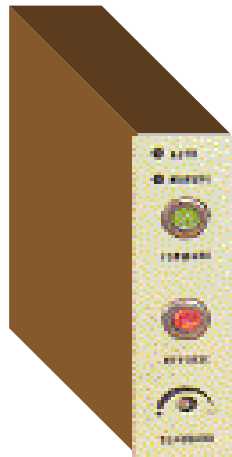




teletherm
INSTRUMENT CO. PVT. LTD.

**CURRENT TO PULSE
CONVERTOR INTERFACE UNIT
MODEL:(IFU 20)**



- **TAKES 4 – 20 mA INPUT SIGNAL AND POT INPUT AND GIVES TWO RELAY OUTPUTS FOR FORWARD & REVERSE CONTROL**
- **TWO MODES OF OPERATION – AUTO & MANUAL**
- **AUTOMATIC CHANGE OF MANUAL MODE WHEN CONTROLLER OUTPUT FAILED**
- **ZERO & SPAN ADJUSTABILITY**
- **RE-TRANSMISSION OUTPUT**
- **LED INDICATION TO INDICATE MODE OF OPERATION**
- **3 YEAR WARRANTY**

APPLICATION

The Model IFU – 20 gives two relay outputs which are useful in indicating the final element position. The interface unit is used in the process industries for controlling the process parameters and the retransmission output is used in the field requirements.

DESCRIPTION

The Interface unit IFU – 20 is a solid state device which takes 4 – 20 mA signal from PID controller or from any manual loading station and position feedback pot input from the actuator and gives two relay outputs for controlling the forward and reverse movement of the final element. Two modes of operation viz. Auto and Manual are provided. In the case of controller output failure, IFU – 20 changes over to manual mode automatically.

LEDs are provided to indicate the mode of operation. 0-20 mA re-transmission output signal is provided which can be used for indicating final element position. Zero and span adjustments for 4 – 20 mA input and pot input are provided.

MOUNTING

IFU – 20 is housed in a mild steel case to suit 144 DIN 43700 standard.

OPTIONS

Option A : A retransmission output 4 – 20 mA is provided for field requirement

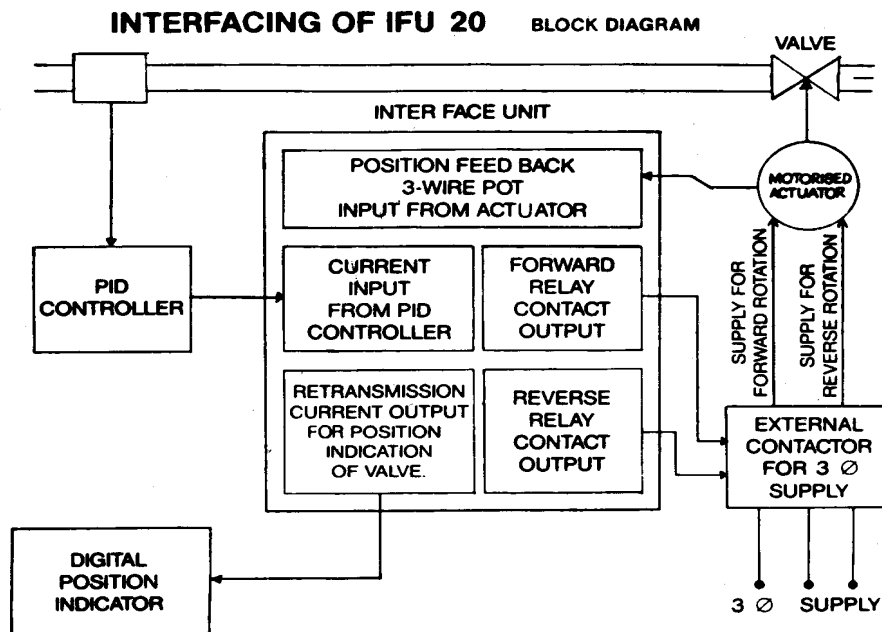
CALIBRATION

1. For 4 – 20 mA input from PID controller

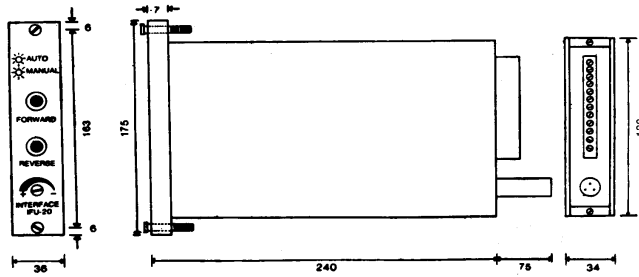
- Connect the 4 – 20 mA input with proper polarity to the unit
- Feed 4 mA and adjust PID R.T output zero trim pot for 0 V at the pin no. 7 of the rear connector
- Now keep the input at 20 mA and adjust R.T output span for (-)2 V at pin no. 7 of the rear connector
- Repeat steps b & c for the better accuracy

2. For Pot I / P (from Actuator)

- Connect the pot input to the proper terminals of the unit
- Keep the actuation pot at zero and adjust the actuator R.T output zero to get 0 V at pin no. 4 of the rear connector w.r.t input negative terminal
- Now keep the pot at maximum level and adjust the actuator R>T output to get positive at pin no. 4 of the rear connector
- Repeat the steps b & c for maximum accuracy



MOUNTING DETAILS :



SPECIFICATIONS

INPUT SIGNALS (Standard)

CONTROL SIGNAL	:	4 – 20 mA
FEED BACK SIGNAL	:	100 ohms Potentiometer
EXCITATION CURRENT FOR POT INPUT	:	3 mA, Maximum
CONTROL OUTPUT	:	2 relay contact output for forward / reverse Control
RELAY CONTACT RATING	:	3 A @ 240 V AC / 24 V DC
ANALONG OUTPUT	:	Retransmission signal of 0 – 20 mA Optional 4 – 20 mA for position indication
OUTPUT DRIVE LOAD	:	400 Ohms maximum
OPERATING MODES	:	Auto / Manual
DEAD BAND	:	Adjustable from 1% to 10% (app.) of the value / damper actuator opening
CONTROL ACCURACY	:	0.5% of value
POWER SUPPLY	:	110 V / 240 V Ac +10%, 50 Hz
POWER CONSUMPTION	:	15 VA
OPERATING TEMPERATURE	:	0 – 50 C
HUMIDITY	:	4 – 95% RH (non – condensing)

DIMENSION

BEZEL	:	36 X 175 mm
CUTOUT	:	34 X 138 mm (+ 0.5 mm)
MOUNTING	:	Through screws from front Bezel.

MANUFACTURED BY:

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