

AC/DC power supplies

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



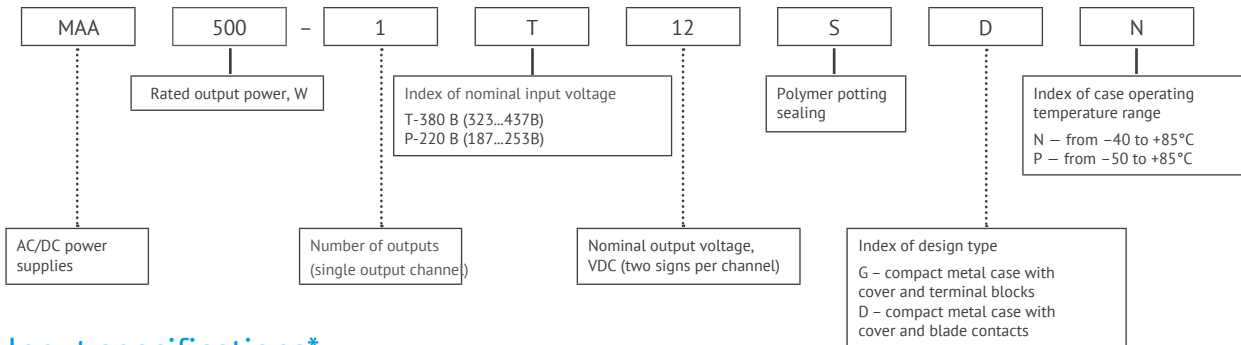
Features

Input voltage.....	~323...437(=455...616) ~187...253(=263...356)
Output voltage.....	=24 V;=27 V
Efficiency.....	no more than 80%
Case operating temperature.....	-40...+85°C;-50...+85°C
Dimensions	175x93x35 mm
Warranty.....	2 years

Advantage

- ▶ Parallel operation
- ▶ Output voltage regulation
- ▶ Parallel and series
- ▶ connections Inductive cooling

Ordering information



Input specifications*

Parameter	Value	
Input voltage range, VAC	T	~323...437(=455...616)
	P	~187...253 (=263...356)
Transient deviation range, VAC	T	~304...456
	P	~176...264
Transient time	T,P	1
Mains frequency range, Hz	T	47...400
	P	360-440
Inrush current , A	T	2,2
	P	3,6

Output

specifications*

Parameter	Value	
Nominal output voltage, VDC	24	27
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 (15...30 mA) output «REMOTE OFF»	
Maximum load capacity	20000 µF (Uout. from 24 to 27 VDC)	

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

Protections

Type of protection	
Short-circuit protection*	auto recovery
Overcurrent protection	$P_{max} < 1.8 P_{nom}$
Overload 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
EMC standards		EN55022 (CISPR22)
Thermal resistance case-ambient		$1.8^{\circ}C / W$
Typical MTBF		up to 75000 Hrs***
Case material		metal
Dimensions, mm		175×93×35
Weight, kg		< 1.1
Warranty		2 year

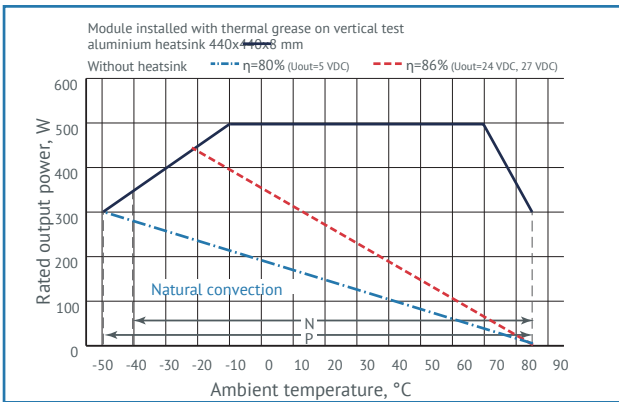
* Parameters are stated for the information purposes and could not be used at long term work, exceeding maximum output current, operating outside of a working temperatures range or when output voltage is over the range of adjustment.

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

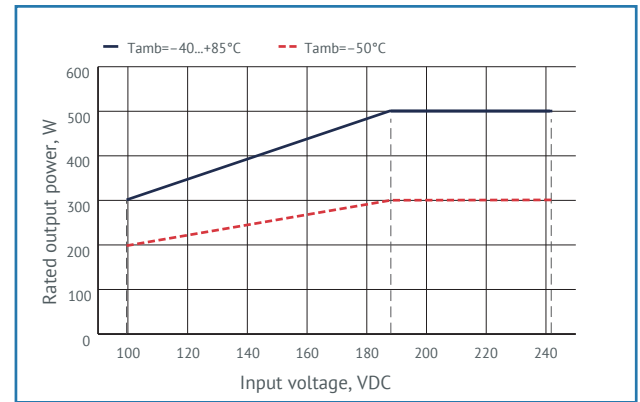
*** When $U_{out} = I_{in, nom.}$, $P_{in} = 0.5 - P_{max}$, $T_{case} \leq 0.5 - T_{case, max}$.

Derating

vs Temperature. MAA500

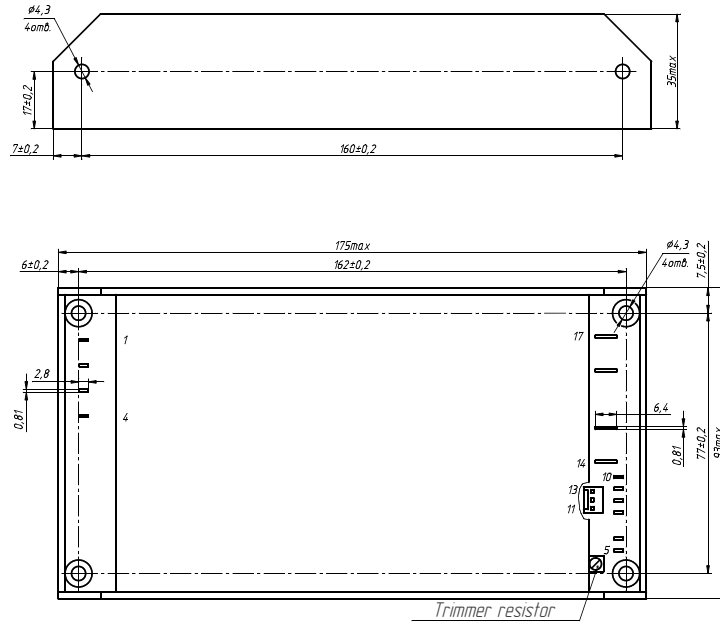


vs Input Voltage. MAA500



Dimensions

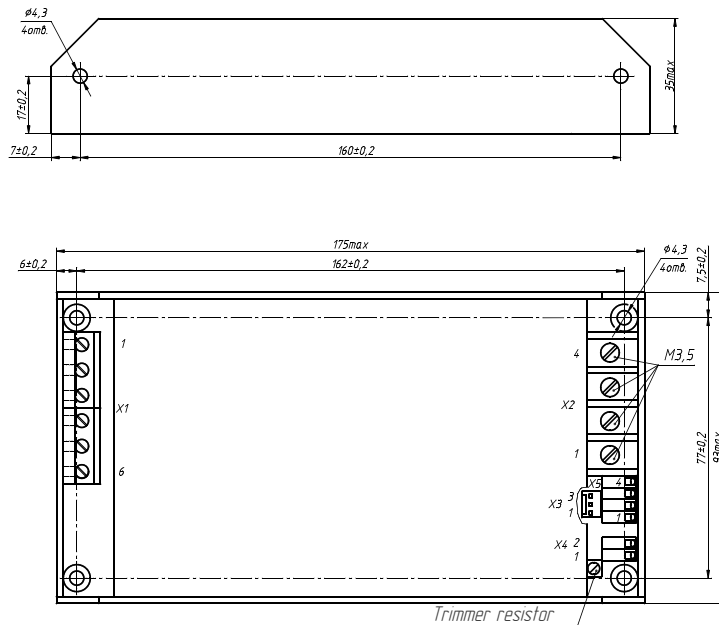
Single channel version with blade contacts



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	-

PIN #	14	15	16	17
DESIGNATION	+Uout	+Uout	-Uout	-Uout

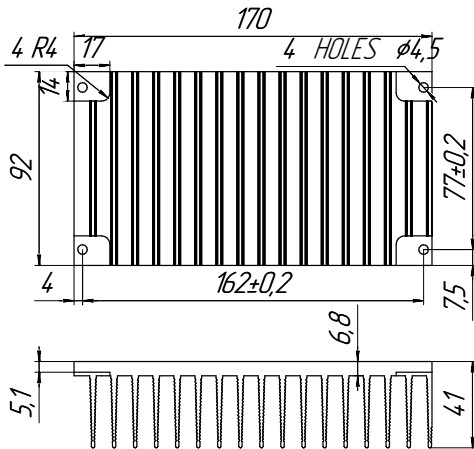
Single Channel with Terminal Blocks



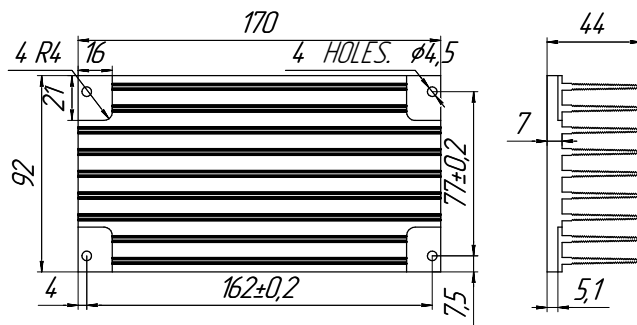
PIN #	X1.1	X1.2	X1.3	X1.4	X2.1	X2.2	X2.3	X2.4	X3.1	X3.2	X3.3	X4.1	X4.2	X5.1	X5.2	X5.3	X5.4
DESIGNATION	A	B	C	CASE	+Uout	+Uout	-Uout	-Uout	+U FAN	-U FAN	-	-REMOTE OFF	+REMOTE OFF	+RS	-RS	PARAL	TRIM

Radiator dimension drawing

Radiator BKYAU.752695.050 transverse



Radiator BKJAU.752695.057 longitudinal



This datasheet is valid for the following units:

MAA500-1P24SXX,MAA500-1P27SXX,MAA500-1T24SXX,MAA500-1T27SXX