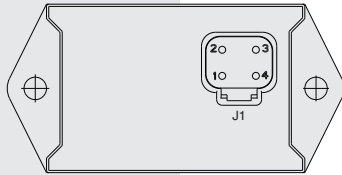


**EACD-1 AC Frequency Detector****Model EACD-1****DESCRIPTION**

The **EACD-1** is an optically isolated AC frequency detector intended for use as a feedback with HydraForce electronic controllers used in hydraulic motor-driven AC power generator applications. The output of the EACD-1 provides a frequency pulse signal based on the generator speed to directly drive the frequency input pin of the controller operating in closed loop mode.

**OPERATION**

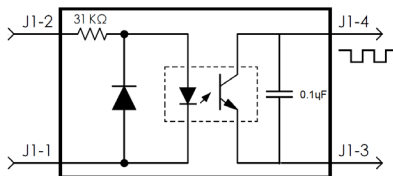
The AC output voltage from the power generator provides the input signal and is connected to pins 1 and 2. Pin 3 connects to the electronic controller signal ground. Pin 4 connects to the electronic controller signal input. The input type of the electronic controller is set to frequency pull-up. A portion of each positive half of the AC input will cause the output pins 3 and 4 to conduct and produce a logic low pulse.

**Note:** You may connect pin 4 to positive voltage and take the output signal at pin 3 to provide a logic high pulse each cycle. If using this mode, take extra care not to exceed the voltage and current limits of the device.

**Note:** We recommend use of a fuse on the AC inputs.

**FEATURES**

- Optical isolation provides protection of DC electronics from the AC power source.
- Tested for severe environmental conditions - temperature, vibration, and voltage transients
- Low cost way to monitor AC power frequency

**SYMBOL****SPECIFICATIONS**

**Input Voltage Range:** 90 to 250 ac RMS

**Input Frequency Range:** 0 to 130 Hz

**Input Resistor:** 16k

**Output Voltage:** 40 dc maximum

**Output Current:** 2.5 mA maximum

**Electrical Isolation:** 1500 V<sub>rms</sub> minimum

**Operating Temperature:** -40 C to 85° C (-40 to 185°F)

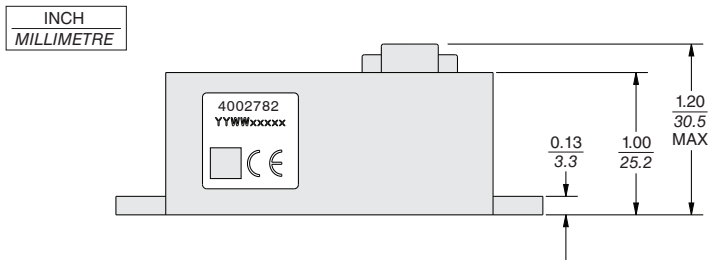
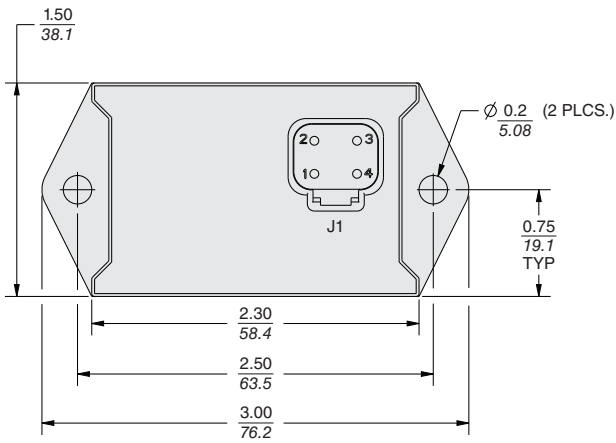
**Ingress Protection Rating:** IP67

**Electrical Connector:** Deutsch DT04-4P (mates with DT06-4S)

# EACD-1 AC Frequency Detector

Model EACD-1

## DIMENSIONS



## PIN CONNECTIONS

Connector J1 Pin	Description
Pin 1	AC Input
Pin 2	AC Input
Pin 3	Output Signal -
Pin 4	Output Signal +

## TO ORDER

EACD-1 - Part No. 4002782

Mating Connector - Part No. 4001953

Compatible Electronic Controller: EGDR-0101A (Part No. 4204850)