

AC/DC power supplies

MAA Family

MAA1000-SG(SD), 1000 W



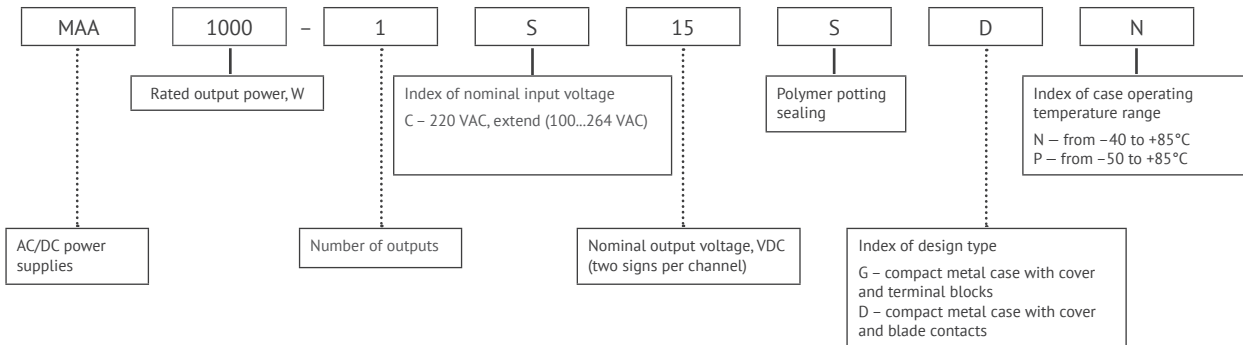
Features

Power.....	1000 W
Input voltage.....	~220(100...264) V
Output voltage.....	=28 V
Efficiency.....	no less than 95%
Case operating temperature.....	-40...+85°C; -50...+85°C
Dimensions.....	211x177x41 mm
Warranty.....	2 years

Advantage

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

Ordering information



Output specifications*

Parameter	Value	
Nominal output voltage, VDC	24	28
Output voltage adjustment	±10 %	
Efficiency, %	no less than 95	
Rated output current, A	41,7	37,1
Ripple and noise (peak-to-peak)	<1%	
Line and load regulation	± 2%	
Start-up time, s	<0,5	
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	100000 µF	

Input specifications*

Parameter	Value
Input voltage range, VAC**	~100...264 (=141...372)
Transient deviation range, VAC	~81...310
Transient time	<3 s.
Mains frequency range, Hz	47...440
Power factor corrector	+
Inrush current, A	<40
Power factor	0.98

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

** For input voltage C (wide mains), the maximum output power is reduced at input voltages of 100...176 V according to the graph of power reduction depending on the input voltage. The parameters are for reference and cannot be used for long-term operation, exceeding the maximum output current, or for operation 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***
Case material		metal
Dimensions, mm		211x117x41
Weight, kg		no more 1,9
Warranty		2 year

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

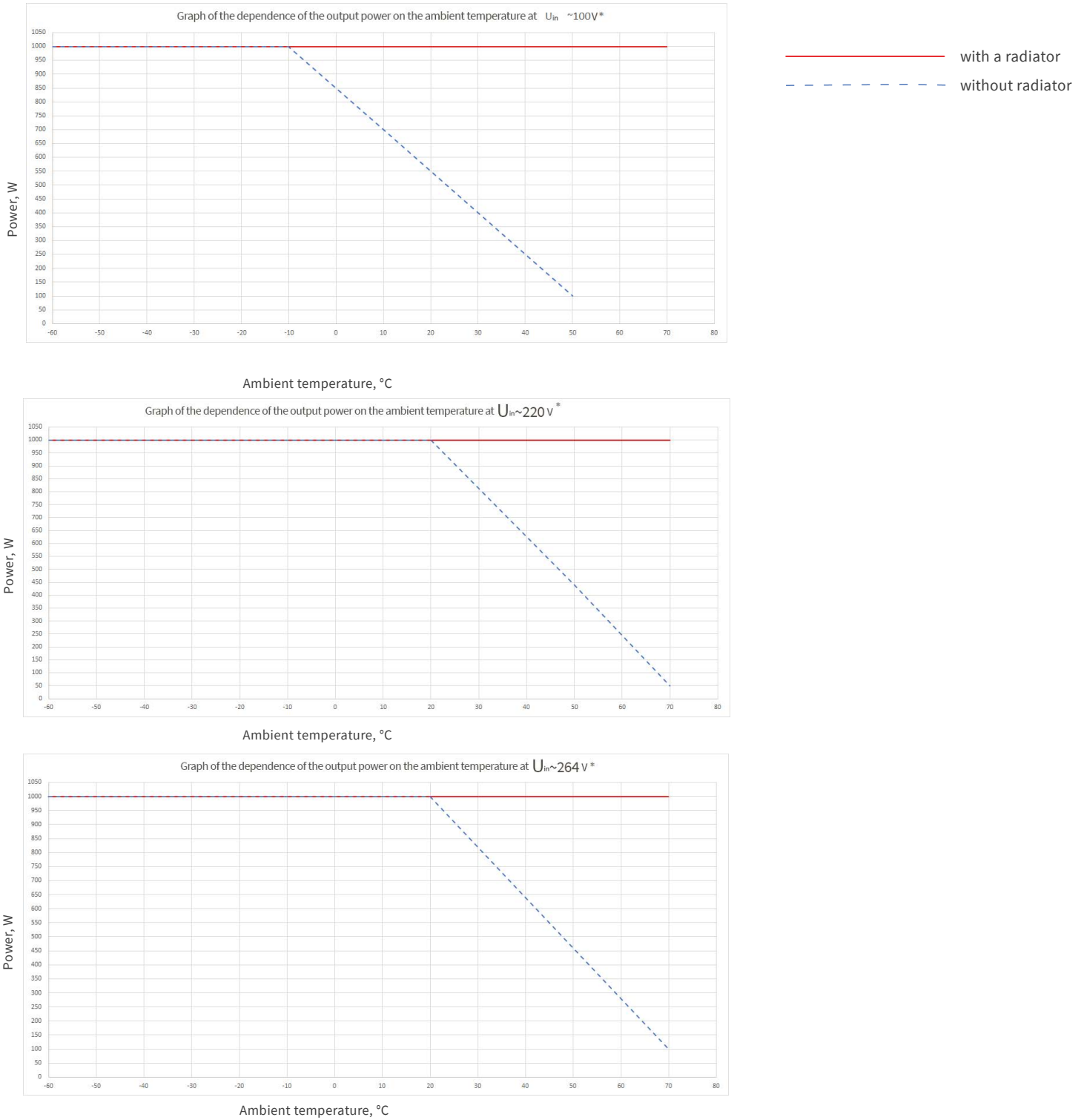
temperatures range or when output voltage is over the range of adjustment.

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

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

Graphs of power reduction depending on ambient temperature at input voltage

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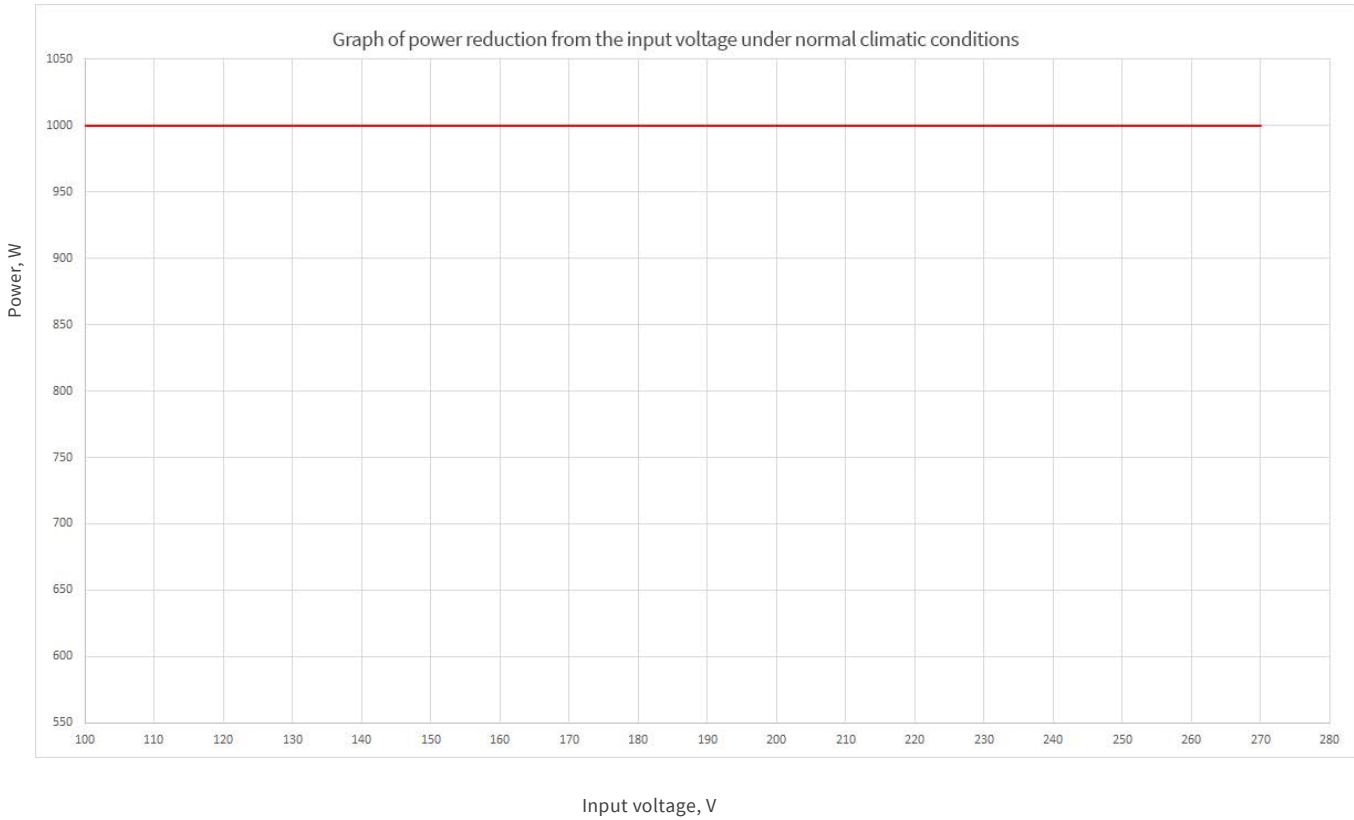


The falling sections of the dotted and dashed curves correspond to the maximum body temperature (+85 °C). The output power of the module must not exceed the values limited by the corresponding curve at a given ambient temperature.

*These graphs show estimated values. To obtain more accurate values, it is recommended that tests be carried out in the operating system under specified conditions.

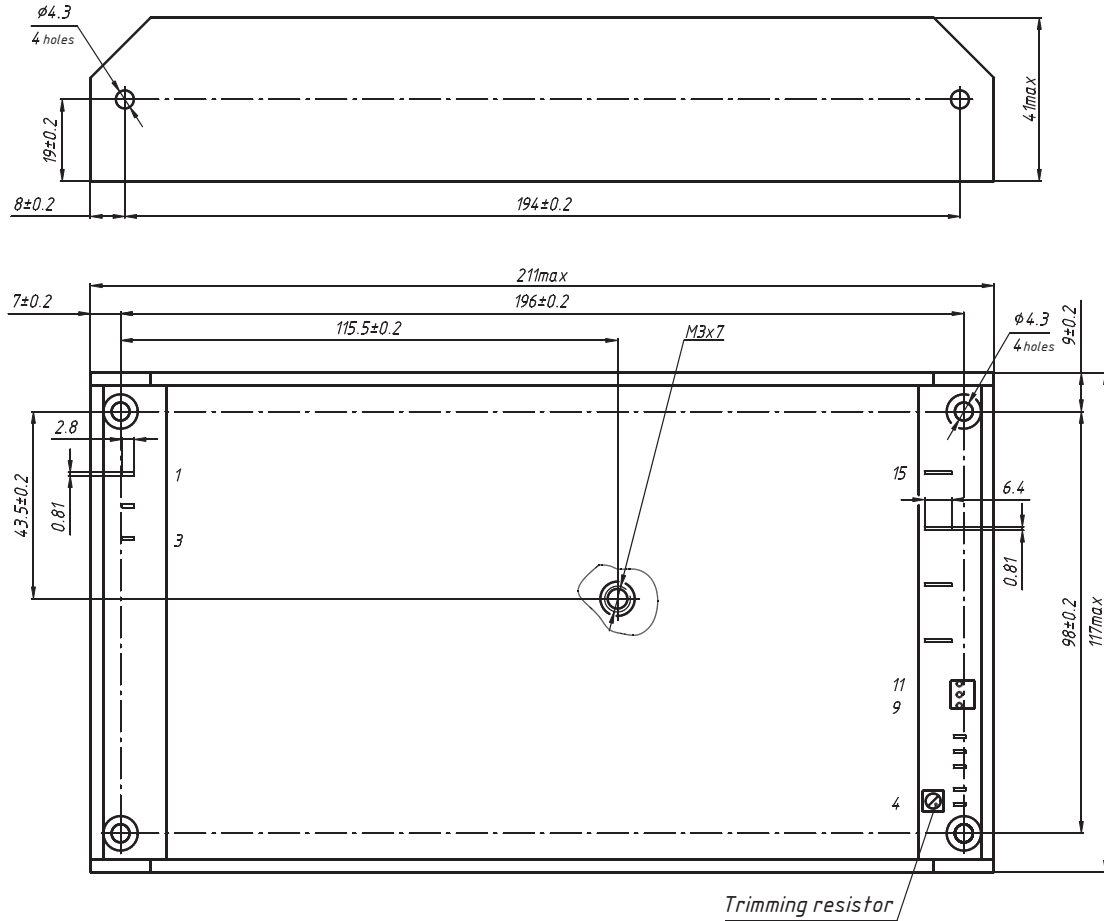
A graph of power reduction depending on the input voltage

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Dimensions

Single-channel design with blade contacts

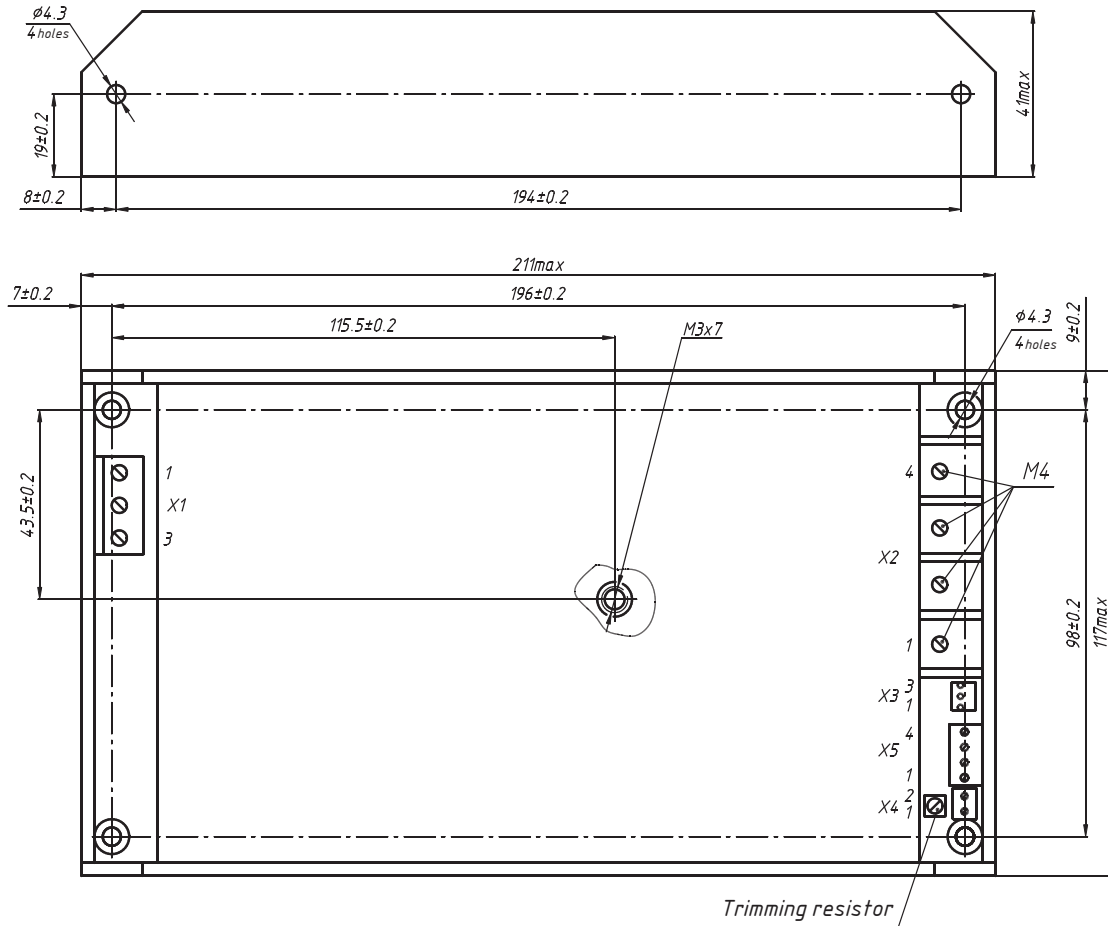



PIN #	1	2	3	4	5	6	7
SINGLE-CHANNEL	L	N		-REMOTE OFF	+REMOTE OFF	+RS	-RS

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

Dimensions

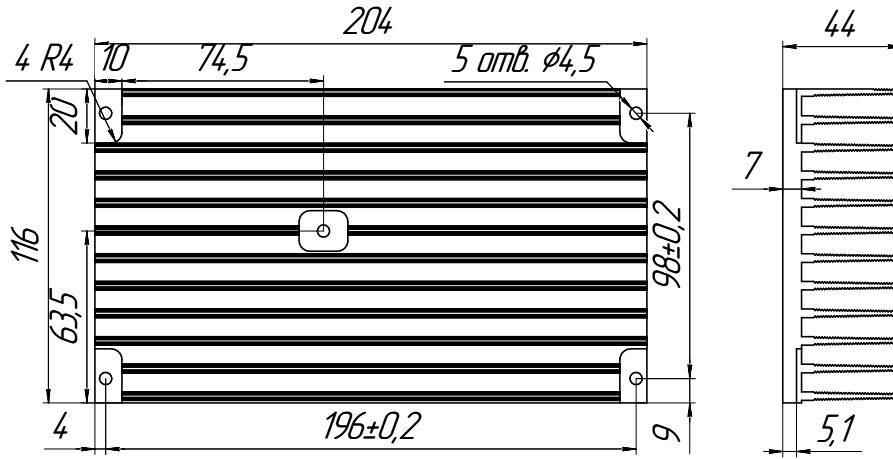
Single-channel design with terminal blocks



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

Radiator

BKYAU.752695.064 dimension drawing



This datasheet is valid for the following units: MAA800-1S24-Sxx; MAA800-1S28-Sxx; MAA800-1S48-Sxx; MAA800-1K15-Sxx; MAA800-1K24-Sxx; MAA800-1K27-Sxx; MAA800-1K48-Sxx; MAA800-1S15-Sxx; MAA800-1S24-Sxx; MAA800-1S28-Sxx; MAA800-1S48-Sxx; MAA1000-1S15-Cxx; MAA1000-1S24-Sxx; MAA1000-1S27-Sxx; MAA1000-1S48-Sxx; MAA1000-1K15-Sxx; MAA1000-1K24-Sxx; MAA1000-1K27-Sxx; MAA1000-1K48-Sxx; MAA1000-1C15-Sxx; MAA1000-1C24-Sxx; MAA1000-1C27-Sxx; MAA1000-1C48-Sxx.