# Uninterruptible Power Supply Unit, MDRC NTU/S 12.2000.1, 2CDG 110 070 R0011



The Uninterruptible Power Supply Unit NTU/S 12.2000.1 is a modular installation device in ProM-Design, for snapon mounting on a 35 mm mounting rail in a universal, wall-mounted or ceiling panel distribution board as well as in distributed surface mounted housings. The power supply delivers sufficient power for all types of demanding applications with a buffered output voltage of 12 V DC and a maximum output current of 2 A.

Operating malfunctions of the power supply are signalled via a changeover contact and can be sent for evaluation purposes.

Up to two 12 V DC sealed lead-acid batteries (gel cell) can be connected in parallel with the power supply, in conjunction with the KS/K 4.1 and KS/K 2.1 cable sets, or the AM/S 12.1 battery module.

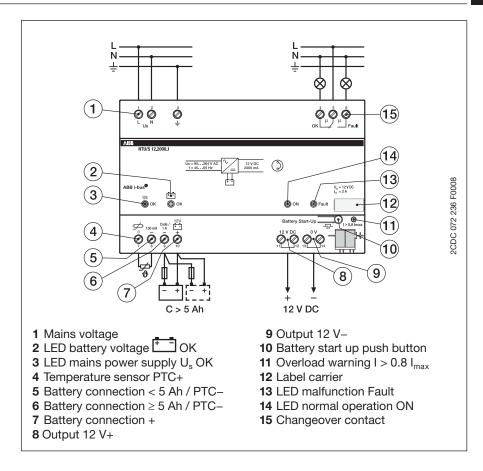
# Technical Data

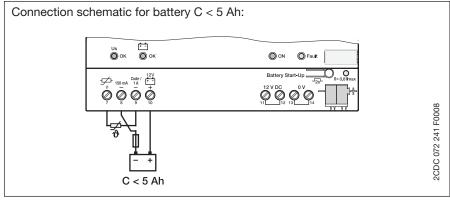
Operating voltage	Mains voltage U <sub>s</sub>	95265 V AC
	Mains frequency	4565 Hz
	Power consumption	Max. 55 W at 230 V AC
	Leakage loss	Max. 8 W at 230 V AC
	Rated voltage U <sub>n</sub>	13 V DC ± 0.5 V SELV
	Rated current I <sub>n</sub>	2 A ± 5 %
Connections	Mains voltage	3 screw terminals
	Output	4 screw terminals
	Accumulator/battery module	4 screw terminals
	Changeover contact	3 screw terminals
	Conductor cross-section for all screw	0.22.5 mm <sup>2</sup> stranded
	terminals	0.24 mm <sup>2</sup> solid core
	Tightening torque	Maximum 0.6 Nm
Accumulator	Accumulator type	12 V DC sealed lead-acid batteries (gel cell)
	Number	Maximum 2 in parallel
	Rated charging current	1 A
	Temperature control	Temperature-controlled adjustment of charging voltage via temperature sensor (included in cable set KS/K 4.1)
Battery module	Number	Maximum 1
	Rated charging current	150 mA
	Temperature control	Temperature-controlled adjustment of charging voltage via internal temperature sensor in battery module
Floating changeover contact	Nominal voltage	230 V AC or 5 V DC or 12 V DC
	Maximum switching current	1 A at 230 V DC
	Minimum switching current	10 mA at 5 V DC or 4 mA at 12 V DC

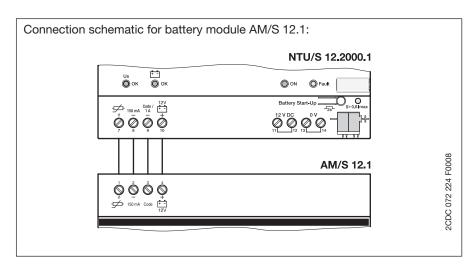
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Operating and display elements	Push buttons	Battery start-up
	LED green	Battery supply OK
	LED green	Mains supply OK
	LED green	Normal operation ON
	LED yellow	Malfunction Fault
	LED yellow	Overload warning I > 0.8 I <sub>max</sub>
Enclosure	IP 20	to EN 60529
Safety class	II	to EN 61140
Isolation category	Overvoltage category	III to EN 60664-1
	Pollution degree	2 to EN 60664-1
Temperature range	Operation	-5 °C+45 °C
	Transport	-25 °C+70 °C
	Storage	-25 °C+55 °C
Ambient conditions	Maximum air humidity	93 %, no condensation allowed
Design	Modular installation device (MDRC)	Modular installation device, ProM
	Dimensions	90 x 144 x 64.5 mm (H x W x D)
	Mounting width	8 modules at 18 mm
	Mounting depth	64.5 mm
Mounting position	On 35 mm mounting rail	to EN 60715
Mounting position	as required	
Weight	0.38 kg	
Housing, colour	Plastic housing, grey	
CE mark	In accordance with the EMC guideline and low voltage guideline	EN 50130-4, EN 61000-6-3

#### **Connection schematics**

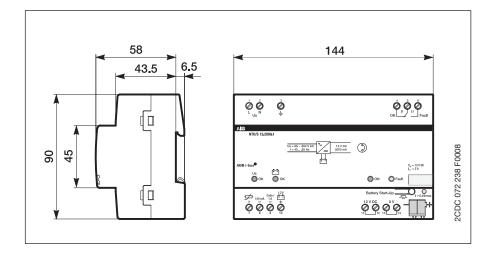






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#### **Dimension drawing**



### Caution

The operation of the changeover contact at high switching operation frequencies can lead to loss of contact material.

This increases the contact resistance so that operation at low output powers is no longer possible.

## Caution

The different connection methods for batteries with a capacity less than and greater than 5 Ah, for the temperature sensor as well as for the battery module must be observed!

If the connection method is not observed, it can lead to damage of the battery or battery module.

If a 12 V DC sealed lead acid battery (gel cell) is used, a temperature sensor (integrated into Cable Set KS/K 4.1) must be connected to the battery! Accordingly, a temperature-controlled adjustment of the charging voltage charging current is used in dependence on the external temperature.

If a temperature sensor is <u>not</u> connected, the battery capacity may be reduced.