

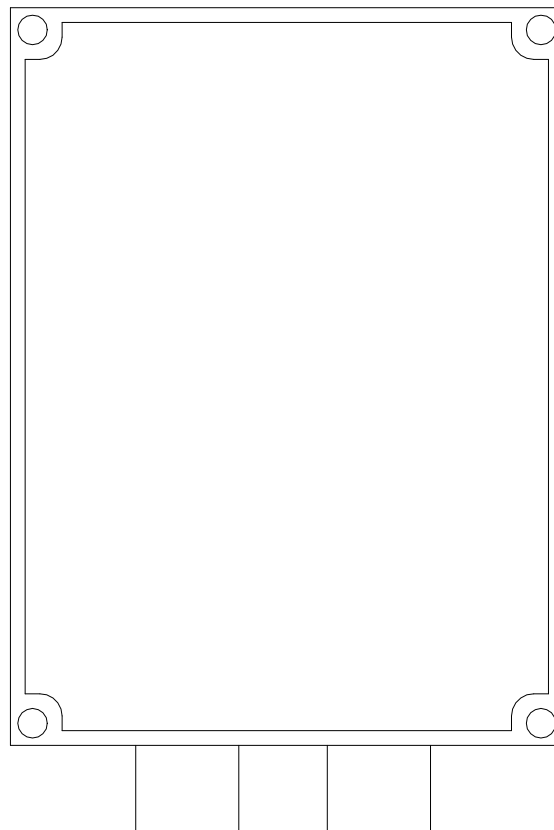


DTA-01

DTA-02

SKC 9233641

VAL0189328



**DIFFERENTIAL TRANSDUCER AMPLIFIER
FOR THE ROTOR POSITIONING SYSTEM
USERS MANUAL**



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1 DESCRIPTION

The DTA-01/02 is an amplifier for the differential transformer transducer POT-20/POT-50, used in the position monitoring system of the rotor. The differential transformer is fed with a triangular formed constant current and the outgoing signal from the transformer is synchronous detected and amplified. The signal can be zero and span-adjusted. A constant current generator gives a 4-20mA output signal for monitoring on a display unit POI-20/POI-50 or to be read by an external instrument system.

2 TECHNICAL SPECIFICATION

SIGNAL INPUT:	Differential transformer POT-20 / POT-50
SIGNAL OUTPUT:	4-20 mA. Max load 800 ohm
POWER SUPPLY:	115 or 230 Vac,48-62 Hz, max. 10VA
WEIGHT:	0,6 kg
HOUSING:	Macrolon box, transparent cover
SIZE:	175x125x75 mm (LxWxH)
CONNECTING:	Screw-connectors inside cover

3 CONNECTING DESCRIPTION

3.1	POWER SUPPLY INPUT		
	Voltage	Connect to	Close
	115 Vac	K1/1 and K1/6	K1/2-3 and K1/4-5
	230 Vac	K1/1 and K1/6	K1/3-4
3.2	SIGNAL INPUT		
	K2/1=	K-POT25/Green	(S+)
	K2/2=	K-POT25/Yellow	(S-)
	K2/3=	K-POT25/White	(E+)
	K2/4=	K-POT25/Brown	(E-)
	K3/1=	K-POT25/Shield	
3.3	SIGNAL OUTPUT		
	K3/3	+ 4-20 mADC	
	K3/4	- 4-20 mADC	

4 CALIBRATION

Remove the plastic cover and locate the "ZERO" and "SPAN" potentiometers in the top of the 8040 board.

4.1 DTA-01, POT-20 AND POI-20

Note! The Zero calibration must be done before the Span calibration.

4.1.1 Zero calibration

- Use a digital voltmeter (DVM) and measure the voltage between TP1 (+) and TP0 (-).
- Adjust the sliding rod of the POT-20 transducer until the DVM indicates 0 ± 0.002 VDC. This is the middle position of the POT-20.
- Adjust the "ZERO" potentiometer until the POI-20 indicator unit reads 10.00.

4.1.2 Span calibration

- Move the sliding rod of the POT-20 outwards 10.00 mm from the middle position.
- Adjust the "SPAN" potentiometer until the POI-20 indicator unit reads 20.00.

4.1.3 Calibration check

- Move the sliding rod of the POT-20 inwards 10.00 mm from the middle position.
- Check the POI-20 indicator reading; 0.00 ± 0.25 .

4.2 DTA-02, POT-50 AND POI-50

Note! The Span calibration is done before the Zero calibration.

Remove the plastic cover and locate the potentiometers in the top of the unit.

4.2.1 Span calibration

- Push in and let out the tip of the POT-50 transducer alternatively and adjust the "SPAN" potentiometer until the difference between the outer and the inner positions are 50.00mm on the POI-50 indicator

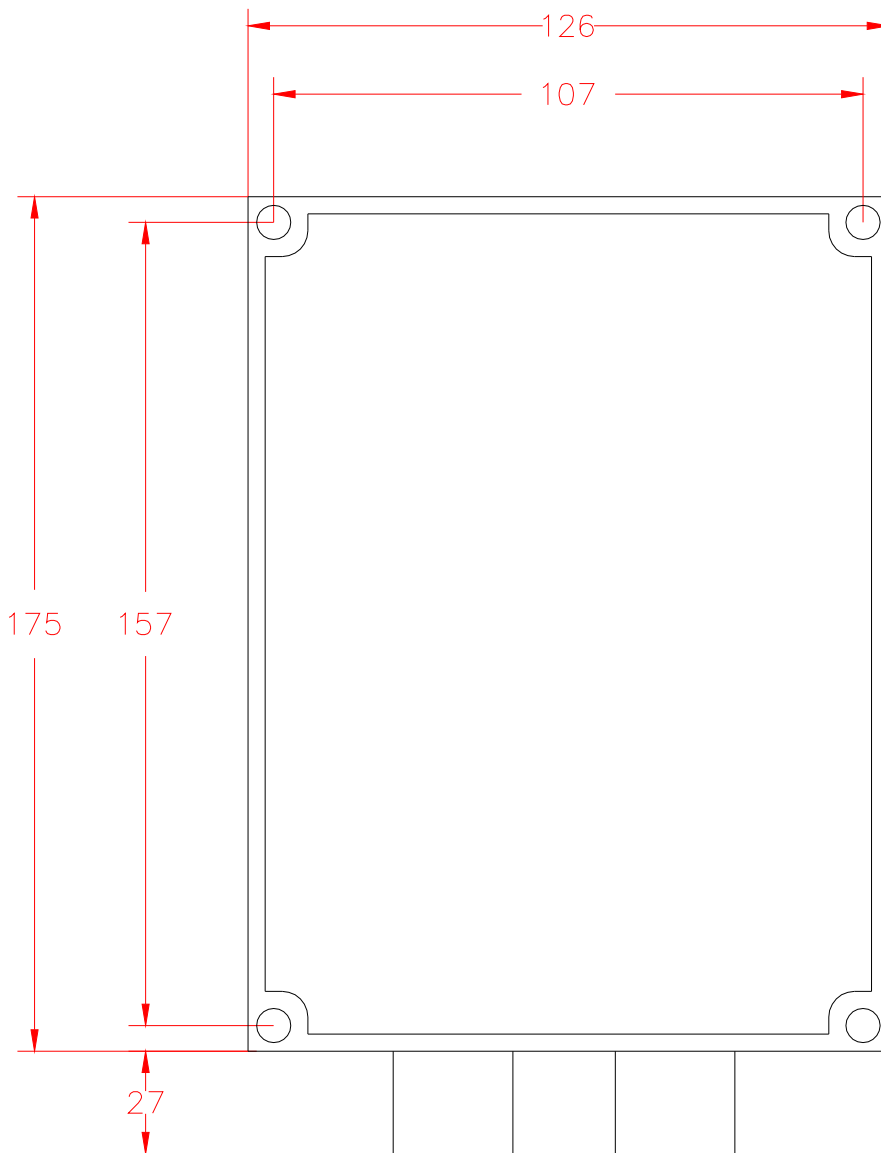
4.2.2 Zero calibration

- Push the sliding rod of the POT-50 transducer to the fully inner position.
- Adjust the potentiometer "ZERO" until the POI-50 unit reads 0.00.

4.3 Calibration check

- Let the tip of the POT-50 transducer to the fully outer position.
- Check the POI-50 indicator reading; 0.00 ± 0.05 .

5 OUTLINE DRAWING



6 CONTACT

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