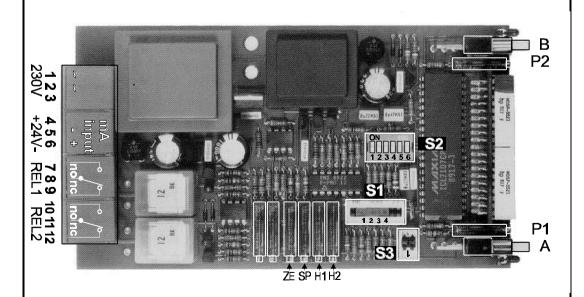
## **DIGITAL PROCESS INDICATOR**



### PM5650-HH INSTRUCTION MANUAL 99A



#### INTRODUCTION

The model PM5650-HH is a high quality, free to scale, digital read-out with two independent relay contacts which can be set as alarm to any required value. Depending on the option the unit accepts linear 4 - 20 mA or 0 - 20 mA signals. It provides a 24V DC power supply for a transmitter at the same time.

#### CALIBRATION INSTRUCTIONS

In order to calibrate the Model PM5650-HH, a current (0/4-20 mA DC) simulator is required. (Model **TL245** is recommended as a fast, simple calibration tool.)

Remove the front bezel and the two cover plates. Place the cover plates on a soft, non-scratching surface. Gently pull the meter assembly out of its housing.

- 1. Connect the simulator to the input (refer to Fig.2; to 5 and + to 6)
- 2. Connect the power supply 230 or 115V (check instrument label!) (Fig.2; no.1 and 2)

#### WARNING: BEWARE OF SHOCK WHEN POWER-SUPPLY IS CONNECTED !!

3. Use switch S2 to determine the Offset or Zero. Only switches # 1, 2 and 3 are used for this function. Set the Zero to obtain the correct range using the following table:

readout	switch position
0 - 500	#1, #2, #3 'OFF'
500 - 1000	#3 'ON' - #1 & #2 'OFF'
1000 - 1500	#2 'ON' - #1 & #3 'OFF'
1500 - 1999	#1 'ON' - #2 & #3 'OFF'

Simulate a 4 mA input. Adjust the ZERO potentiometer "ZE" to obtain the exact reading desired.

- 4. To select the Zero or Offset POSITIVE (+) or NEGATIVE (-) sign, use S3. The 'A' position will give a positive (+) sign; the '1' position will display a negative (-) sign.
- 5. Adjust the simulator to an output of 20 mA. Use S1 to determine the Span Range. Set the Span to the desired range using the following table:

span range	switch position
0 - 500	#4
500 - 1000	#3
1000 - 1500	#2
1500 - 1999	#1

Adjust the SPAN potentiometer "SP" to obtain the exact reading desired.

Note that decimal point is not shown is this table. For a range of 0 - 120.0 you must put S1 in position #2.

6. Use S2 to select the position of the Decimal Point. Only switches #4, 5 and 6 are used.

decimal location	switch position
000.0	#4 'ON' - #5 & #6 'OFF'
00.00	#5 'ON' - #4 & #6 'OFF'
0.000	#6 'ON' - #4 & #5 'OFF'

#### **SETTING THE ALARM POINT(S)**

- Push the button A on the front left side and adjust the read-out to the first required setpoint with P1
- 8. Use potentiometer H1 to set the hysteresis. Turn counter clockwise for the smallest hysteresis.
- 9. Push the button B on the front right side and adjust the read-out to the second required setpoint with P2.
- 10. Use potentiometer H2 to set the hysteresis. Turn counter clockwise for the smallest hysteresis.

# NOTE: THE RELAY CONTACTS ARE ALARM CONTACTS ONLY AND NOT SUITABLE TO SWITCH HIGH RATINGS. (MAXIMUM 100W NON-INDUCTIVE LOAD)

11. Adjust the simulator to provide an input of 0 mA or 4 mA. If the displayed value is incorrect, repeat the calibration procedure. Repeat for a simulator value of 20 mA.

The Model PM5650-HH is now calibrated. Replace the front cover plates and bezel.

FIG.2 Connection

