AC/DC power supplies

MAA Family
MAA1500, 1500 W threephase

Basic specifications

Input voltage	~220 (187...253) VAC ~380 (323...437) VAC
Output voltage	=24 VDC, =28 VDC, =48 VDC
Efficiency	≥80%
Case operating temperature	-40...+85 °C; -50...+85 °C
Dimensions	250×140×41 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

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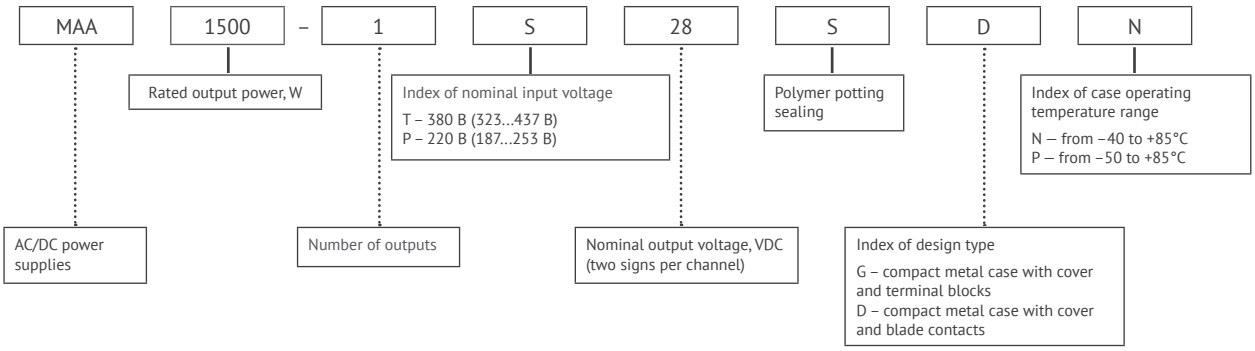
17.07.24

Ordering information



Output specifications*

Parameter	Value		
Nominal output voltage, VDC	24	28	48
Output voltage adjustment	±10 %		
Efficiency, %	89	89	90
Rated output current, A	62.5	55.55	31.25
Ripple and noise (peak-to-peak)	<2%		
Line and load regulation	max 2%		
Start-up time, s	<2		
Parallel operation	redundancy, and boost of power		
Remote on/off	Off at 3.5...4.5 VDC (15...30 mA) output «REMOTE OFF»		

Input specifications*

Parameter		Value
Input voltage range, VAC**	T (3ph. without neutral)	~323...437 (=455...616)
	P (3ph. without neutral)	~187...253 (=263...356)
Transient deviation range, VAC	T	~304...456
	P	~176...264
Transient time	T, P	1 s.
Mains frequency range, Hz	T	47...53
	P	360...440
The value of the current consumed from the mains at the time of switching on, A	T	4,1
	P	7,0

* 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), Uin. nom., Iout. nom., unless otherwise noted.

** Maximum output power for input voltage range C (wide range) at Uout 100...187 VDC is reducing according to power derating VS input voltage diagram.

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Protections

Type of protection	
Short-circuit protection*	auto recovery
Overload protection	Pmax<1.8 Pnom
Overvoltage 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 MOhm min
Cooling		conductive
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		250×140×41
Weight, kg		< 2.4
Warranty		2 year

* All specifications are given for normal climatic conditions, Uin.nom., Iout.nom., unless otherwise specified.
** At Uin=Uin nom, Pout=0.5·Pmax, Tkorp≤0.5·Tkorp.max.
***Typical MTBF values for KWant and MAA series are determined by calculation method in accordance to MIL-HDBK-217, (25°C).

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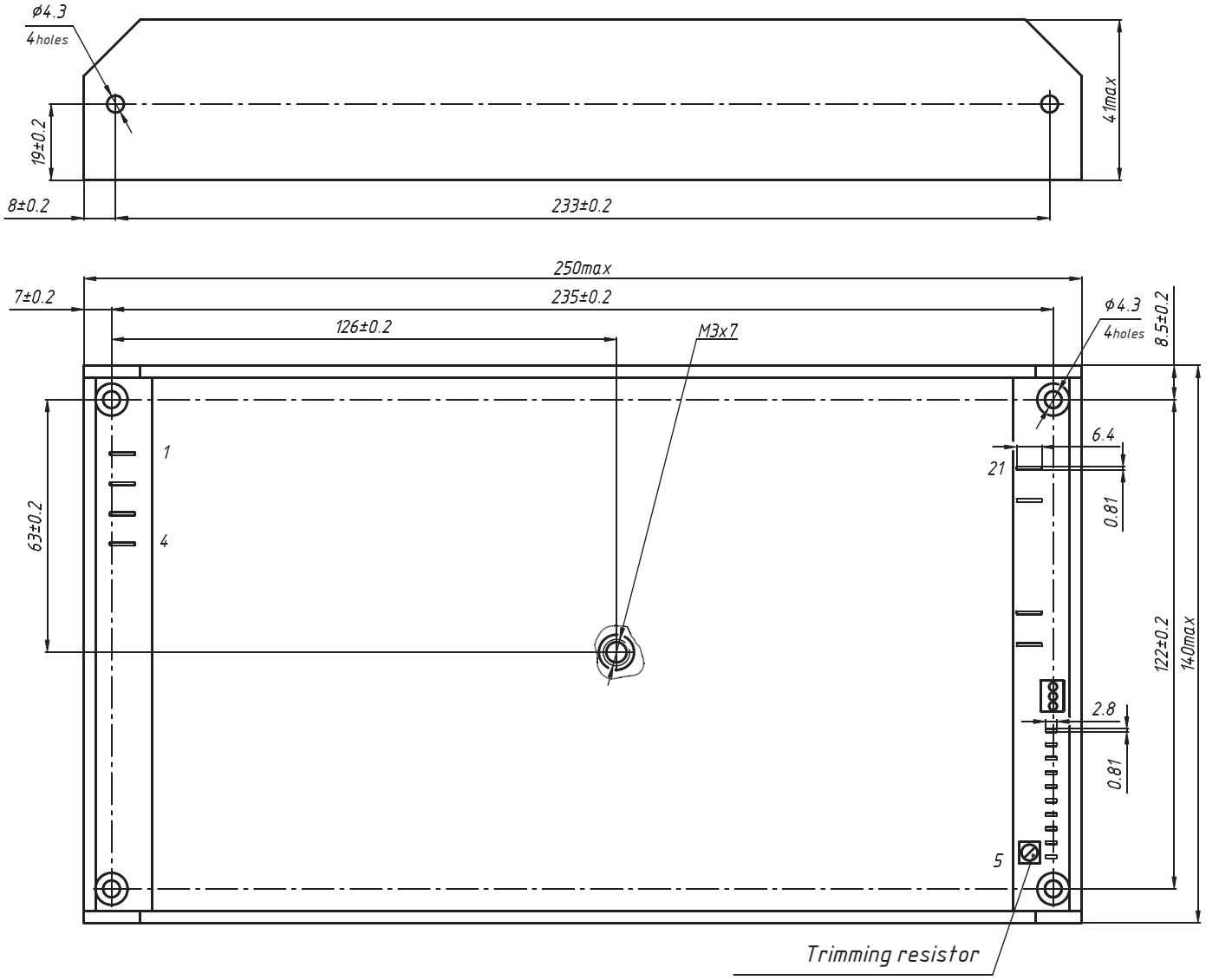
Dimensions

Single-channel design with blade contacts



PIN #	1	2	3	4	5	6	7	8	9	10	11
SINGLE-CHANNEL	C	B	A	⏚	−REMOTE OFF	+REMOTE OFF	+RS	−RS	PARAL	ADG	+FAN

PIN #	12	13	14	15	16	17
SINGLE-CHANNEL	−FAN	NOT USE	+OUT	+OUT	−OUT	−OUT

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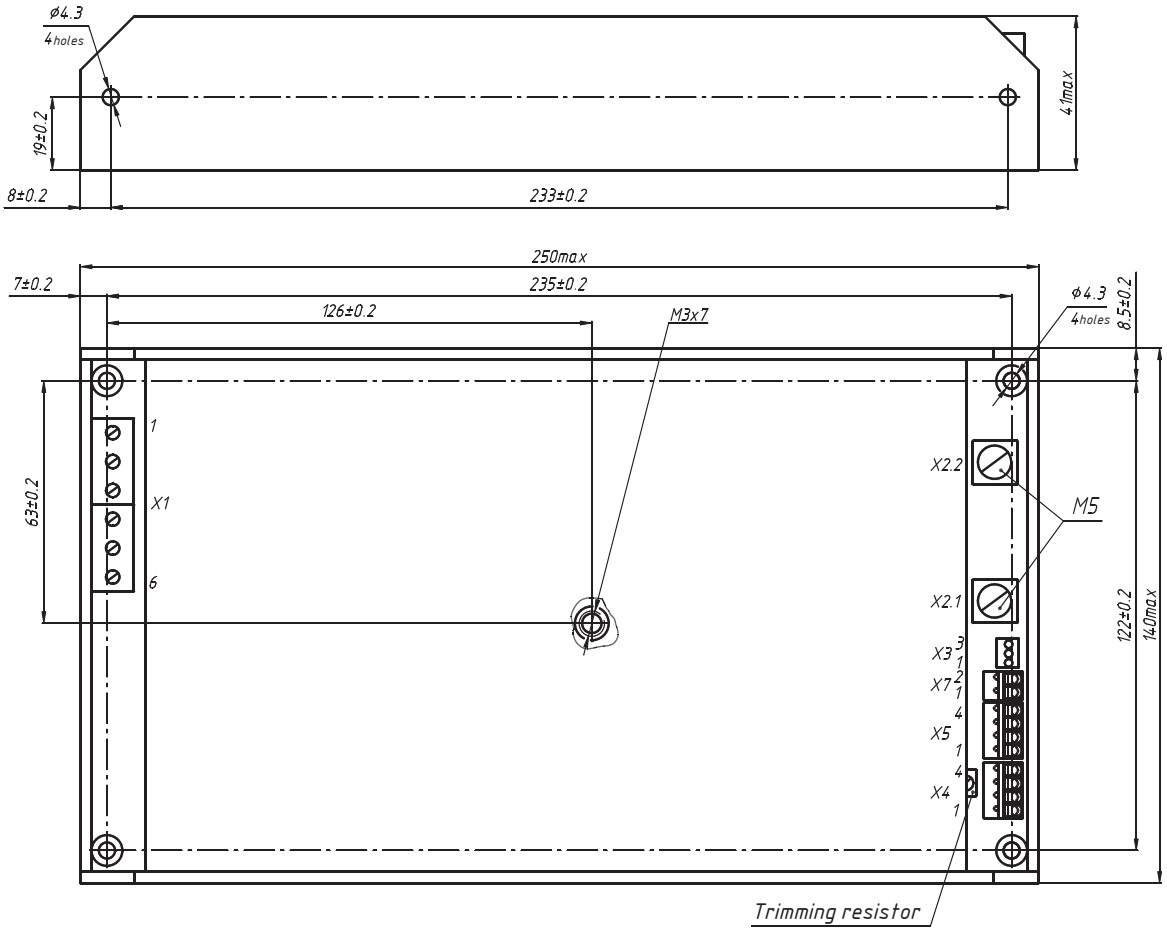
Dimensions

Single-channel design with terminal blocks



PIN #	X1.1	X1.2	X1.3	X1.4	X1.5	X1.6	X2.1	X2.2	X3.1	X3.2	X3.3
SINGLE-CHANNEL	C	B	A	⏚	NOT USE	NOT USE	+OUT	−OUT	+FAN	−FAN	NOT USE

PIN #	X4.1	X4.2	X5.1	X5.2	X5.3	X5.4
SINGLE-CHANNEL	−REMOTE OFF	+REMOTE OFF	+RS	−RS	PARAL	ADG

This datasheet is valid for the following units:
MAA1500-1T24CXX, MAA1500-1T28CXX, MAA1500-1T48CXX, MAA1500-1P24CXX, MAA1500-1P28CXX, MAA1500-1P48CXX.

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