

AC/DC power supplies

MAA Family **MAA1500-SG(SD)**, 1500 W



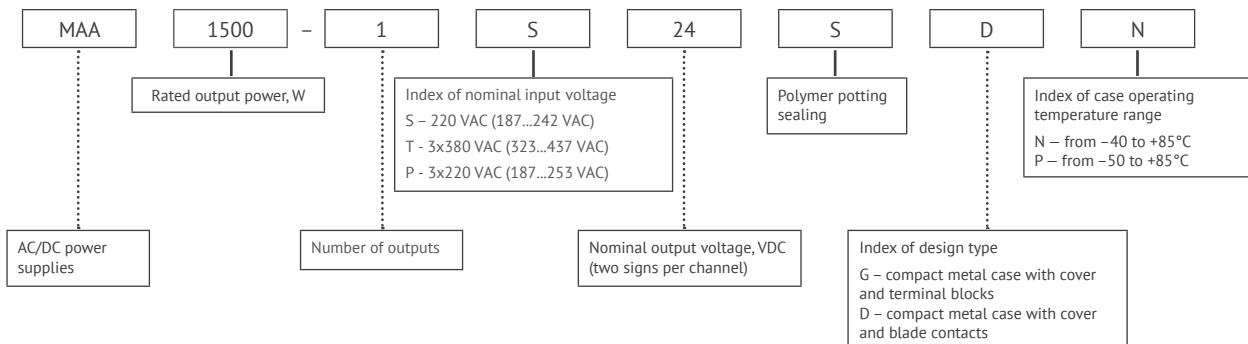
Features

Input voltage.....	~220 (187...264)V
.....	~3x380V (323...437) V
.....	~3x220V (187...253) V
Output voltage.....	=24 V;=28 V;=48 V
Efficiency.....	no less than 80%
Case operating temperature.....	-40...+85°C; -50...+85°C
Dimensions.....	250x140x41 mm
Warranty.....	2 years

Advantage

- ◀ Parallel and series connection
- ◀ Output voltage regulation
- ◀ Conductive cooling
- ◀ Output voltage diagnostics

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	62.5	55,55	31.25
Ripple and noise (peak-to-peak)	<2% Uout nom		
Line and load regulation	no more than 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»		

Input specifications*

Parameter	Value		
Input voltage range, VAC	S	~187...242 (=263...340)	
	T	~323...437	
	P	~187...253	
Transient deviation range, VAC	S	~176...264	
	T	~304...456	
	P	~176...264	
Transient time	S, T, P	1 s.	
Mains frequency range, Hz	P	360...440	
	S, T	47...440	
Power factor corrector	C, T, P	+	
Inrush current	S	7,3	
	T	4,1	
	P	7,0	

* 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)	
Typical MTBF	75000 hrs***	
Case material	metal	
Dimensions, mm	250x140x41	
Weight, kg	< 2.4	
Warranty	2 year	

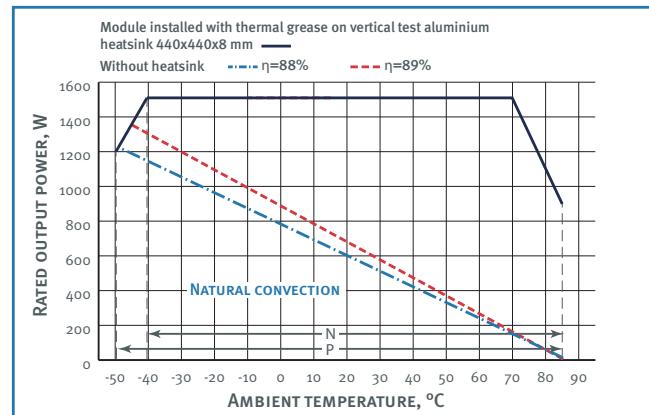
* For output voltage C (wide mains) the maximum output power is taken at input voltage 100...176 V according to the graph of power reduction depending on the input voltage

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

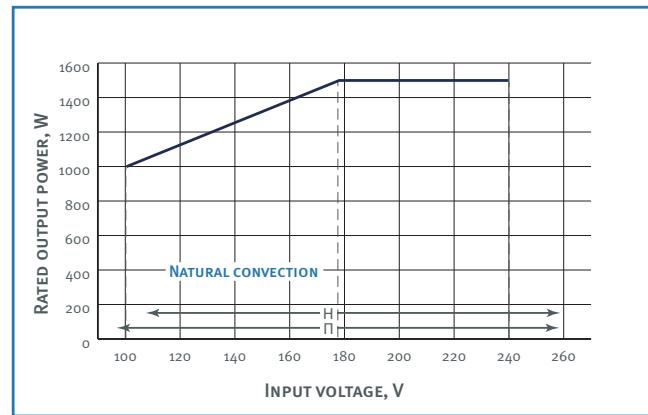
*** When Uout=Uout.nom., Pin=0.5*Pmax, Tcase≤0.5*Tcase.max.

Derating

vs Temperature

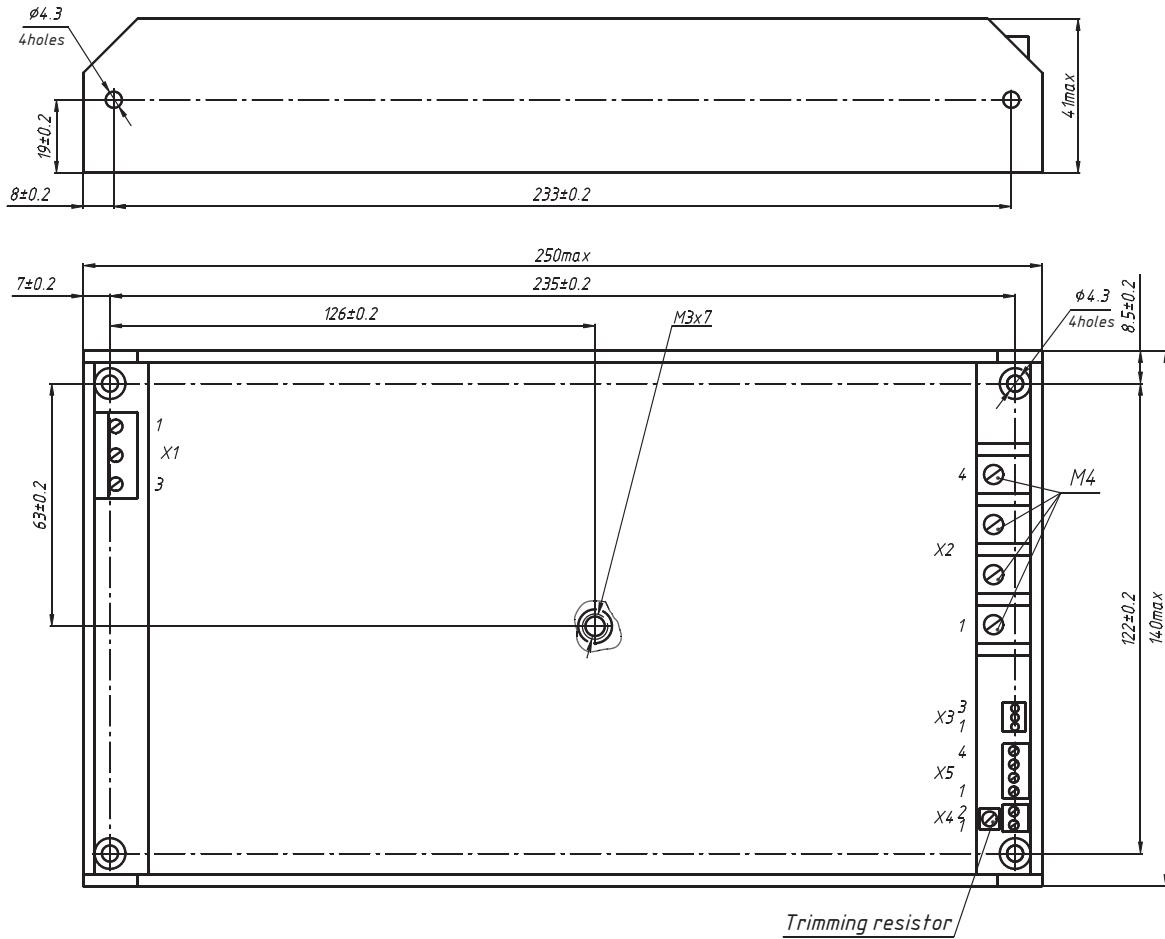


vs Input Voltage



Dimensions

Single-channel design with terminal blocks

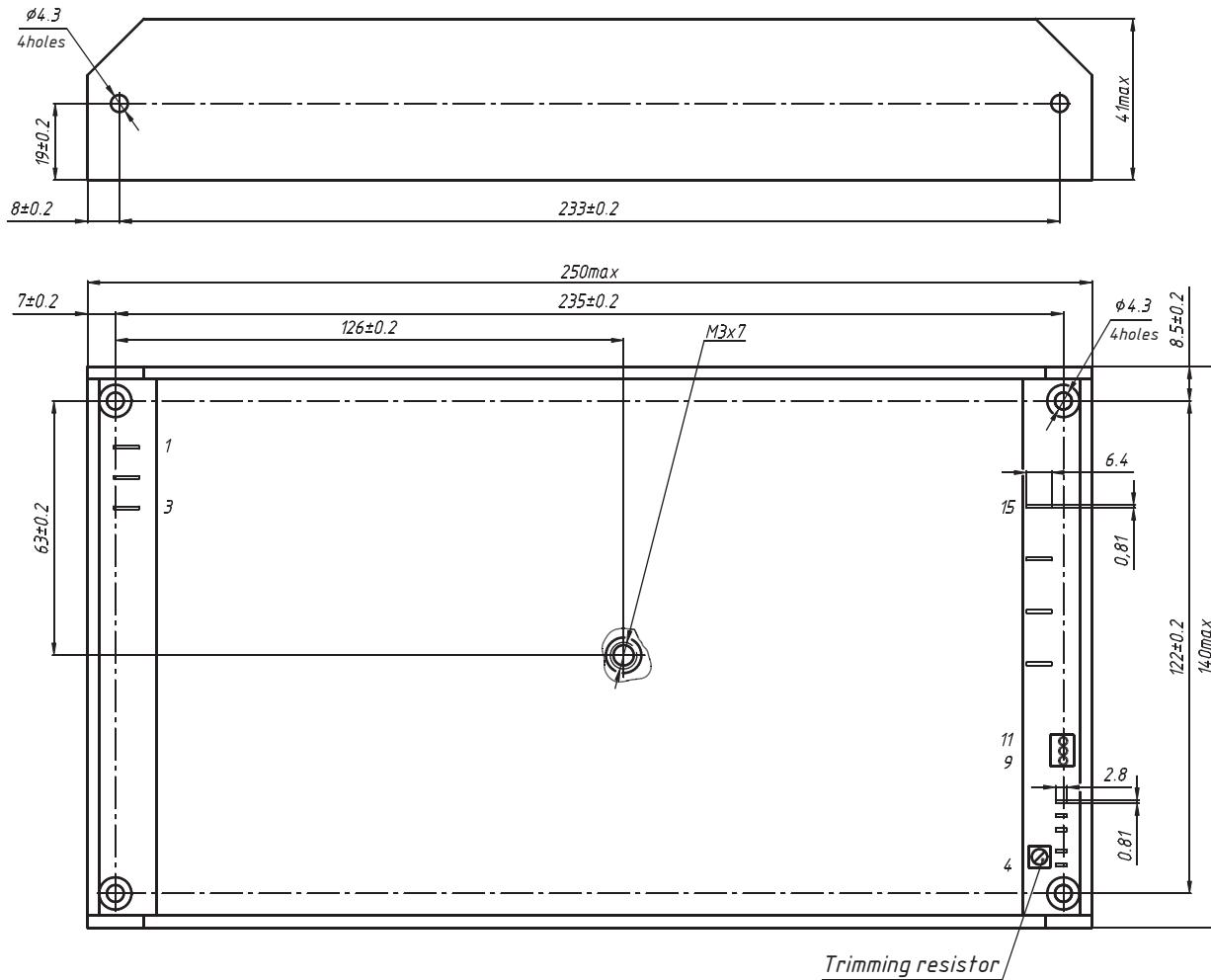


PIN #	X1.1	X1.2	X1.3	X2.1	X2.2	X2.3	X2.4	X3.1
SINGLE-CHANNEL	L	N	(⏚)	+ OUT 1	+ OUT 1	- OUT 1	- OUT 1	+U FAN

PIN #	X3.2	X3.3	X4.1	X4.2	X5.1	X5.2	X5.3	X5.4
SINGLE-CHANNEL	-U FAN	NOT USE	-REMOTE OFF	+REMOTE OFF	+RS	-RS	PARAL	NOT USE

Dimensions

Single-channel design with blade contacts

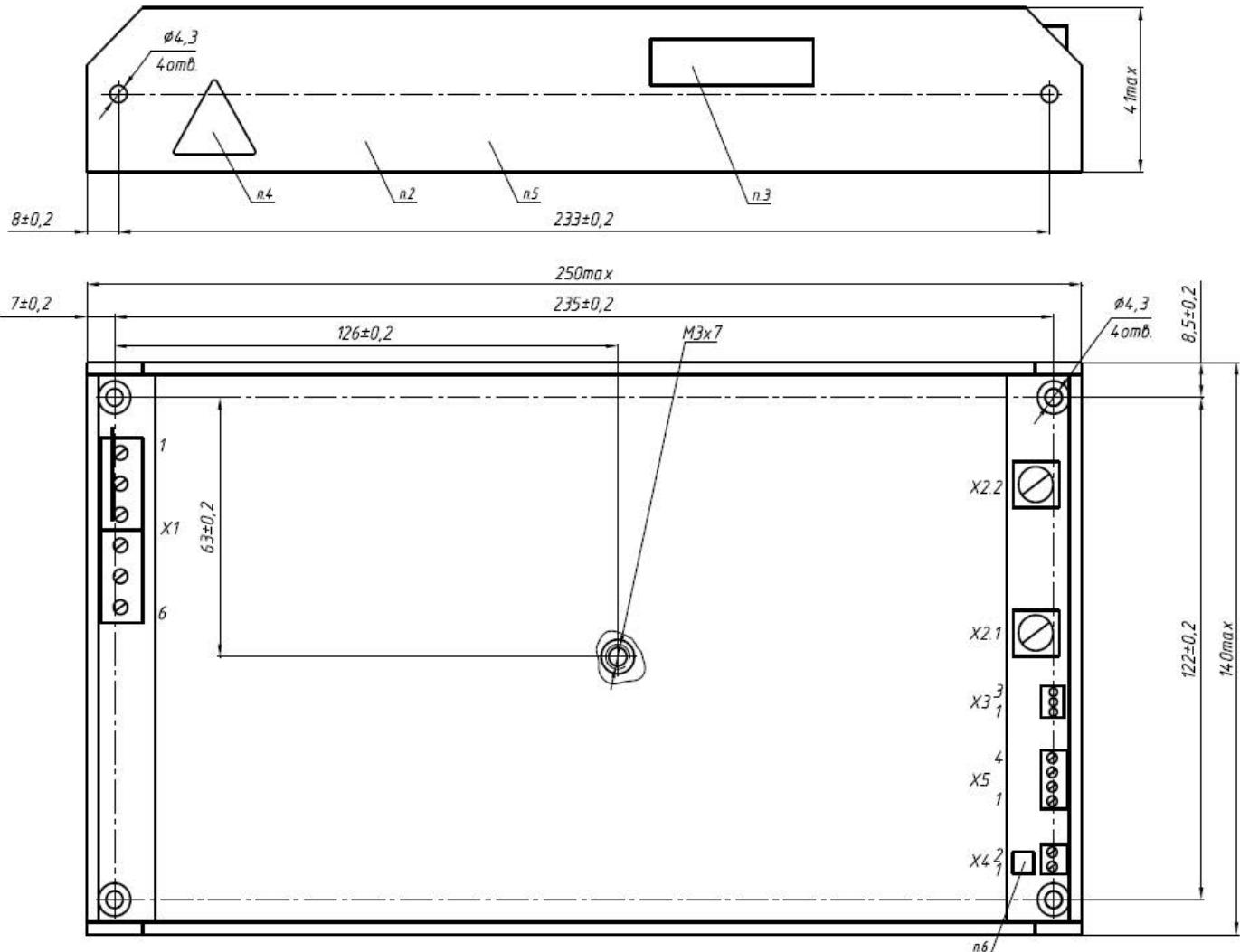


PIN #	1	2	3	4	5	6	7
SINGLE-CHANNEL	L	N	(circle with a cross)	-REMOTE OFF	+REMOTE OFF	+RS	-RS

PIN #	8	9	10	11	12	13	14	15
SINGLE-CHANNEL	PARAL	+U FAN	-U FAN	NOT USE	+ OUT 1	+ OUT 1	-OUT 1	-OUT 1

Overall scheme

Three-phase module Version with terminal blocks



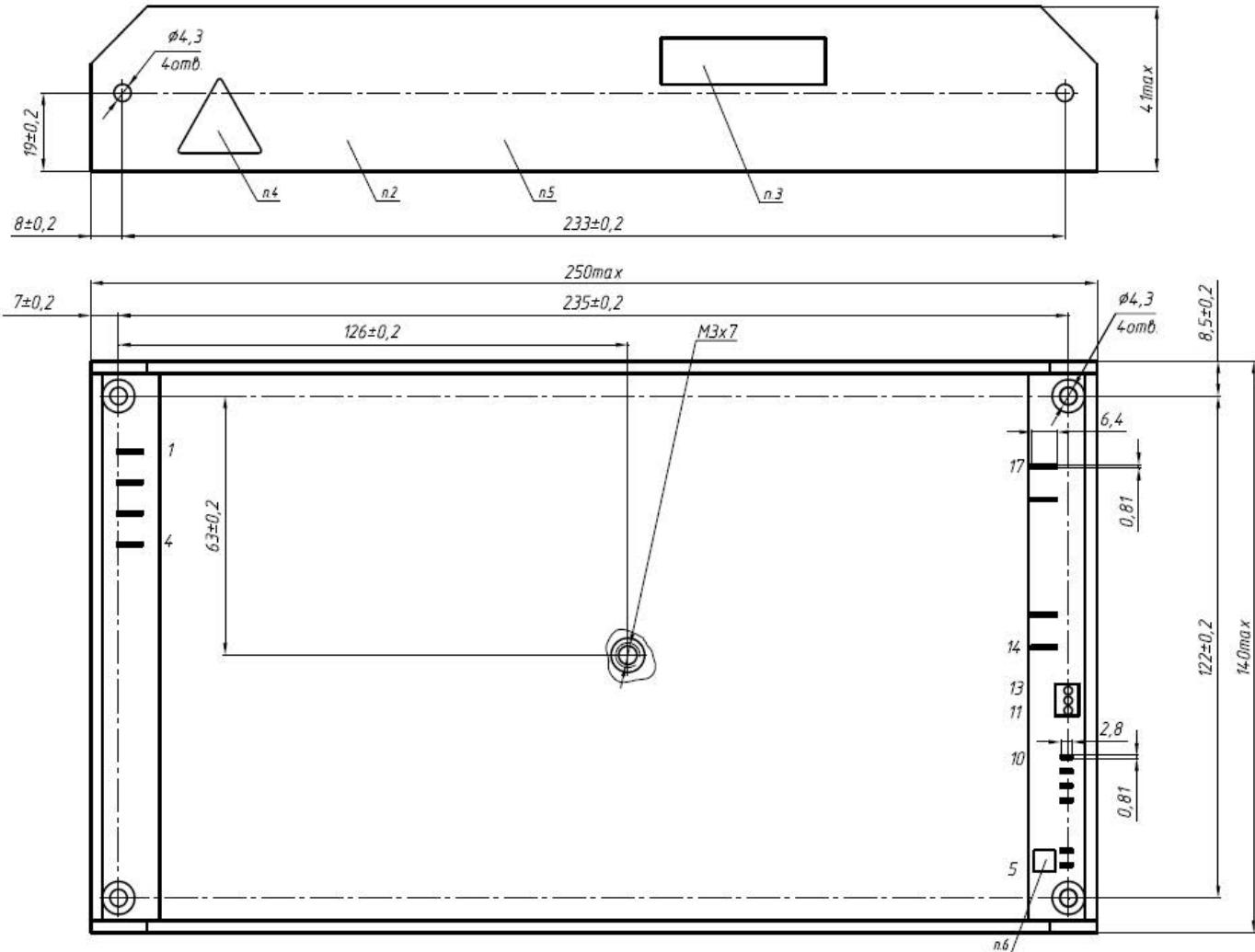
Pin assignment

PIN #	X1.1	X1.2	X1.3	X1.4	X1.5	X1.6	X2.1	X2.2	X3.1
SINGLE-CHANNEL	C	B	A	(\perp)	-	-	+ OUT 1	-OUT 1	+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	ADJ

Overall scheme

Three-phase module Version with knife contacts

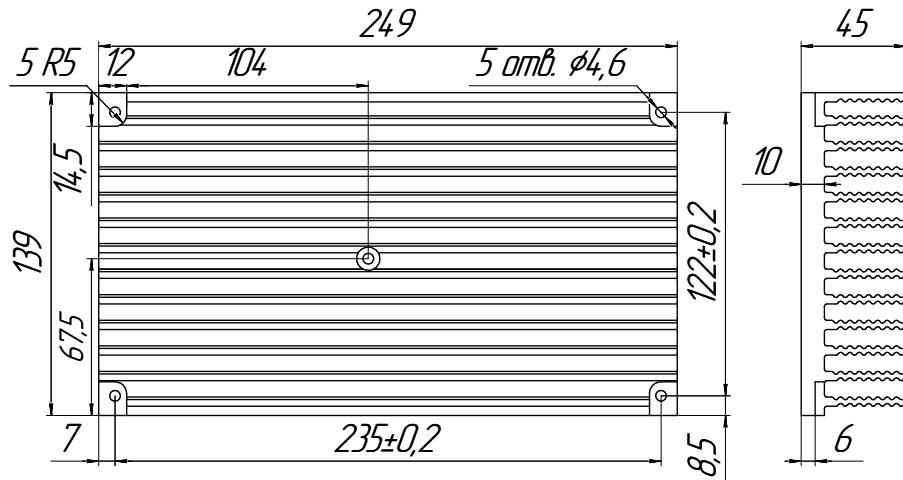


Pin assignment

PIN #	1	2	3	4	5	6	7	8
SINGLE-CHANNEL	C	B	A	(GND)	-REMOTE OFF	+REMOTE OFF	+RS	-RS

PIN #	9	10	11	12	13	14	15	16	17
SINGLE-CHANNEL	PARAL	ADJ	+U FAN	-U FAN	-	+ OUT 1	+ OUT 1	- OUT 1	- OUT 1

Dimensional drawing of the radiator



This datasheet is valid for the following units: MAA1500-1S24SXX, MAA1500-1S28SXX, MAA1500-1S48SXX.