

Low Emission AC/DC-Module 24W

Single Output MAAS 24.1

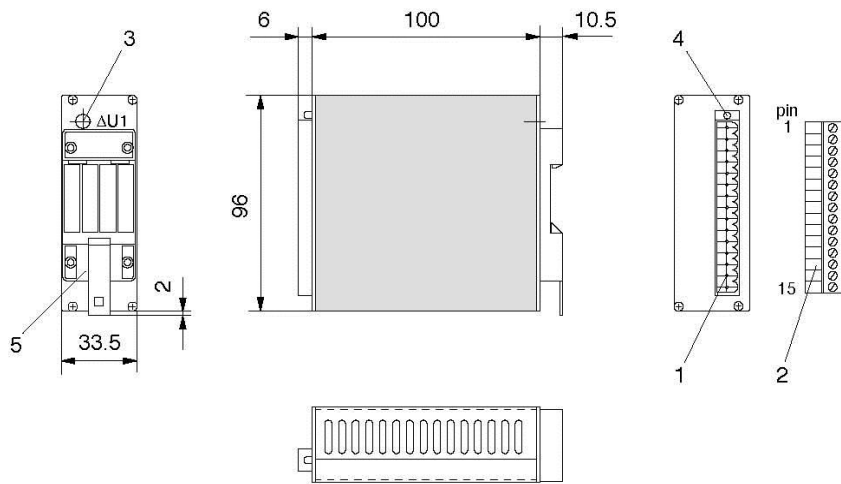


Ordering Information

Type	Output () Power Boost	Input Voltage *	Housing Dimensions see drawing	Article No. *1
MAAS 24.1	O1 = 24V ; 1A	115/230 Vac	100x33.5x96mm	170-614-00
* automatic mains shift				*1 Housing chromated

Dimensions in mm without accessories

- 1 = connector
- 2 = female connector with screw terminal strip (accessory)
- 3 = potentiometer
- 4 = LED, green
- 5 = mounting device (according to EN 50022)



Terminal Strip

Free pins may not be connected external!

	Pin
+ Output 1	1
+ Sense Lead 1	2
- Output 1	3
- Sense Lead 1	4
I/O External ON/OFF	11
Live L1	13
Neutral N	14
Earth PE	15

Technical Data

Guaranteed values after a warm-up period of approx. 15 min. at nominal load, measured at the unit's output.

Output		O1				
Output Voltage	[Vdc]	24				
Adjustment Range (±)	[V]	2				
Output Current						
Nominal	[A]	1				
Current Limiting	[A]	1.3				
Characteristic Curve		approx. V-I				
Type of Regulation		resonant conv.				
Efficiency	[%]	≥ 81				
Voltage Deviation for						
Load Change 0... 100% (static)	[mV]	≤ 20				
Mains Voltage Change Vin min-Vin max	[mV]	≤ 10				
Residual Ripple (100Hz)	[mVpp]	< 2				
Operating Frequency Ripple (50-190kHz)	[mVpp]	< 6				
Superimposed Switching Spikes	[mVpp]	< 6				
Dynamic Voltage Deviation for						
ΔIo = 65...100% Inom	[mV]	≤ 80				
Regulation Time for						
ΔIo = 65...100% Inom	[μs]	≤ 250				
Starting Delay	[ms]	≤ 800				
Overvoltage Protection Output						
Factory Setting	[V]	voltage limitation by TVS diode				
Sense Lead Operation	[V]	max. 0.25				
(load line compensation)		per load line				
Overload Protection		continuous short-circuit-proof				
Temperature Coefficient	[ppm/K]	200				
Input Voltage	Nominal	[Vac]	108 - 120		216 - 240	
Operating Range (automatic mains shift)		[Vac]	+6%/-10%	≈ 97-127	+6%/-10%	≈ 194-254
Frequency		[Hz]	50 - 400 ±10%	≈ 45-440	50 - 400 ±10%	≈ 45-440
in the Event of Mains Failure						
at Nominal Load: Buffer Time	tBuff	[ms]	≥ 25			
Max. Input Current (nominal range)	[A]	0.6		0.3		
Starting Inrush Current						
Unit Cold	$\int i^2 dt ; I_p$	[A ² s] ; [A]	≤ 0.41 ; ≤ 32			
Worst Case	$\int i^2 dt ; I_p$	[A ² s] ; [A]	≤ 1.1 ; ≤ 86			
Unit Fuse (primary, internal)		[A]	T 0.63			
Operating Temperature Range						
(measured 5mm from the side wall)	[°C]	- 25... 0... + 50				
Max. allowed Case-/Radiator-Temperature	[°C]	+ 70				
Storage Temperature Range	[°C]	- 40... + 85				
Weight approx.	[kg]	0.4				
For definitions, informations about electrical safety, EMC and mechanical stressability see description.						