



Power	120 VAC, +/- 10%
Operating Temp	0-50 C (32-122 F)
Relative Humidity	0-95% RH
Input Signal	mV
Output Signal	4-20 or 10-50 mA
Max Output Load	1500 ohms
Seismic Approval	Category B
Transient Immunity	OH A28M-1982 1000 V _{peak}
RFI Immunity	OH C5047-77
Accuracy	+/- 0.25% of span
Drift	Short term +/- 0.05% LongTerm +/- 0.1%
Isolation	1000 vac input vs output vs power

ACM-TA-4006-P.1 Square Root Extractor

The ACM-TA-4006-P.1 was developed as a direct form, fit and function replacement for the AGM model ACM-TA-4006 Square Root Extractor.

This unit reads the analog signal from a differential pressure transmitter measuring the pressure drop across an orifice plate and calculates an analog output signal that is linearly proportional to the flow rate.

The new unit uses an EPROM with a look up table, which contains the calculated square root values. The values in the EPROM are accessed using an A/D and D/A on the circuit board. Using this approach means the design does not have any embedded software.

The new ACM-TA-4006-P.1 several performance enhancements. The 900F-P has 3 way input-output-power isolation. It has an electrical transient protection circuit on the input and output signal lines as well as the power line. The power supply is a very efficient switching power supply which uses only one electrolytic capacitor as compared to the original unit which had a linear supply with multiple electrolytic capacitors. Additionally the circuit is designed with a low temperature coefficient giving the unit good long term stability requiring reduced calibration maintenance.

