

# 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

#### Line resistance:

max. 1 ohm

#### Climate:

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

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



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# **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)

### **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

#### Order number Device name

520-4185	Power supply NTV 44 P with housing 230V
520-4187	Power supply NTV 44 P without housing 230V
520-4180	Power supply NTV 44 P - Basic with housing 230V
520-4188	Power supply NTV 44 P - Basic without housing 230V
520-4181	Power supply NTV 44 P - Advanced %O2 230V
520-4182	Power supply NTV 44 P - Advanced TP 230V
520-4183	Power supply NTV 44 P - Advanced L/O2 230V
520-4186	Power supply NTV 44 P - Advanced Lambda 230V
520-4285	Power supply NTV 44 P with housing 115V
520-4287	Power supply NTV 44 P without housing 115V
520-4280	Power supply NTV 44 P - Basic with housing 115V
520-4288	Power supply NTV 44 P - Basic without housing 115V
520-4281	Power supply NTV 44 P - Advanced %O2 115V
520-4282	Power supply NTV 44 P - Advanced TP 115V
520-4283	Power supply NTV 44 P - Advanced L/O2 115V
520-4286	Power supply NTV 44 P - Advanced Lambda 115V

## **Optional accessories**

530-2126 Terminal T 300 for NTV44P

### \* 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

