AC/DC power supplies

MAA Family

MAA75-SG(SD), 75 W

Features

Input voltage.....~220(100...264) V
Outout voltage.....=5V;=12V;=15V;=24V;=27V
Efficiency.....no less than 78%
Case operating temperature.....-40...+85°C;-50...+85°C
Dementsions.....111x61x25mm
Warently .....2 years

Adventages

- Low ripple level: < 2% (at Uout=nom)
- Low level of conducted interference - GOST V 25803-91, curve 2
- Ability to operate the module without a radiator at high
- temperatures

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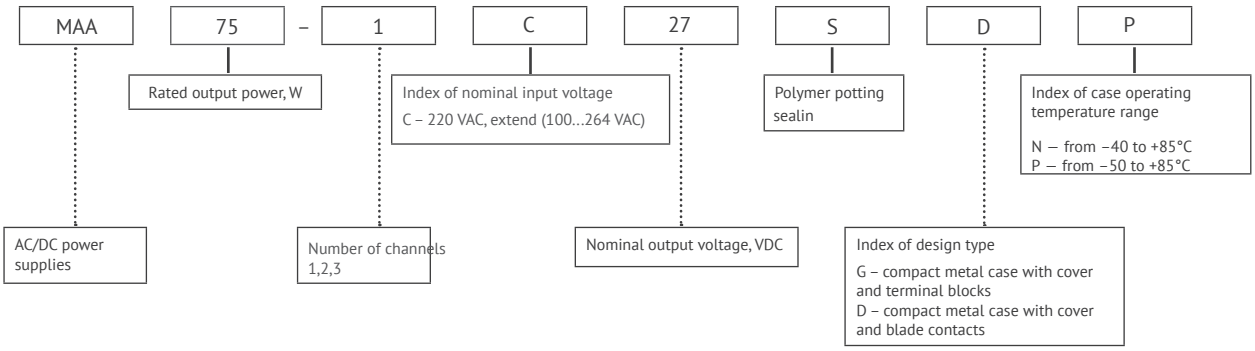
Document version current as of 11.01.24

Ordering information



Input specifications*

Parameter		Value
Input voltage range, V	VAC	100...264
	VDC	141...372
Mains frequency range, Hz		50,400
Consumed current, A		2,4
I^2t (Joule integral) for pulse-type current		50

Output specifications*

Parameter	Value				
Nominal output voltage, VDC	5**	12	15	24	27
Efficiency, %	75 at Uout=5 V 78 at Uout>5 V				
Rated output current, A	15	6.25	5	3,12	2,78
Ripple spread (peak-to-peak), mV	<2% at Uout.nom				
Instability of output voltage at smooth change of input voltage and output current, %	± 2% for the first channel ± 10% for the second(third) channel				
Output channel power distribution	100% - 1 50% - 1, 50% - 2 50% - 1, 25% - 2, 25% - 3				
Start-up time, s	<0,5				
Maximum load capacitance, µF	45000	15000	15000	5000	5000

* AAll specifications are given for NCC, Uin.nom., Iout.nom. unless otherwise specified.

** Output voltage drop.

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Protections

Type of protection	
Short-circuit protection*	auto recovery
Overcurrent protection	Pmax<1.8 Pnom
Overload protection level*	<125% Uout nom.
Overheat protection	triggers at case temperature > 100±3°C
Pre-fuse	Slow blow 3 A

Basic specifications

Nominal output voltage, VDC		Values
Type of connection		screw terminals and blade contacts
Protection level		IP20
Case temperature, operating*,°C	«N»	–40...+85°C
	«P»	–55...+85°C
Case temperature, storage,°C		–60...+70°C
Humidity		95% / 25°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, Hrs		75 000 h**
Case material		metal
Dimensions, mm		111×61×25
Weight, kg		< 0.3
Warranty		2 year

* See power reduction graphs.
** When Uin=Uin.nom, Pout=0.5-Rmax, Tcase⩽0.5-Tcase.max.

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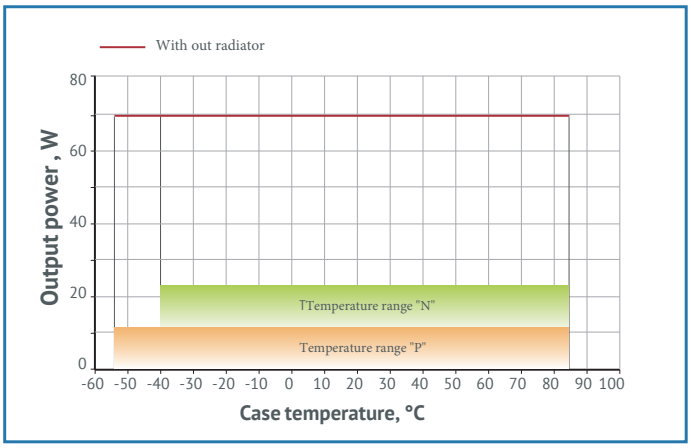
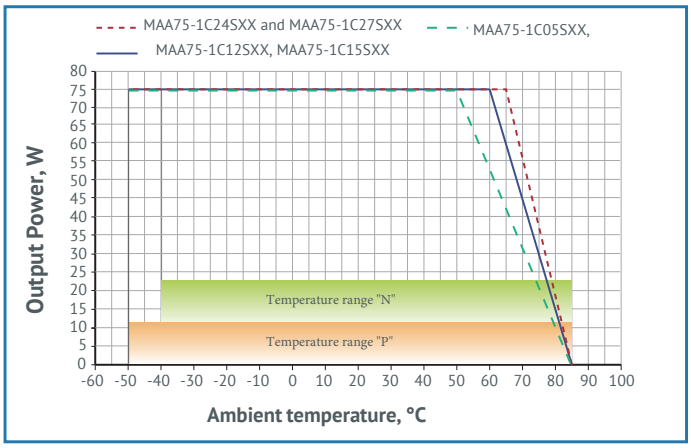
Derating

Vs Temperature Dependence

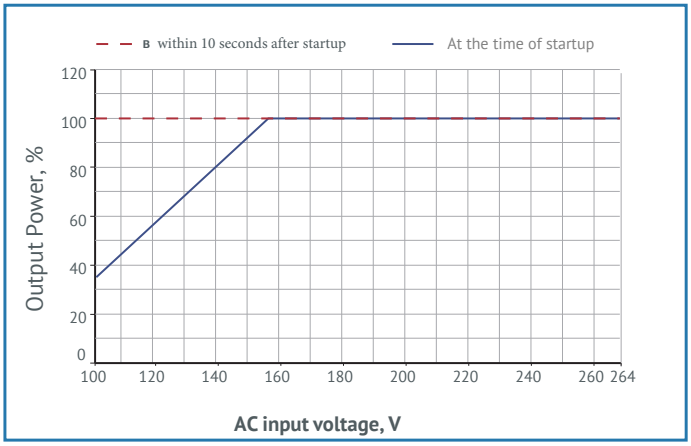


Power derating graph as a function of case temperature at ~220V nominal input voltage for MAA75-1CXXSXX modules



Power derating graph as a function of ambient temperature at rated input voltage ~220V for MAA75-1CXXSXX modules

Input voltage dependence



Power derating graph versus input voltage at -50°C for MAA75-1CXXSXX modules

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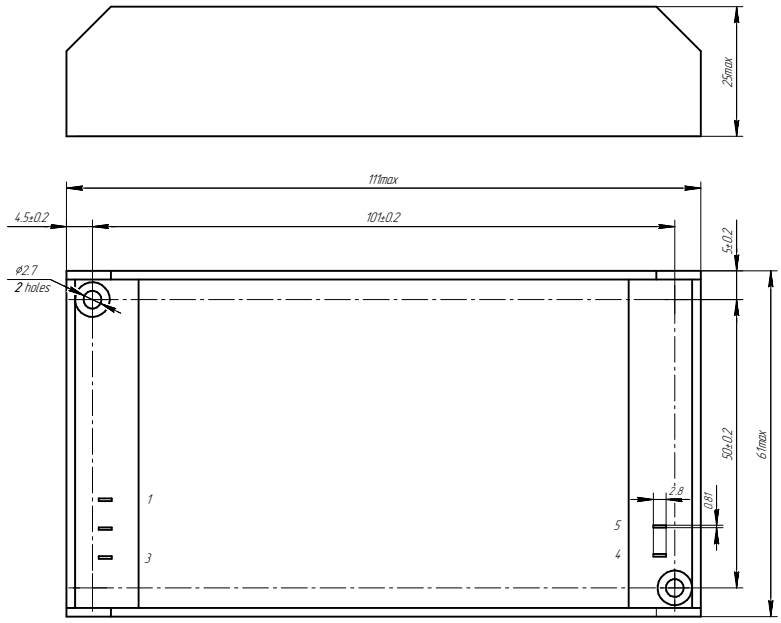
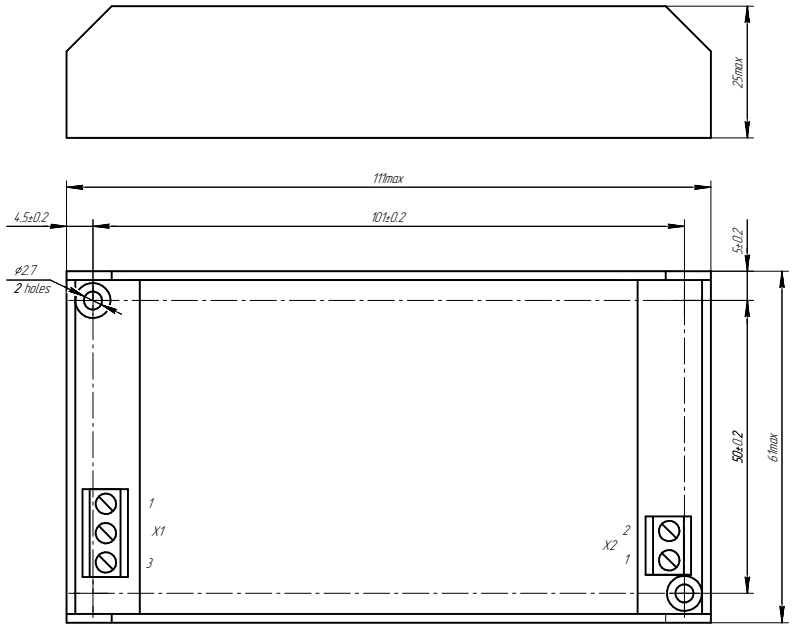
Dimensions

Single-channel design with blade contacts



PIN #	1	2	3	4	5
SINGLE-CHANNEL	L	N	⏚	+OUT 1	–OUT 1

Single-channel design with terminal blocks



PIN #	X1.1	X1.2	X1.3	X2.1	X2.2
SINGLE-CHANNEL	L	N	⏚	+OUT 1	–OUT 1

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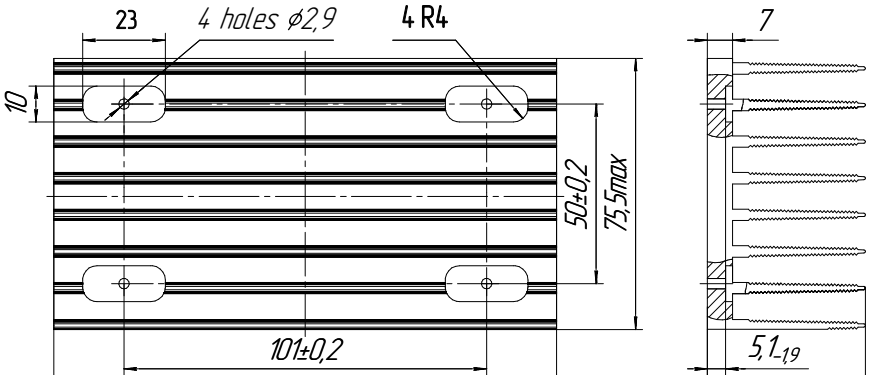
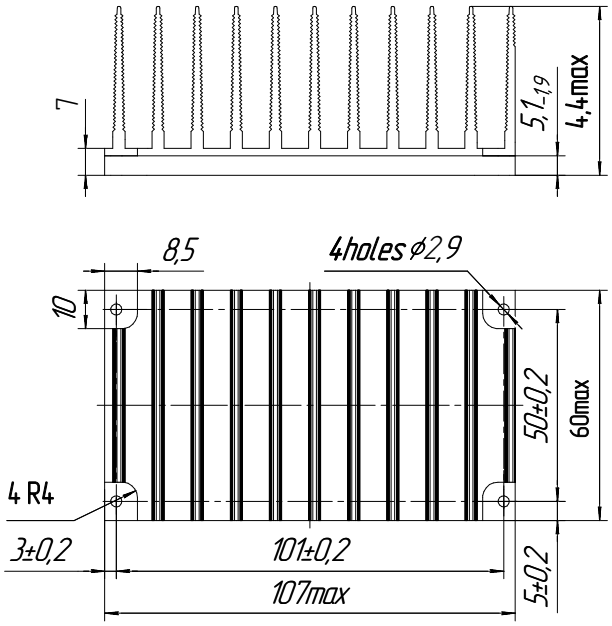
Radiator dimension drawing[1]

Radiator BKYAU.752695.058 (longitudinal ribbing)



Radiator ANZHE.752694.004 (cross ribbing)



This datasheet is valid for the following units: MAA75-1C05SXX, MAA75-1C12SXX, MAA75-1C15XX, MAA75-1C24SXX, MAA75-1C27SXX.

*Order separately

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