

# Display and control unit DTX-P



The Bühler control and display unit DTX-P features a rugged plastic housing and a protection class of IP 65 on the panel side making it an excellent solution for industrial applications.

The 4-20 mA analogue input combines it with our level- and temperature controls like Nivotemp, Nivovent and Thermolog as well as with our Fluidcontrolterminals.

The unit can be adapted to the individual application by inserting special pc boards. These pc boards can be exchanged any time later on if required.

## Standard variations for the DTX-P are:

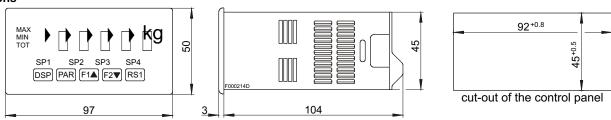
Analogue output 4-20 mA, two change over relays, four NO relays and either four NPN or PNP outputs. An interface PC board for remote programming is also available.

- 5-digit, 14mm LED display back gruond illuminated
- Input signals 0-20 mA, 4-20 mA or 0-10v DC optional
- Optional pc boards. Up to four switch points, 0/4-20 mA or 0-10 V analogue outputs, RS 232 interface
- Easy to programme either on site or remotely
- Signal linearisation programmable in 16 steps
- Display front IP 65



## technical data

### dimensions



housing: dark red, shock-proof plastic housing. Fixing by mounting frame with terminal screw.

display: five-digit display with 14 mm high red LED

signal: The following standard signals are possible. The range will adjusted in the programming.

The accuracy in the following range table is stated in percent of indication value.

The protection complies the max. permissible input signal.

range accuracy Impedance/ protection resolution load 20 mA 0,03%-0,12%  $20 \Omega$ 150 mA 1 µA 10 VDC 500 k $\Omega$ 300 V 0,03%-0,12% 1 mV

**user-** 3 programmable inputs are occure. They are adjustable by bridges PNP- or NPN-switching.

inputs: Protection max. 30 V.

NPN: active V < 0.7 VDC; inactive V > 2.5 VDC PNP: active V < 2.5 VDC; inactive V > 0.7 VDC

power supply: DTX-P-230 :85 to 250 VAC 50/60 Hz, 15 VA

DTX-P-24 :11 to 36 VDC, 11 W or 24 VAC ± 10%, 15 VA

sensor

supply: 24 VDC, ± 5%, regulated, max. 50 mA

connection: stronghold terminal strip

relative

**humidity:** max. 85%. rF, not condensable operation: 0...+50°C; with 3 cards

temperature: unequipped: 0...45°C; storage: -40...+60°C

weight: 300 g (without plug-in cards)

Specification plug-in cards

analogue output card: output : 0-20 mA or 4-20 mA or 0-10 VDC

**DTX-K-AO** accuracy : 0,17 % to 0,4%

load : 0-10 VDC: min 10 k $\Omega$  , 0/4-20 mA: max. 500  $\Omega$ 

relay output card: type : 2 relays with change over contact

2x change over contact load : 5 A, 120/240 VAC or 28 VDC. total current at 2 aktive relays  $\leq$  5 A

DTX-K-2W lifespan : minimum 100000 switch cycle at max. load

relay output card: type : 4 relays with NO (normally open) contact

4x NO (normally open) contact load : 3 A, 120/240 VAC or 28 VDC. total current at 2 aktive relays ≤ 4 A

DTX-K-4S lifespa : minimum 100000 switch cycle at max. load

transistor output card: **type** : 4 NPN-open-collector transistors

**DTX-K-4N** nominal data : max. 100 mA at  $V_{SAT}$  = max. 0,7 V.  $V_{max}$  = 30 V

transistor output card: type : 4 PNP-open-collector transistors

**DTX-K-4P** nominal data : Intra supply voltage: 24 VDC ±10 %, total load for all 4 outputs:

max. 30 mA. external supply: max. 30 VDC, load output: max. 100 mA.

# order information

description	type	part-no.
Digital indicator (flush-type); 85 to 250 VAC 50/60 H	DTX-P-230	1450099
Digital indicator (flush-type); 11 to 36 VDC, 11 W or 24 VAC 50/60 Hz	DTX-P-24	1450199
accessories		
plug-in interface card RS 232	DTX-K-SER	14500991
plug-in analoge output card	DTX-K-AO	14500992
plug-in relay output card 2x change over	DTX-K-2W	14500993
plug-in relay output card 4x NO (normally open)	DTX-K-4S	14500994
plug-in transistor output card 4xNPN open-collector transistors	DTX-K-4N	14500995
plug-in transistor output card 4xPNP open-collector transistors	DTX-K-4P	14500996
programmable software for windows	DTX-S-PC	14500997