

Description

The 2-wire ACX Current Transmitter accepts standard AC inputs from current and potential transformers. It converts the input to a proportional current or voltage signal for monitoring motor currents, and interfacing with a distributed control system or another process instrument.

The ACX, for personal safety, incorporates an internal toroidal input transformer that steps a 0-5 amp ac current input to 0-5 milliamps. The transformer also isolates the input and enables the ACX to withstand large momentary surges of input current.

For additional safety, the ACX can be ordered with the toroidal input transformer (-EM option) mounted outside the unit. This option permits servicing without opening the secondary of the customer current transformer.

The ACX is offered with a variety of other options including complete RFI/EMI protection. For details, see the back page.



The ACX is offered in high-density DIN-style and hockey-puck housings. The hockey-puck housing mounts on a relay track or in an explosion-proof enclosure.

Features

- **Wide range of inputs and outputs.** Interfaces almost any current/voltage device to any process control system, readout device, or process control instrument.
- **Low output ripple/high common mode rejection.** Low output ripple and high common mode rejection mean output signals are exceptionally accurate, stable, and noise-free.
- **Complete isolation.** Eliminates signal inaccuracies caused by ground loops.

Certifications



Canadian Standards Association (CSA)
General (Ordinary) Location – DIN/HP
Explosion-Proof – HP in explosion-proof enclosure: Class I, Groups B, C, D; Class II, Groups E, F, G; Class III



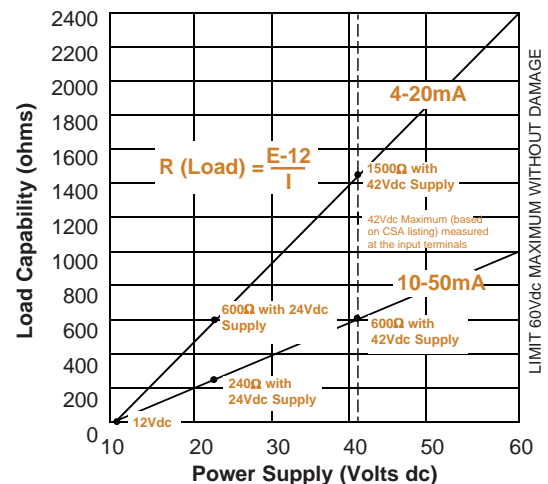
Factory Mutual Research Corporation (FMRC)
Explosion-Proof – HP in explosion-proof enclosure: Class I, Division 1, Groups B, C, D
Dust Ignition-Proof – HP in explosion-proof enclosure: Class II, Division 1, Groups E, F, G
Suitable for: Class III, Division 1



CENELEC approved by ISSEP/INIEX
Explosion-Proof – HP in explosion-proof enclosure: EExd IIC; T6



SAA Standards Association of Australia (SAA) Approved
Type N – DIN: Ex N IIC; T6; IP65
Explosion-Proof – HP in explosion-proof enclosure: Exd IIC; T6; IP66



The load capability of the ACX increases with the power supply.

ACX

AC Current Transmitter

Specifications

<p>Performance</p> <p>Calibration Capability: ±0.2% of span (linearity and repeatability); ±0.5% of span at 0-10Vac range and lower</p> <p>Isolation: Input and output are transformer isolated up to 500Vdc</p> <p>Overload Capability: 35 amps for 30 seconds with -EM option; 150% overvoltage with voltage input</p>	<p>Performance (continued)</p> <p>Load Capability: $R \text{ (Load)} = \frac{E - 12}{I}$</p> <p>Ripple: 10mV peak-to-peak maximum</p> <p>Ambient Temperature Range: -20°C to +82°C (-20°F to 180°F)</p> <p>Effect: ±0.015%/°C (±0.01%/°F) over above range</p>	<p>Adjustments Type: External multiturn potentiometers</p> <p>Span: With full-scale input, adjusts output to 100%, ±10% of selected output span</p> <p>Zero: With minimum input, adjusts output to 0%, ±10% of selected output span</p> <p>Weight 170 grams (6 ounces)</p>
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Ordering Information

Unit	Input	Output	Power	Options	Housings
ACX	Current (into 0.1ohm input impedance) 0-1AAC 0-2AAC 0-3AAC 0-4AAC 0-5AAC Voltage (into 100ohm per volt input impedance) 0-.5VAC 0-1.5VAC 0-5VAC 0-10VAC 0-25VAC 0-50VAC 0-120VAC 0-150VAC	4-20MA into 600ohm with 24Vdc power supply 10-50MA into 600ohm with 42Vdc power supply	12-42DC (loop-powered on output side)	-EM Externally-mounted input transformer for current input -FA Front accessible terminal block (DIN housing only) -RF RFI/EMI protection (requires -EM option for current input); DIN and hockey-puck housings rate 50V/m -ABC = 0.1% F.S. when tested according to SAMA Standard PMC 33.1 -RTB Removable terminal block (DIN housing only)	DIN Aluminum DIN-style rail-mount housing (G-type rail) HP Hockey-puck housing with spring clips for mounting in an explosion-proof enclosure FL Hockey-puck housing with flanges for surface or relay track mounting 2LS* Hockey-puck housing mounted in a 2-hub, solid cover, low dome, explosion-proof enclosure <small>*F (prefix) indicates CENELEC approved (e.g. F2LS) FM (prefix) indicates FM approved (e.g. FM2LS) S (prefix) indicates SAA approved (e.g. S2LS) P (suffix) indicates unit comes equipped with a base plate and U-bolts for mounting on a 2-inch pipe (e.g. 2LSP)</small>

When ordering, specify: Unit / Input / Output / Power / Options [Housing]
Model Number Example: ACX / 0-5AAC / 4-20MA / 12-42DC / -EM -FA [DIN]

Easy to Order

To order, use the bold face data from the Ordering Specifications table above. For assistance, refer to the model number example located at the bottom of the table.



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