

# Power supply NTV 44 Processing



# **Function:**

The Power supply **NTV 44** Processing was developed to use the L-Probe on all common controller systems. The new power Supply converts the L-Probe Signal to an equivalent mV Signal of a Oxygen Probe. With the Terminal T300 the user can input the correction Factors K1,K2.

A two point correction mechanisms is included. Special functions as flushing Probe, recovery time and flushing time will be input via Terminal T300. The **NTV 44 Processing** supplies high constant voltages (e.g. at lambda probes and other loads).

An active 4-wire circuit ensures that line resistances up to 1 ohm and the related voltage drops are compensated.

The polarity of the heating voltage is reversed automatically at regular intervals to avoid effects of oxidation on the lambda probe heater which shorten the life of the probe.

# Line cross sections:

Two-wire circuit:  $\langle = 2 \text{ m} \rangle = 1,00 \text{ mm}^2$ 

Four-wire circuit:  $\langle = 15 \text{ m} \rangle = 0.50 \text{ mm}^2$ 

 $= 20 \text{ m} >= 0.75 \text{ mm}^2$ 

 $= 30 \text{ m} >= 1,00 \text{ mm}^2$ 

 $<= 40 \text{ m} >= 1,50 \text{ mm}^2$ 

 $<= 70 \text{ m} >= 2,50 \text{ mm}^2$ 

# **Technical data**

#### Construction:

Macrolon housing for wall mounting

# **Dimensions/ Weight:**

160 x 120 x 90 mm (l x w x h) / 1,85 kg

#### **Protection type:**

Housing IP 64

#### **Connection:**

Pluggable screw terminals Wire cross section: max. 2.5 mm

#### **Connection L-probe:**

1 m connection cable with plug and coupler

## Cable feeds:

7 screw-type glands, PG7, PG9 and PG11

#### Auxiliary voltage:

115 / 230 Vac/50-60 Hz, approx. 50 VA

# Input measuring probe:

0...1300 mVdc (L-probe signal)

### **Output power supply unit:**

12.00 Vdc max. 3 A tol. +-20 mV (heating voltage for L-probe)

#### Output measuring probe:

0...1300 mVdc (L-probes-signal, 1:1) Option: physically separated output 0...20 mA or 4..20 mA

#### 011120 1111 1 01 11120 1

#### Line resistance:

max. 1 ohm

## Climate:

Storage: -10...+70 °C Operation: 0...+50 °C

5...95 % relative humidity, non-condensing



# Power supply NTV 44 Processing



# Technical data (continued)

# **Basic (basic functions):**

- Non-isolated voltage output 0...1.3 V
- Optional isolated universal output 0...10V or 0...(4)...20 mA
- Time-controlled probe purging function (optional)

#### Order number

520-4185	
520-4187	
520-4180	
520-4188	
520-4181	
520-4182	
520-4183	
520-4186	

#### Device name

Power supply NTV 44 P with housing
Power supply NTV 44 P without housing
Power supply NTV 44 P - Basic with housing
Power supply NTV 44 P - Basic without housing
Power supply NTV 44 P - Advanced %O2
Power supply NTV 44 P - Advanced TP
Power supply NTV 44 P - Advanced L/O2
Power supply NTV 44 P - Advanced Lambda

## **Optional accessories**

530-2126
----------

Terminal T 300 for NTV44P

## **Advanced (Advanced functions)**

- %O2 and Dew Point calculation with current temperature (measured by thermocouple K or S type)
- Conversion of L-probe voltage into O2 sensor voltage
- Optional handheld terminal T300\* for configuration of universal outputs, two point correction constants
- Digital input and two digital outputs
- Four modes for define flushing (Time, voltage, temperature, digital input)
- Current or voltage output of O2% in the range defined trough terminal T300\*

Isolated analog output as standard in advanced version

### \* Terminal T300 is an optional device for this article

#### Language

1:German

2:English

#### Main-Menu:

- 1 Measurements
- 2 Errors, Reset
- 3 NTV Settings
- 4 Start Flushing
- 5 T300 Settings
- 6 NTV44 Version
- 7 Correction

