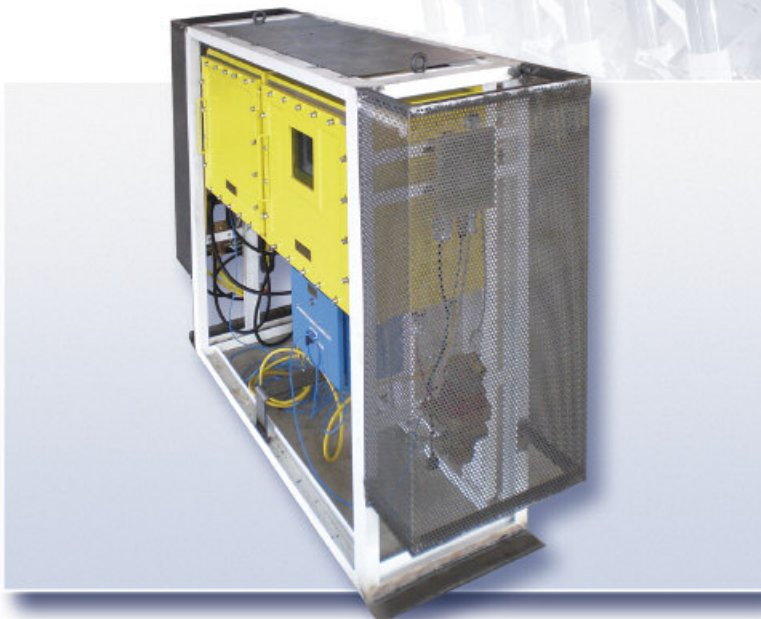




## Power supply unit dNTA81

for primary voltages  
from 24 VAC to 230 VAC,  
intrinsically safe output voltage  
12 VDC

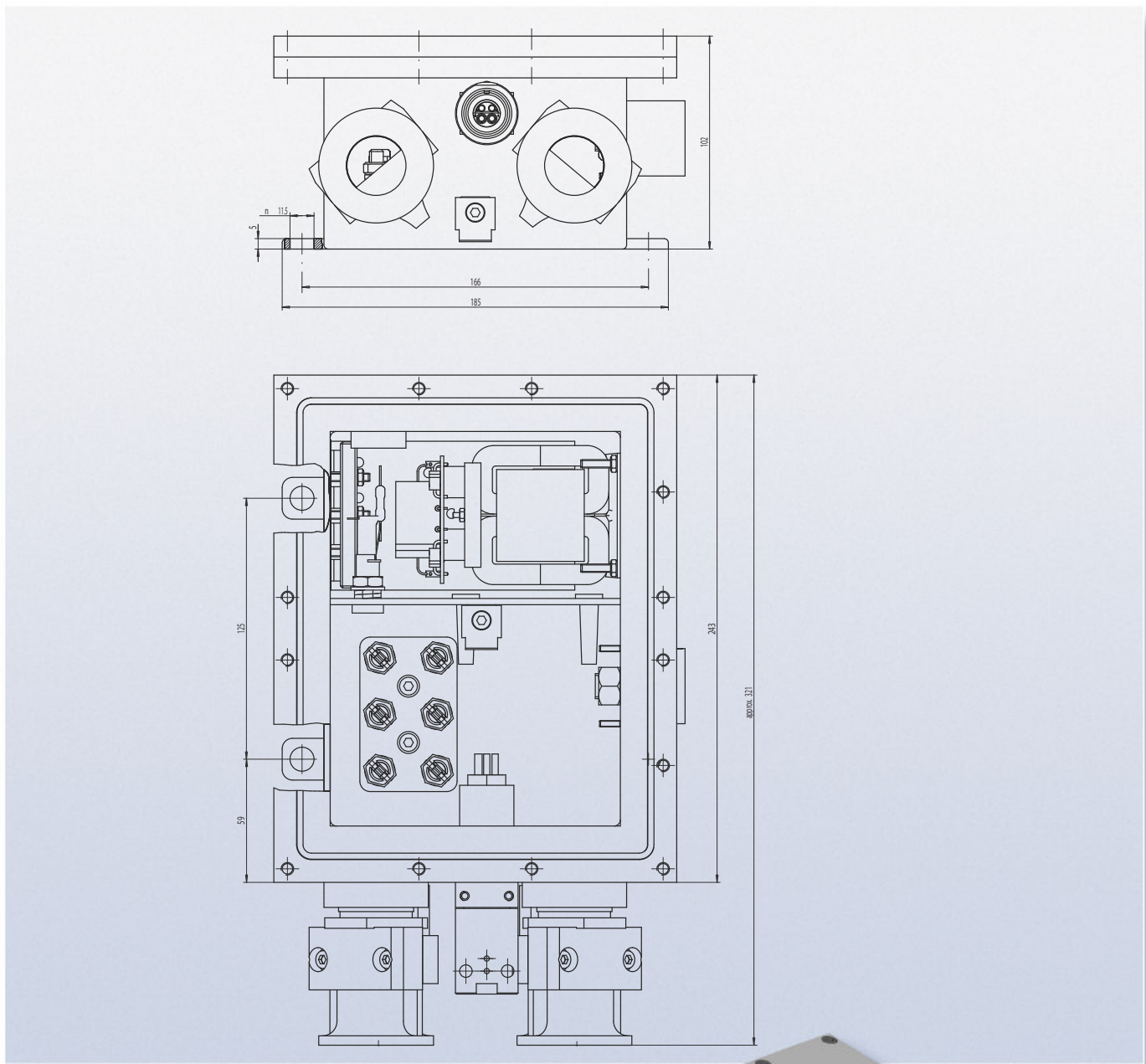
- Rugged pressure-proof housing
- Connection via plug-in socket
- Short-circuit-proof voltage output
- Also available with integrated test switch
- Type of protection: IP 65 acc. to EN 60529
- Ex-approval: I M2 EEx ia I intrinsically safe acc. to Directive 94/9/EC (ATEX)



**Power supply unit dNTA81**  
for the supply of voltage to an  
electronic emulsion mixing plant



## dNTA81

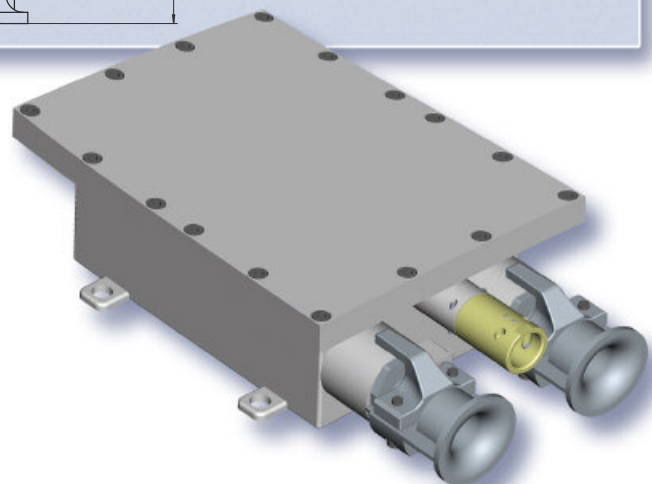


### Information for assembly

The terminals for connection of the non-intrinsically safe mains circuit are accessible after the housing cover has been opened.

### Attention!

**Never operate the unit with the housing cover open. Operation is only allowed when the cover has been duly fitted and all cover bolts have been tightened.**



# dNTA81

## FUNCTION AND DESIGN

The power supply unit includes a module in which the 12V power is generated. This module comes integrated with all components required for converting the primary voltage into intrinsically safe output voltage. The voltage output is short circuit proof.

The module is installed in a pressure-proof housing. The heat resulting from the power loss is dissipated thermally via the module housing and the pressure-proof housing.

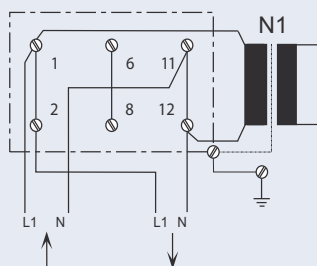
### Application

- The power supply unit is designed for supplying power to intrinsically safe equipment. It is available for input voltages of 24 VAC to 230 VAC at an output voltage of 12 VDC / 0.6 A, 1 A, or 1.5 A.
- For the mains power connection several explosion-proof cable entry glands are available in different sizes with one cable gland designed as lead-through to further power supply units. In order to permit a fast diagnosis if a fault occurs the power supply unit can be equipped with a test switch (see diagram 1.2). The switch can be used to cut off the mains power to the downstream power supply units after an earth leakage occurred. At the same time, the monitoring conductor wired to terminal 6 is connected to earth potential via the diode/resistor combination. This arrangement permits to find out whether the power supply leading to this device is free from faults.
- The intrinsically safe circuit is led out via a plug-in socket which has a pressure-proof screw connection to the power supply housing. Further connection to the consumers is effected using the SKK24 hoseline which has a proven track record in mining.

## Pin configuration

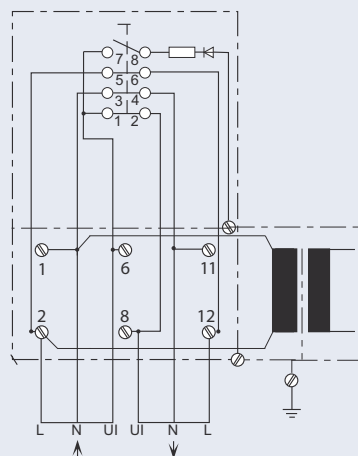
### Mains connection

1.1



without test switch

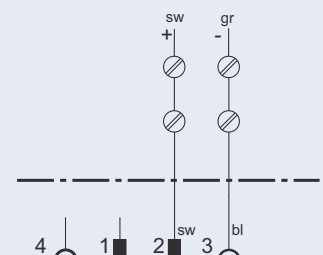
1.2



with test switch

### Intrinsically safe output

1.3



plug-in socket SKK24 Special design



# dNTA81

## TECHNICAL DATA

Mains voltage	24 VAC ± 20 % 36 VAC ± 20 % 42 VAC ± 20 % 110 VAC ± 20 % 127 VAC ± 20 % 230 VAC ± 15 %
Output voltage $U_o$	12.5 VDC
Output current $I_o$ each module	0.65 A 1.05 A 1.55 A
Output socket	SKK24
Temperature range	-20 °C to +40 °C
Fitting position	any
Type of protection	IP 65 nach EN 60529/IEC 529
Ex-approval	I M2 Ex d [ib] I acc. to Directive 94/9/EG
Certificate No.	IBExU 08 ATEX 1081

## TYPE CODE AND ORDERING INFORMATION

<b>dNTA 8 1 A *** 12 **</b>	Output current:	06 > 0.65 A 10 > 1.05 A 15 > 1.55 A
	Output voltage:	12.5 VDC
	Mains voltage:	024 > 24 VAC    110 > 110 VAC 036 > 36 VAC    127 > 127 VAC 042 > 42 VAC    220 > 220 VAC
	Output circuit marking	
	1 built-in power pack	
	Series: 8	
	Design acc. to ATEX	
	Flameproof power supply unit	

## TYPICAL EXAMPLE

<b>dNTA 81A 42 12 15</b>	<ul style="list-style-type: none"> <li>■ Flameproof power supply unit, series 8, according to ATEX</li> <li>■ 1 built-in power pack</li> <li>■ Input current: 42 VAC</li> </ul>	<ul style="list-style-type: none"> <li>■ Output voltage: 12.5 VDC</li> <li>■ Output current: 1.5 A</li> <li>■ Output socket: SKK24</li> </ul>
<b>dNTA 81A 127 12 06</b>	<ul style="list-style-type: none"> <li>■ Flameproof power supply unit, series 8, according to ATEX</li> <li>■ 1 built-in power pack</li> <li>■ Input current: 127 VAC</li> </ul>	<ul style="list-style-type: none"> <li>■ Output voltage: 12.5 VDC</li> <li>■ Output current: 0.65 A</li> <li>■ Output socket: SKK24</li> </ul>

Subject to technical alterations · Version 02/14