

Electronic Instrumentation

100 Series ACT-PAK

Description

ACT-PAK® (Automatic Control Translator Package) is a line of electronic instruments for recording, totalizing and actuating controls based on meter throughput. The ACT-PAK instrument accepts pulses or contact closures from the metering device and provides a variety of outputs displaying consumption, rate of flow data, process control and data transmission. Enclosures include Standard – a free standing or panel mountable package that meets NEMA1 requirements, and NEMA 4X a wall-mountable fiberglass enclosure.

A number of options are available as listed below. The options Bb and L are both field programmable. A secure totalizer zero reset circuit is standard.

Models Available

- 100D – Totalizer and Digital Flow Rate Indicator w/ 4-20 MA
- 100DN – Same as above in a NEMA 4X enclosure
- 104N – Blank Front Panel in a NEMA 4X Enclosure



Features

FRONT PANEL

INPUT PULSE INDICATOR: A red LED that blinks on and off to display each pulse received from the meter.

POWER INDICATOR: A red LED located below the input pulse indicator, indicating the instruments power supply is functional.

TOTALIZER/FLOW RATE INDICATOR: Displays both the total consumed and flow rate on an eight-digit, transmissive red LCD backlight 0.46" display. (For outdoor or high ambient light conditions a reflective readout is available). A single display indicates the flow rate designated by an R. A blank on the display indicates the total consumed and a b indicates the total consumed on a resettable totalizer. The various parameters can be toggled with the front panel SELECT switch or set to automatically scroll. The number of active digits depends on the parameters of the input signal.

OUTPUTS AVAILABLE

STANDARD PROPORTIONAL DC OUTPUT: 4-20 mA:

All instruments are supplied with a 4-20 mA DC output proportional to the flow rate through the metering device. This signal has the capability of driving external equipment with an impedance from 0 to 500 ohms without recalibration.

OPTIONAL OUTPUTS

OPTION A: Dual 4-20 mA Output Signal: Two (2) 20 mA output signals proportional to the flow through the metering device. With the standard 4-20 mA output this option provides for a total of (3) 4-20 mA signals. If isolation between devices is necessary an analog isolator is required.

OPTION Bb: Totalized Contact Output: A SPDT contact closure rated 5 amps, resistive 30 VDC or 250 VAC. The value of the pulse and the pulse duration may be changed in the field.

OPTION B: Totalized Contact Output: The same specifications as option Bb. The value of the pulse and the pulse duration are not field programmable.

OPTION C1: Keying Output: A SPST mercury-wetted contact closure (bounce free, rated 1 amp 24 VDC or 0.1 amps at 117 VAC, all resistive. The output is synchronous with the input signal to the instrument. Used to retransmit meter pulses to other instruments or equipment.

OPTION D: Scaled Output: A mercury wetted SPST contact closure with a preset output frequency proportional to flow rate through the meter. Typically specified as a number of pulses at a maximum flow rate. Example: 60 ppm at 1500 GPM. Contact ratings are the same C1.

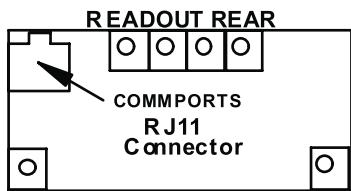
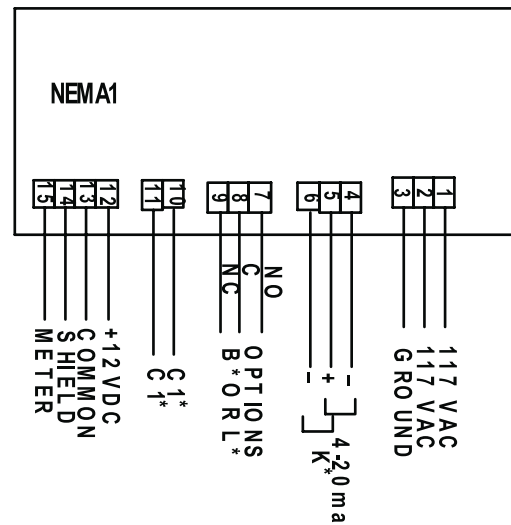
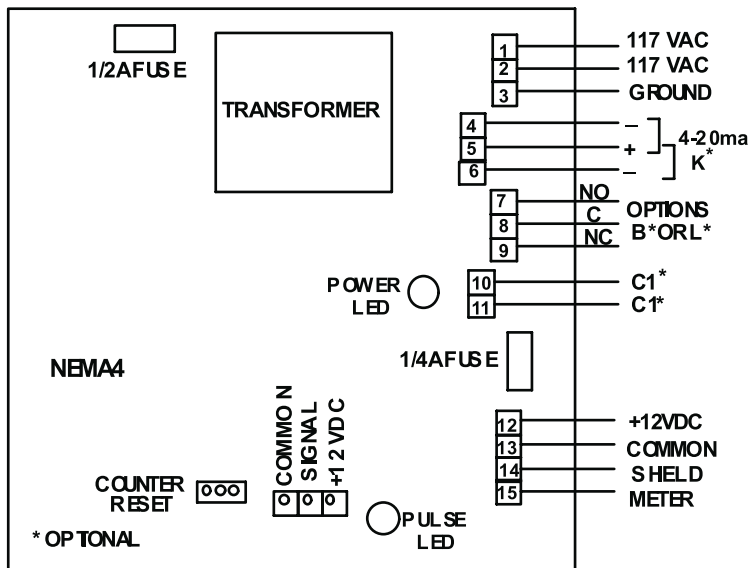
OPTION I: Input Compensator: An input signal multiplier used when totalized quantities are smaller than standard increments are specified. Not required with option Bb.

OPTION L: Flow Alarm: A SPDT contact closure that is activated when the flow rate exceeds or falls below a preset flow rate. The switching point may be changed in the field by changing the program. Contact ratings are the same as Option B.

OPTION P: Panel Mounting: Instrument is supplied with the hardware necessary for panel mounting.

Communications Ports: Two (2) serial communications ports RS485, Comm1, and RS232, Comm2, are available. Only one port can be used at a time. External programming by the user is required.

OPTIONAL OUTPUTS



TERMINAL NUMBER	FUNCTION	SWITCH INPUTS (BELDEN 8760)	SOLID STATE INPUTS (BELDEN 8770)
1	Input Signal	White	White
2	Shield	Bare (Shield)	Bare (Shield)
3	Ground	Black	Black
4	+12VDC	No Connection	Red

	NEMA1	NEMA4X
LENGTH	6.35"	5.9"
HEIGHT	3.0"	5.9"
WIDTH	5.3"	3.8"
WEIGHT	2.4 Lbs	2.5 Lbs

© All products purchased and services performed are subject to Sensus' terms of sale, available at either; <http://na.sensus.com/TC/TermsConditions.pdf> or 1-800-METER-IT. Sensus reserves the right to modify these terms and conditions in its own discretion without notice to the customer.

This document is for informational purposes only, and SENSUS MAKES NO EXPRESS WARRANTIES IN THIS DOCUMENT. FURTHERMORE, THERE ARE NO IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, WARRANTIES AS TO FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY. ANY USE OF THE PRODUCTS THAT IS NOT SPECIFICALLY PERMITTED HEREIN IS PROHIBITED.