	
Nominal output voltage, VDC	24	28
Output voltage adjustment	±10 %	
Efficiency, %	no less than 80	
Rated output current, A	20,83	18,51
Ripple and noise (peak-to-peak)	<2%	
Line and load regulation	no more than 2%	
Start-up time, ms	<500	
Remote on/off	Off at 3,5...4,5 VAC (1~..30 mA) output «REMOTE OFF»	
Maximum load capacity	20000 µF (Uout. from 24 to 27 VDC)	

## Input specifications\*

Parameter	Value	
Input voltage range, VAC	T	~323...437
	P	~187...253
Transient deviation range, VAC	T	~304...456
	P	~176...264
Transient time	T,P	1
Mains frequency range, Hz	T	47...440
	P	360-440
Inrush current , A	T	2,2
	P	3,6

\* All specifications are valid for normal climatic conditions, Uin. nom., Iout. nom., unless otherwise noted.

## Protections

Type of protection	
Short-circuit protection*	auto recovery
Overshoot protection	Pmax<1.8 Pnom
Overload protection level*	<125% Uout nom.
Overheat protection	triggers at case temperature > 85°C

## Basic specifications\*\*

Parameter	Value	
Type of connection	screw terminals and blade contacts	
Protection level	IP20	
Case temperature, operating	«N»	-40...+85°C
	«P»	-50...+85°C
Case temperature, storage	-50...+70°C	
Humidity	98% / 35°C	
Isolation voltage	in /case	~1500 VAC
	in /out	~1500 VAC
	out /case, out/out	~500 VAC
Isolation resistance @ 500 VDC	≥ 20 MΩ min	
Cooling	conductive	
EMC standards	EN55022 (CISPR22)	
Thermal resistance case-ambient	1.8°C / W	
Typical MTBF	up to 75000 Hrs***	
Case material	metal	
Dimensions, mm	175×93×35	
Weight, kg	< 1.1	
Warranty	2 year	

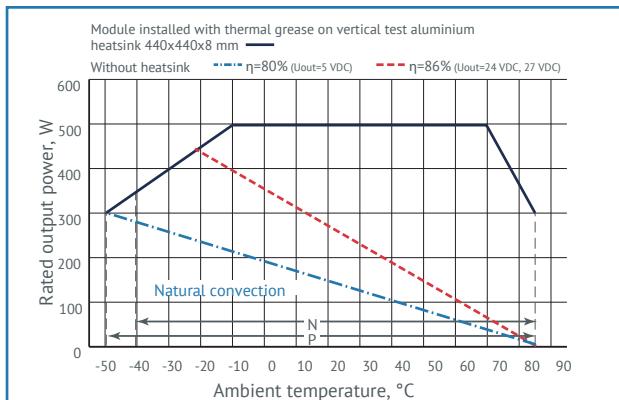
\* Parameters are stated for the information purposes and could not be used at long term work, exceeding maximum output current, operating outside of a working temperatures range or when output voltage is over the range of adjustment.

\*\* All specifications are valid for normal climatic conditions, Uin. nom., Iout. nom., unless otherwise noted.

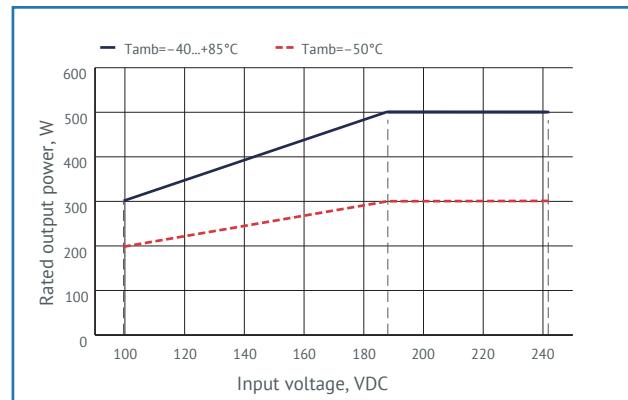
\*\*\* When Uout.=In.nom., Pin=0.5-Pmax, Tcase≤0.5-Tcase.max.

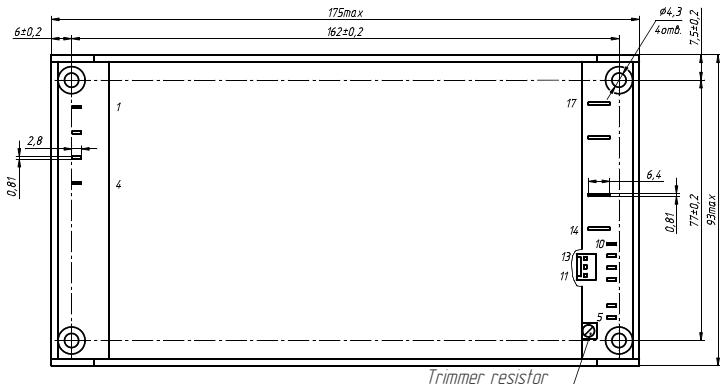
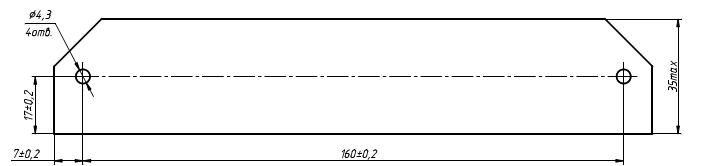
## Derating

**vs Temperature. MAA500**

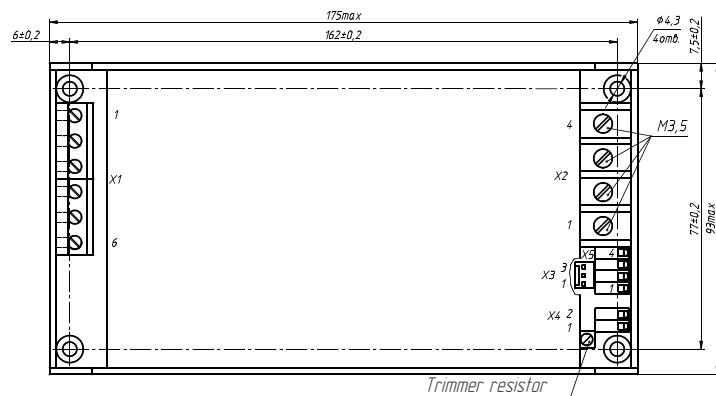
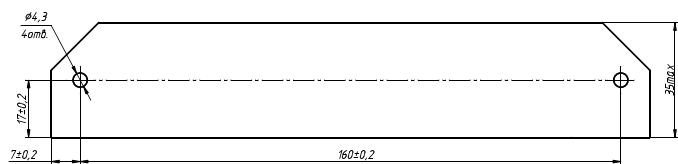


**vs Input Voltage. MAA500**



**Dimensions**
**Single channel version with blade contacts**


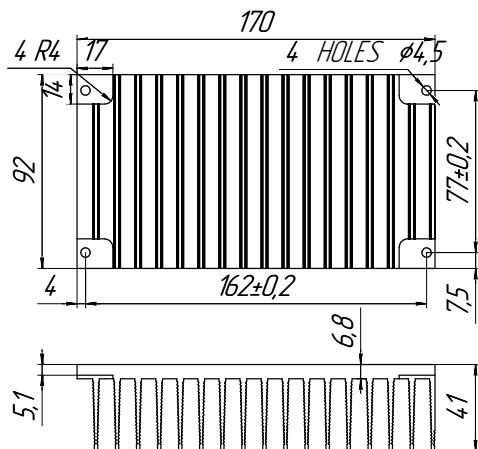
PIN #	1	2	3	4	5	6	7	8	9	10	11	12	13
DESIGNATION	A	B	C	CASE	-REMOTE OFF	+REMOTE OFF	+RS	-RS	PARAL	TRIM	+U FAN	-U FAN	-
DESIGNATION	+Uout	+Uout	-Uout	-Uout									

**Single Channel with Terminal Blocks**


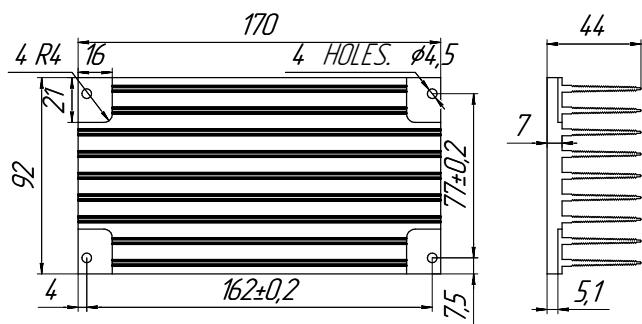
PIN #	X1.1	X1.2	X1.3	X1.4	X2.1	X2.2	X2.3	X2.4	X3.1	X3.2	X3.3	X4.1	X4.2	X5.1	X5.2	X5.3	X5.4
DESIGNATION	A	B	C	CASE	+Uout	+Uout	-Uout	-Uout	+U FAN	-U FAN	-	-REMOTE OFF	+REMOTE OFF	+RS	-RS	PARAL	TRIM

## Radiator dimension drawing

Radiator BKJAU.752695.050 transverse



Radiator BKJAU.752695.057 longitudinal



This datasheet is valid for the following units:

MAA500-1P24SXX, MAA500-1P28SXX, MAA500-1T24SXX, MAA500-1T28SXX