

AC/DC power supplies

MAA Family

MAA1200-SG(SD), 1200 W



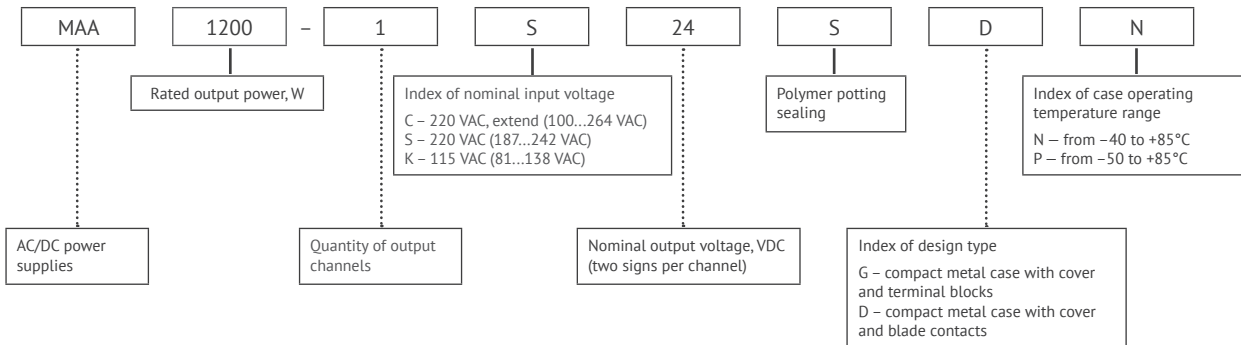
Features

Input voltage.....	~220(187...242) V ~220(100...264) V ~115(81...138) V
Output voltage.....	=24 V;=28 V;=48 V
Efficiency.....	no more than 80%
Case operating temperature.....	-40...+85°C; -50...+85°C
Demensions.....	250x140x41 mm
Warently.....	2 years

Advantage

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

Ordering information



Output specifications*

Parameter	Value		
Nominal output voltage, VDC	24	28	48
Output voltage adjustment	±10 %		
Efficiency, %	no less than 80		
Rated output current, A	50	44,44	25
Ripple and noise (peak-to-peak)	no more than 2%		
Line and load regulation	<2%		
Start-up time, ms	<2000		
Parallel operation	redundancy, and boost of power		
Remote on/off	Off at 3.5...4.5 VAC (15...30 mA) output «REMOTE OFF»		
Maximum load capacity	33000 µF (U _{out} from 24 to 28 VDC) 11000 µF (U _{out} = 48 VDC)		

Input specifications*

Parameter	Value	
Input voltage range, VAC**	C	~100...264 (=141...372)
	S	~187...242 (=263...340)
	K	~81...138
Transient deviation range, VAC	C	~100...264
	S	~176...264
	K	~81...150
Transient time	S, K	1 s.
Mains frequency range, Hz	K	50
	C, S	47...440
Power factor corrector	C, S, K	+
Inrush current	C	22,5
	S	66,0
	K	79,2

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

** For input voltage Ts (wide area network), the maximum output power decreases at input voltage 100...176 V according to the graph of power decrease depending on input voltage. Parameters are for reference and cannot be used for long-term operation, exceeding the maximum output current, operating outside the operating temperature range.

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
EMC standards		EN55022 (CISPR22)
Typical MTBF		up to 75000 Hrs***
Case material		metal
Dimensions, mm		250x140x41
Weight, kg		no more than 2.4
Warranty		2 year

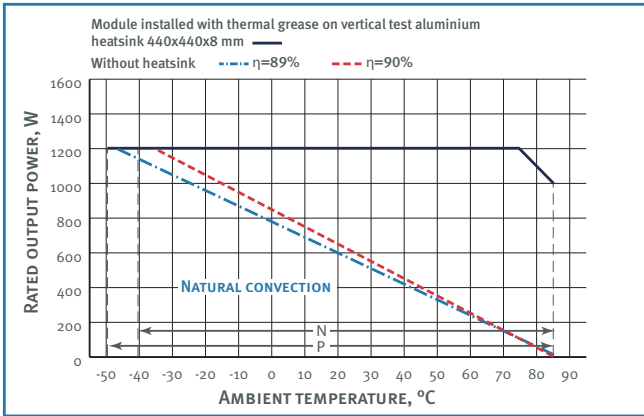
* For output voltage C (wide mains) the maximum output power is taken at input voltage 100...176 V according to the graph of power reduction depending on the input voltage

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

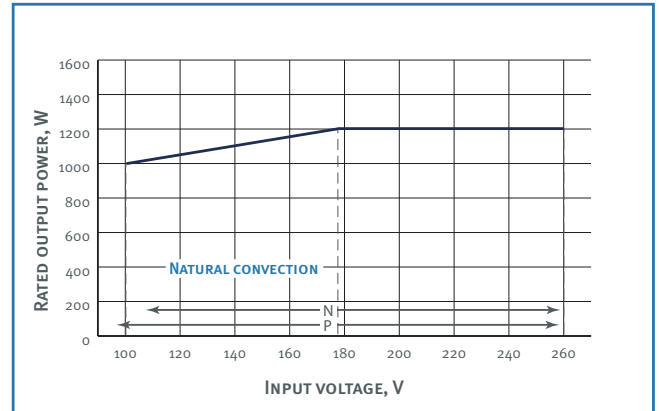
*** When $U_{out} = U_{out, nom.}$, $P_{in} = 0.5 * P_{max}$, $T_{case} \leq 0.5 * T_{case, max.}$

Derating

vs Temperature

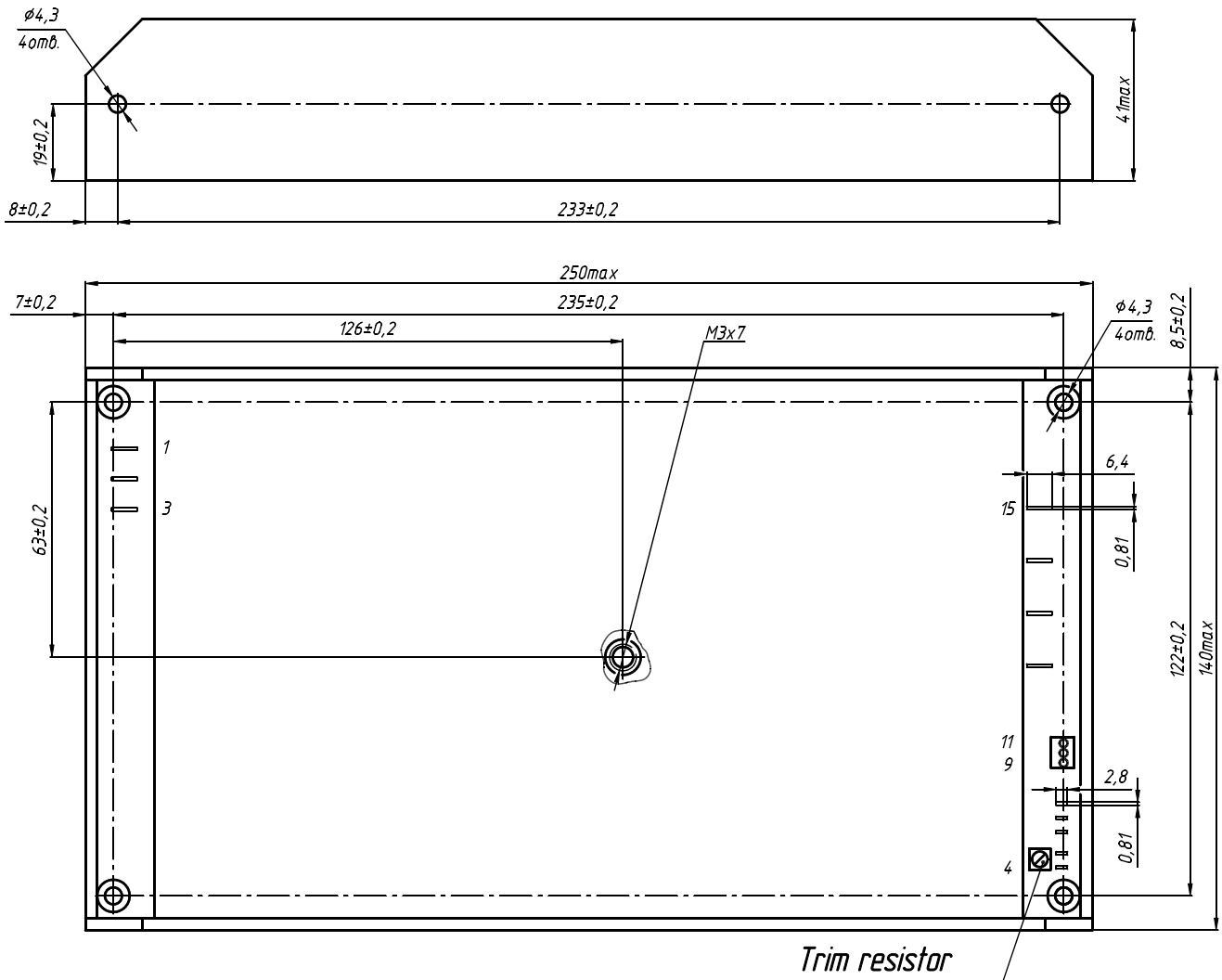


vs Input Voltage



Dimensions

Single-channel design with blade contacts



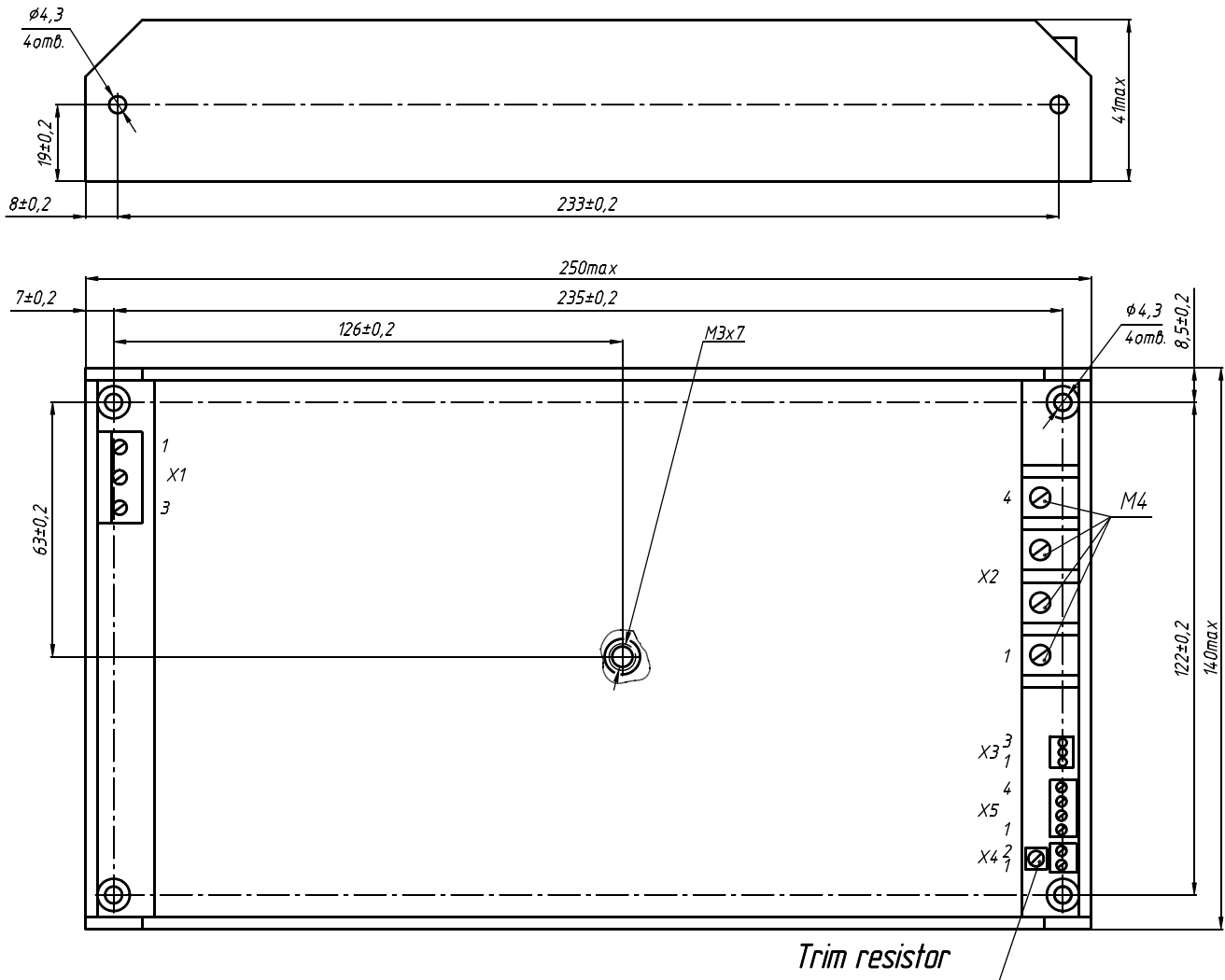
Pin assignment

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


PIN #	8	9	10	11	12	13	14	15
SINGLE-CHANNEL	PARAL	+U FAN	-U FAN	-	+Uout1	+Uout1	-Uout1	-Uout1

Dimensions

Single-channel design with terminal blocks

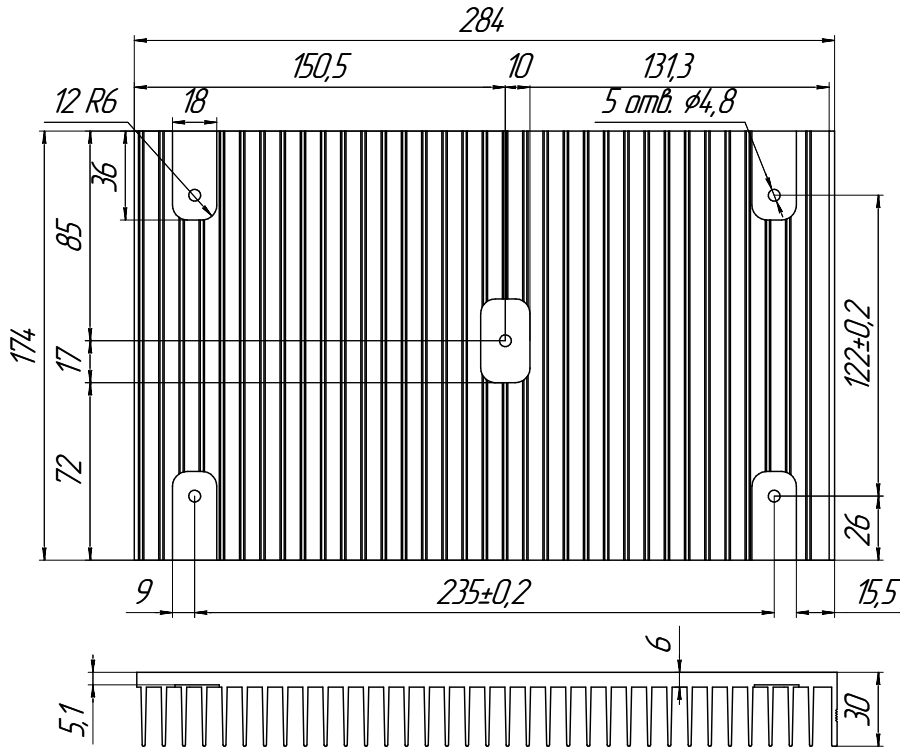


Pin assignment

PIN #	X1.1	X1.2	X1.3	X2.1	X2.2	X2.3	X2.4	X3.1
SINGLE-CHANNEL	L	N		+Uout1	+Uout1	-Uout1	-Uout1	+U FAN

PIN #	X3.2	X3.3	X4.1	X4.2	X5.1	X5.2	X5.3	X5.4
SINGLE-CHANNEL	-U FAN	-	-REMOTE OFF	+REMOTE OFF	+RS	-RS	PARAL	-

Radiator dimension drawing
Radiator BKYAU.752695.036



This datasheet is valid for the following units: MAA1200-1S24SXX, MAA1200-1S27SXX, MAA1200-1C48SXX, MAA1200-1C24SXX, MAA1200-1C28SXX, MAA1200-1C48SXX