



Dual power supply unit dNTA42

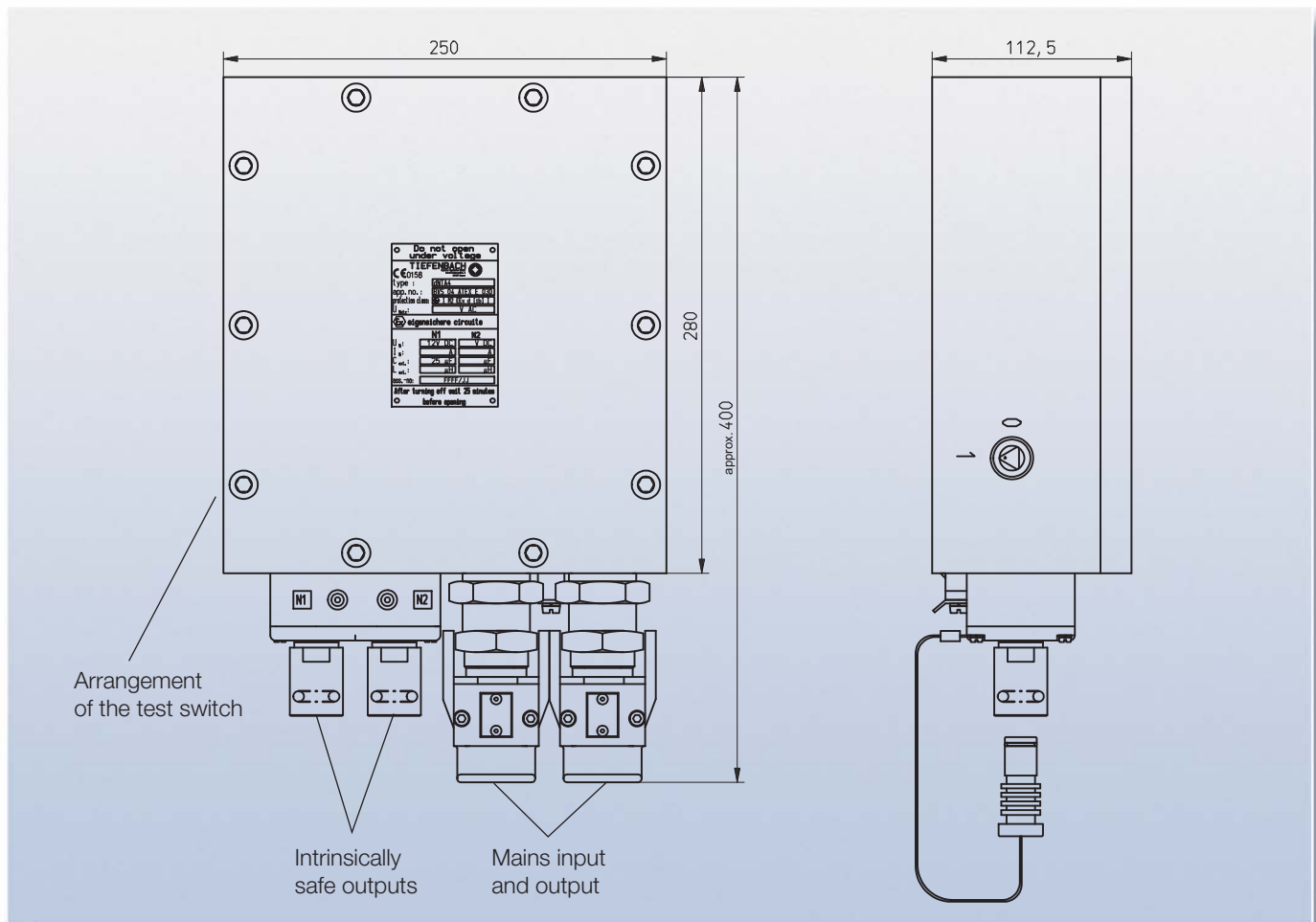
for primary voltages
from 24 VAC to 230 VAC,
intrinsically safe output voltage
 $2 \times 12 \text{ VDC}$

- Rugged pressure-proof housing, stainless steel for the safety-relevant closure elements
- Connection via plug-in socket
- Short-circuit-proof voltage output
- Light emitting diodes for the control of the output voltages
- Also available with integrated test switch
- Type of protection: IP44 acc. to EN 60529
- Ex-approval: I M2 EEx ia I intrinsically safe acc. to Directive 94/9/EC (ATEX)



Dual power supply unit dNTA42
for the supply of voltage to an
electrohydraulic control unit

dNTA42



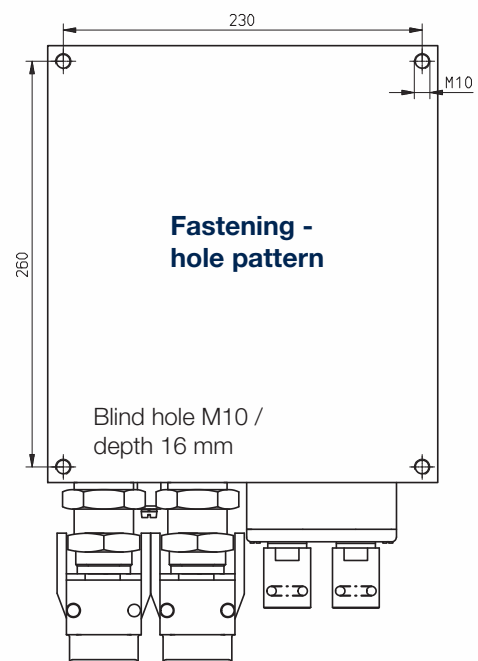
Information for assembly

The hole pattern shown is located at the rear of the power supply unit. For fastening, the M10 threaded holes in the rear wall can be used.

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.



dNTA42

FUNCTION UND DESIGN

The power supply unit includes two modules which each generate the 12V power.

Both modules come integrated with all components required for converting the primary voltage into intrinsically safe output voltage. Thus, the two modules operate totally independent of each other which helps to essentially increase functional reliability. The voltage output is short circuit proof.

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

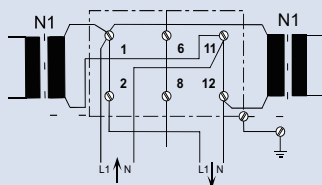
Application

- 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 each module.
- 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 circuits are led out via plug-type connectors. For reasons of safety, the connection module with the plug connectors and the LEDs is fastened to the wall of the pressure-proof housing with cable entry glands and secured by cast resin so that it cannot be dismantled and the integrity of the pressure-proof chamber is maintained. Further connection to the consumers is effected using the SKK24 or SKK34 hoseline which has a proven track record in mining.

Pin configuration

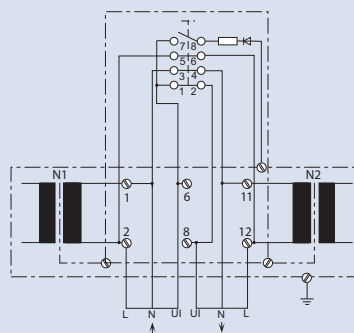
Mains connection

1.1



without test switch

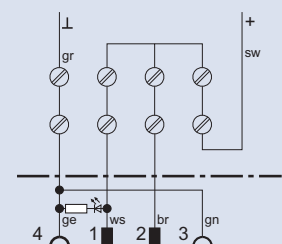
1.2



with test switch

Intrinsically safe output

1.3



Plug-in socket SKK24



dNTA42

TECHNICAL DATA

Mains voltage	24 VAC $\pm$ 20 % 36 VAC $\pm$ 20 % 42 VAC $\pm$ 20 % 110 VAC $\pm$ 20 % 127 VAC $\pm$ 20 % 230 VAC $\pm$ 15 %
Frequency range Mains voltage	50 Hz to 60 Hz
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 44 acc. to EN 60529/IEC 529
Ex-approval	I M2 EEx d [ib] I acc. to Directive 94/9/EC
Certificate No.	BVS 04 ATEX E 030

TYPE CODE AND ORDERING INFORMATION

dNT A 4 2 A *** 12 ** *	Nominal size output socket A ► connector SKK24
	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
	2 built-in power packs
	Series 4
	Design acc. to ATEX
	Flameproof power supply unit

TYPICAL EXAMPLE

dNTA 42A 42 12 15 A	- Flameproof power supply unit, series 4, according to ATEX 2 built-in power packs - Input current 42 VAC	- Output voltage 12,5 VDC - Output current 1,5 A - Output socket SKK24
dNTA 42A 127 12 06 A	- Flameproof power supply unit, series 2, according to ATEX 4 built-in power packs - Input current 127 VAC	- Output voltage 12,5 VDC - Output current 0,65 A - Output socket SKK24

Subject to technical alterations · Version 05/14