Industry DC-Amplifier
Typ 783T / 783T2G

Dimensions of ABS-Plastic housing:

W x L x H (mm): 120 x 200 x 75

Description

The industry DC amplifier type 783T/ 783T2G was developed for the connection by measuring sensors with Wheatstone bridge in 6 wire technique.

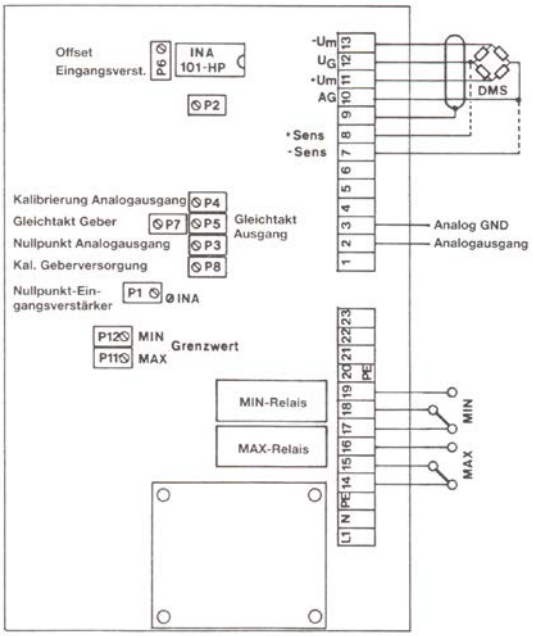
This enables a compensation of the voltage drop in the inlet and the measuring accuracy is substantially improved.

The Model 783T can monitor with potential-free relay outputs a minimum and a maximum value.

With the development of the equipment special value was put on universal and simple handling and precise adjustment possibilities

Basic attributes
Enclosure IP 65
Universal application
Min.-Max.-Limit values
Strain gauge transducer in 6-wire technique
High precision amplifier 0,003 %
Symmetrical difference amplifier
Analoque output 0(4) ... 20 mA or 0 ... ± 10 V

Options		
Standard		
Mains supply	230 V AC / 60 Hz	
Range of supply voltage	10 V DC (1... 11 V DC)	
Current output	0... 20 mA (4... 20 mA)	
Additional feature		783T.
Voltage output	0... ± 10V	0-10V
Mains supply	18...36 V DC	24V
Mains supply	9... 18 V DC	12V
Reinforced sense supply		SUM



Option mains supply 12/24 V DC:

Clamp 24 (N): + Ub
Clamp 25 (PE): - Ub

General technical data

Input	
Circuit principle	Symmetrical difference amplifier
Input resistance	1 MΩ
Sensitivity	2 mV... 5V (Standard adjustment 40 mV)
Adjustment sensitivity and zeropoint	Coarse adjustment with Fix-resistor Fine adjustment with Potentiometer
Permissible common mode tension	± 10 V max.
Common mode rejection	≤ 100 dB (at 50 Hz)
Frequency range	0... 20 kHz (-1 dB) at amplification x 100
Output	
Current output	0 (4)... 20 mA, Fine adjustment with Potentiometer, Zero delay with Potentiometer, Load ≤ 600 Ω
Voltage output	0... ± 10 V short circuit proof, Load 1000 Ω
Non-linearity	≤ ± 0,01 % of end value
Temperature ranges	
Operating temperature	0... +50°C
Storage temperature	-20°C... +70°C
Temperature coefficients	
-The zero point	typ. ± 0,25 µV/°C +10/V (V=reinorcement)
-The reinforcement	typ. 0,002 %/°C
Power supply	230 V/60 Hz (other supply see additional equipment or on request.)
Limit values	Relay with neutral change-over contacts for minimum and maximum value setting: With 20 gear potentiometer via the whole measuring range. Here it is to be processed in such a way that the appropriate measured values are simulated or started. After that the switching points are to be adjusted with both setting potentiometers. At request the switching points can be pre-adjusted
Output/Switchen Performance	220 V AC/2A at inductive load
Sensor supply	
Constant voltage	1... 11 V, Pre adjusted at 10 V,
Strom	Max. 30 mA (120 mA with reinforce sense supply) Connection with feeler line (6-wire technology)
Bridge resistance	≥ 350 Ω, (lower resistors with reinforce sense supply)

<u>Attention:</u>
In case a transducer in 4-wire technique shall be connected one has to bridge terminal 8/12 and 7/10. Otherwise the transducer will be destroyed.
All sense wire hast o be protected. The screen is to be connected with PE or signal ground.

INDUK GmbH Giebel 30 D-42327 Wuppertal Fon +49(0)202/74 99 88 Fax +49(0)202/74 99 877 Web www.induk.de