



# DEPU – Complete Digital Solution

## Features

- Complete solution for tubular steam trace heaters-controllers, limiters and power setpoint adjusters all in one unit
- Alteration of adjusting parameters also possible in potentially explosive areas
- Current carrying capacity 25 A
- Fault-free full wave control
- Sensor input, intrinsically safe
- Allows easy output adaptation to heating circuit changes

## Description

A complete solution for DEPU tubular steam trace heaters is provided by temperature control, limitation and power setpoint adjustment, all in one unit. DEPU is ATEX-certified and approved for use in potentially explosive areas.

All fault alarms are indicated by a master fault contact. Resetting can be carried out directly on the unit or externally with a key.

## Structure

All functional units are integrated in a standard casing of aluminium. The connecting lines up to 6 mm<sup>2</sup> are contacted with cage tension spring clamps.

The power setpoint adjuster works as a fault-free full wave control by means of a semi-conductor relay.

## Function

The controller is designed as a two point controller and measures the temperature by means of a Pt100.

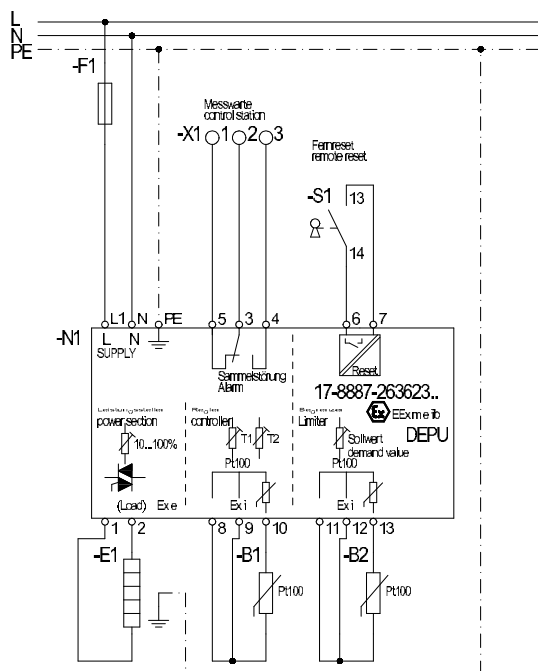
A 7-segment display guarantees good readability of the temperature values of controller and limiter through the viewing plate.

The limiter works as an independent system and measures the temperature at the hot spot with its own Pt100. If the temperature exceeds the limit value the limiter interrupts the heater permanently and a fault signal is given.

## Additional products

- 3-wire Pt100
- up to 200 °C Order no. 03-9040-0006
- up to 400 °C Order no. 03-9040-0016

## Circuit diagram





### Explosion protection

#### Ex protection type

II 2G EEx m e ib [ib] IIC T4

#### Certification

TÜV 03 ATEX 2088

### Technical data

#### Enclosure/Enclosure material

Standard enclosure of aluminium, grey

#### Protection class

IP 65

#### Terminals

Wago cage clamp

#### Cable entries

Mains supply line 1 x M25 (M32 opt.)

Heating cable/cold end 1 x M20

Fault alarm 1 x M20

Remote reset 1 x M20

Sensor 2 x M16

#### Storage temperature

-30 °C up to +70 °C

#### Ambient temperature

-20 °C up to +40 °C

#### Weight

6 kg

### Guidelines/norms/certifications

Directive 94/9/EC

NAMUR NE 21

EN 50020, EN 50019, EN 50028, EN 50014

### Electrical data

#### Supply voltage

AC 230 V +10 %/-15 % (50 up to 60 Hz)  
(special voltage 254 V on request)

#### Rated current - power setpoint adjuster

max. 25 A

#### Power consumption

no load:  $P = 11 \text{ VA}$

full load:  $P_{\text{max}} = 5.7 \text{ kVA}$

#### Relay outputs

Master fault control-1 changeover contact  
250 V/5 A

#### Measuring input (intrinsically safe)

Pt100 (2 or 3 conductors)

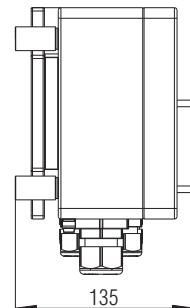
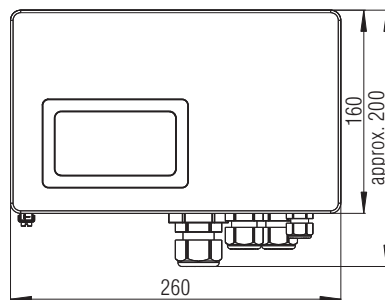
#### Measuring range Pt100

0 °C up to +450 °C

#### Resolution/measuring accuracy

1 K

### Dimensions (mm)



Order no.  
**17-8887-2636/2300**

Technical data subject to change without notice.