

AC/DC power supplies

MAA Family

MAA150-SG(CD), 150 W



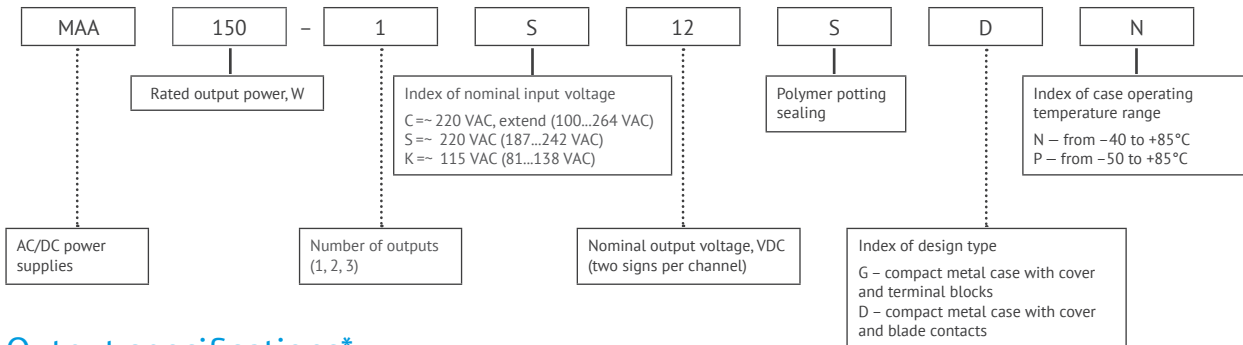
Features

Input voltage.....	~220 (100...264)V; ~220 (187...242)V; ~115 (81...138)V
Efficiency.....	>80%
Case operating temperature.....	-40...+85°C; -50...+85°C
Dimensions	131x83,5x32,5mm
Warranty.....	2 years

Advantages

- ◀ Remote shutdown
- ◀ Output voltage adjustment
- ◀ Conductive cooling

Ordering information



Output specifications*

Parameter	Value					
Nominal output voltage, VDC	5	9	12	15	24	27
Output voltage adjustment	±10 %					
Efficiency, %	78 at Uout=5 V 80 at Uout>5 V					
Rated output current, A	30	16.66	12.5	10	6.25	5.55
Output channel power distribution	single-channel	100%-1				
	dual-channel	50%-1, 50%-2				
	triple-channel	50%-1, 25%-2, 25%-3				
Ripple and noise (peak-to-peak)	<2%					
Line and load regulation	max 2% for first channel max 10% for second (third) channel					
Start-up time, ms	<500					
Remote on/off	Off at 3...4,5 VAC (15...30 mA) output «REMOTE OFF»					
Maximum load capacity	135000 µF (Uout = 5 V); 45000 µF (Uout from 6 V to 15 V turn on); 15000 µF (Uout from 15 V to 27 V turn on);					

Input specifications*

Parameter	Value	
Input voltage range, VAC**	C	~100...264 (=141...372)
	S	~187...242 (=263...340)
	K	~81...138 (=113...198)
Transient deviation range, VAC	C	~100...264
	S	~176...264
	K	~81...150
Transient time	S, K	1 s.
	C	-
Mains frequency range, Hz	C, S	47...440
	K	360...440
Inrush current, A	S	3,7
	C	10,9
	K	13,1

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

** Maximum output power for input voltage range C (wide range) at Uout 100...176 VDC is reducing according to power derating VS input voltage diagram.

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 M Ω min
Cooling		conductive
EMC standards		EN55022 (CISPR22)
Typical MTBF		up to 75000Hrs***
Case material		metal
Dimensions, mm		131×83×32,5
Weight, kg		< 0.6
Warranty		2 year

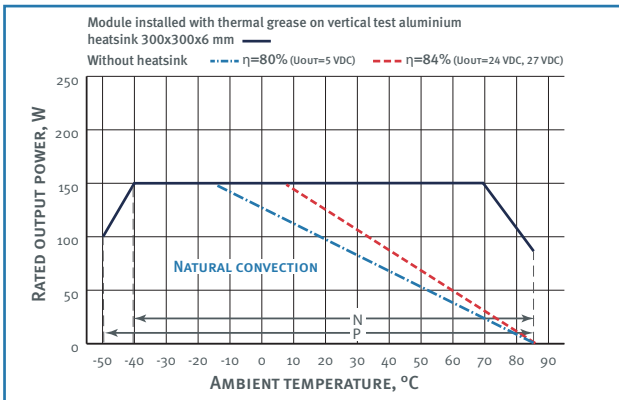
* Parameters are stated for the information purposes and could not be used at long term work, exceeding maximum output current, operating outside of a working temperatures range or when output voltage is over the range of adjustment.

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

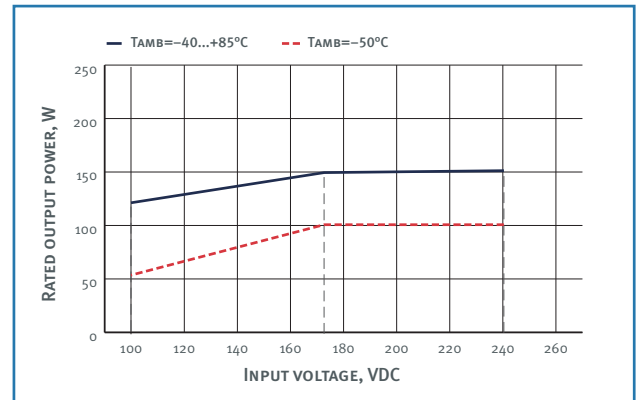
*** When $U_{in} = U_{in, nom.}$, $P_{out} = 0.5 \cdot R_{max}$, $T_{case} \approx 0.5 \cdot T_{case, max}$.

Derating

vs Temperature. MAA150

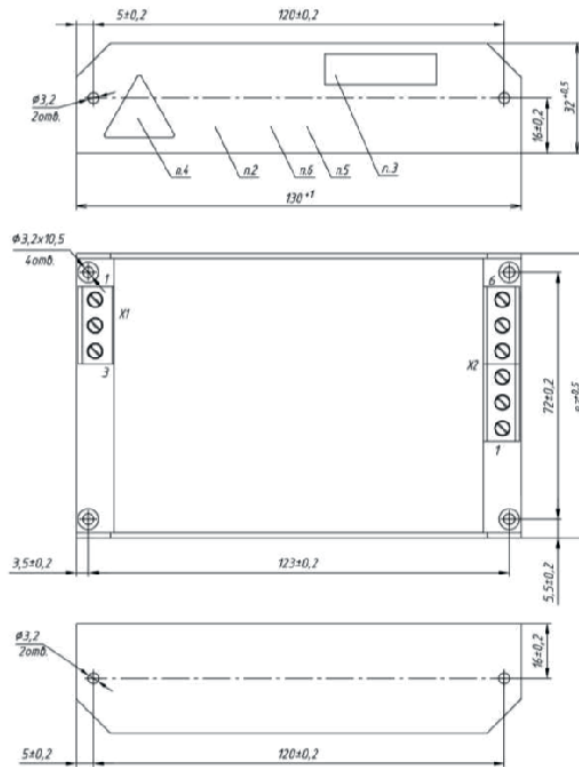



vs Input Voltage. MAA150



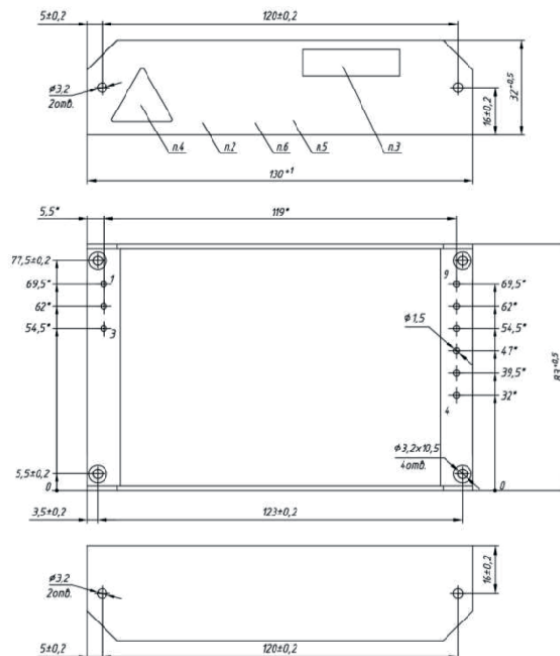
Dimensions


Single-channel design with terminal blocks



PIN #	X1.1	X1.2	X1.3	X2.1	X2.2	X2.3	X2.4	X2.5	X2.6
SINGLE-CHANNEL		N	L	-REMOTE OFF	+REMOTE OFF	-OUT 1	-OUT 1	+OUT 1	+OUT 1

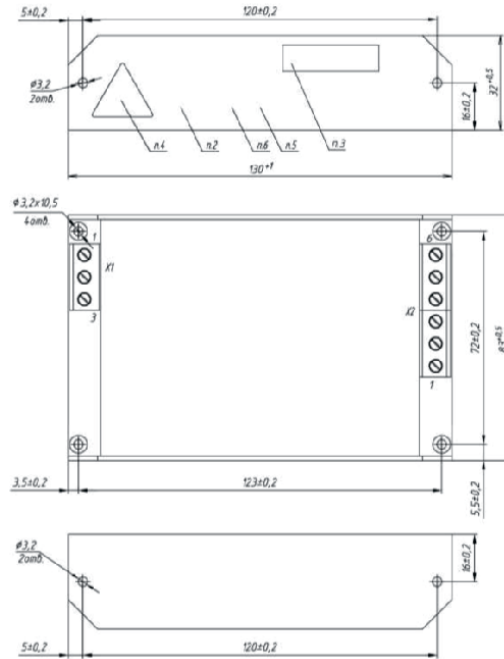
Single-channel design with blade contacts




PIN #	1	2	3	4	5	6	7	8	9
SINGLE-CHANNEL		N	L	-REMOTE OFF	+REMOTE OFF	-OUT 1	-OUT 1	+OUT 1	+OUT 1

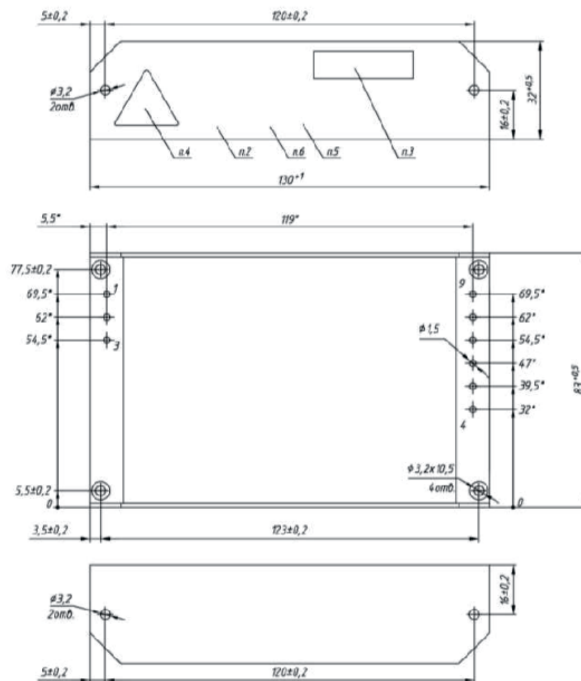
Dimensions


Dual-channel design with terminal blocks



PIN #	X1.1	X1.2	X1.3	X2.1	X2.2	X2.3	X2.4	X2.5	X2.6
DUAL-CHANNEL		N	L	-REMOTE OFF	+REMOTE OFF	-OUT 1	+OUT 1	-OUT 2	+OUT 2

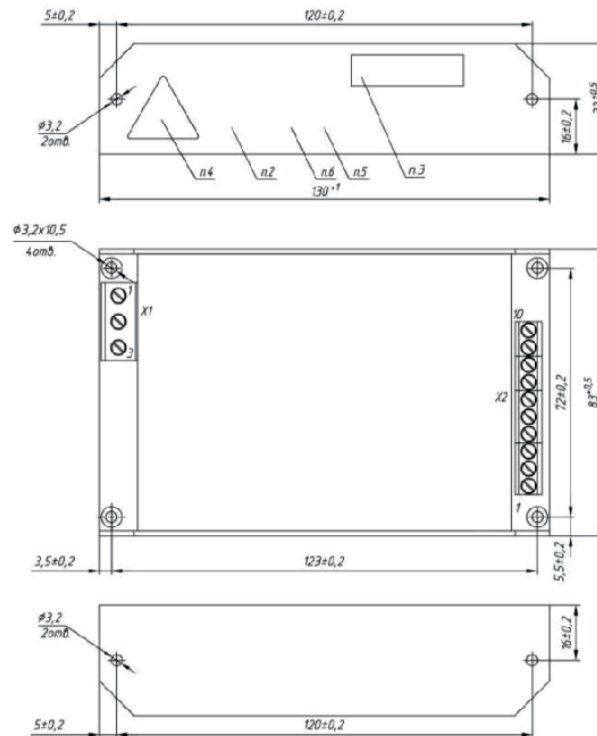
Dual-channel design with blade contacts



PIN #	1	2	3	4	5	6	7	8	9
DUAL-CHANNEL		N	L	-REMOTE OFF	+REMOTE OFF	-OUT 1	+OUT 1	-OUT 2	+OUT 2

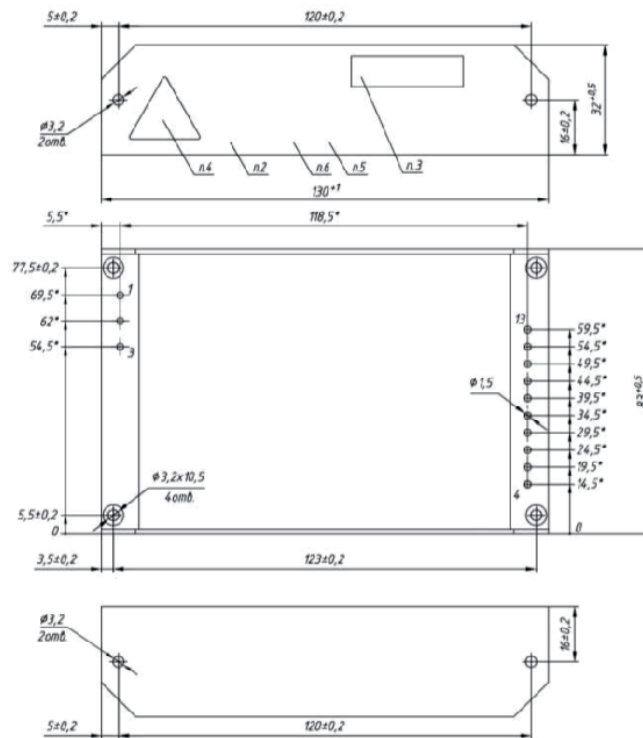
Dimensions

Triple-channel design with terminal blocks



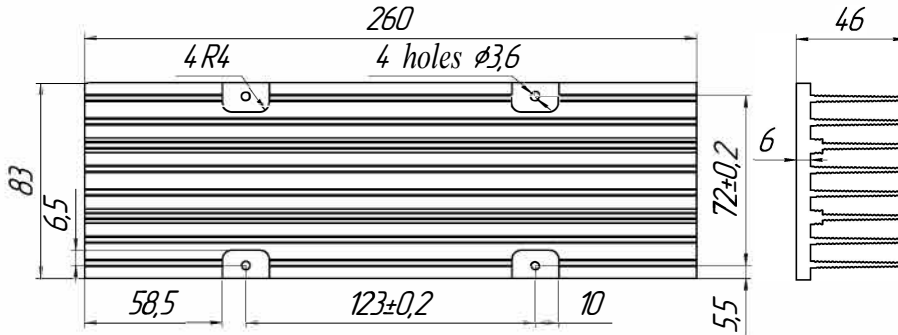
PIN #	X1.1	X1.2	X1.3	X2.1	X2.2	X2.3	X2.4	X2.5	X2.6	X2.7	X2.8	X2.9	X2.10
TRIPLE-CHANNEL		N	L	+REMOTE OFF	-REMOTE OFF	+OUT 1	+OUT1	-OUT1	-OUT1	+OUT2	-OUT2	+OUT3	-OUT3

Triple-channel design with blade contacts

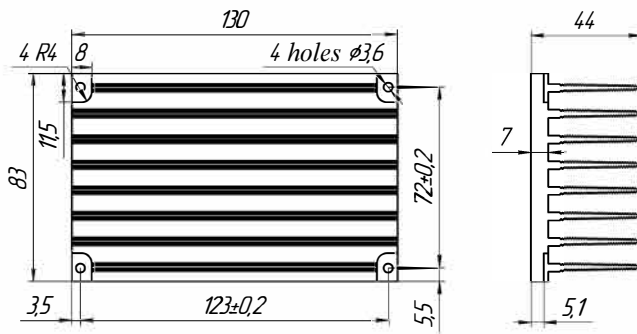


PIN #	1	2	3	4	5	6	7	8	9	10	11	12	13
TRIPLE-CHANNEL		N	L	+REMOTE OFF	-REMOTE OFF	+OUT 1	+OUT 1	-OUT 1	-OUT 1	+OUT 2	-OUT 2	+OUT 3	-OUT 3

Radiator dimension drawing
Radiator BKYAU.752695.043



Radiator BKJAU.752695.041



This datasheet is valid for the following units: MAA150-1C05SXX, MAA150-1C09SXX, MAA150-1C12SXX, MAA150-1C15SXX, MAA150-1C24SXX, MAA150-1C27SXX, , MAA150-1S05SXX, MAA150-1S09SXX, MAA150-1S12SXX, MAA150-1S15SXX, MAA150-1S24SXX, MAA150-1S27SXX, MAA150-1K05SXX, MAA150-1K09SXX, MAA150-1K12SXX, MAA150-1K15SXX, MAA150-1K24SXX, MAA150-1K27SXX, MAA150-2C0505CSX, MAA150-2C1212SXX, MAA150-2C1515SXX, MAA150-2C2424SXX, MAA150-2C2727SXX, MAA150-2S0505SXX, MAA150-2S1212SXX, MAA150-2S1515SXX, MAA150-2S2424SXX, MAA150-2S2727SXX, MAA150-2K0505SXX, MAA150-2K1212SXX, MAA150-2K1515SXX, MAA150-2K2424SXX, MAA150-2K2727SXX, MAA150-3C051212SXX, MAA150-3C051515SXX, MAA150-3K051212SXX, MAA150-3K051515SXX, MAA150-3S051212SXX, MAA150-3S051515SXX.