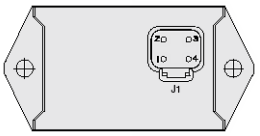
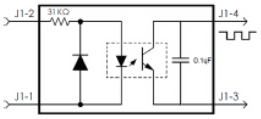
Overview



Symbol



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.

Notes

- 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.
- Add a 100 mA fuse to each input pin (J1-1,2) for added protection.

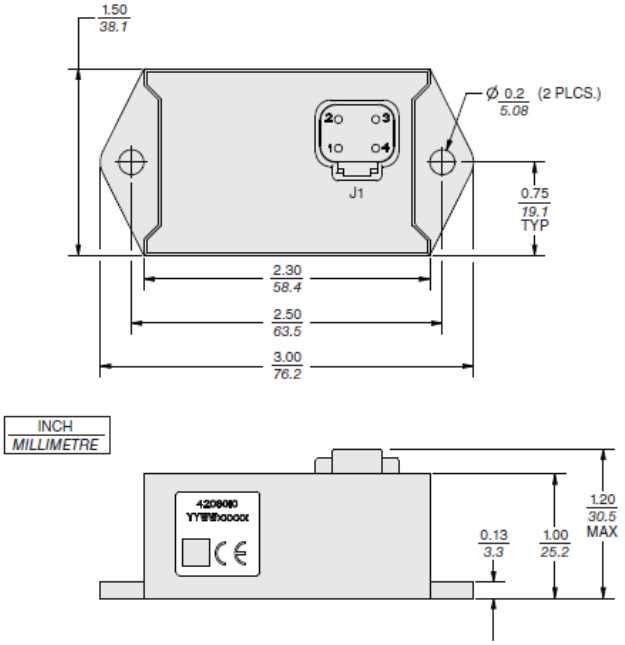
Features

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

Ratings

Electrical Parameters		
Input voltage range	90 to 250 Vac	**- Note:** RMS
Input frequency range	0 to 130 Hz	
Input resistor	16 kohm	
Output voltage	40 Vdc	**- Note:** Maximum
Output current	2.5 mA	**- Note:** Maximum
Electrical isolation	1500 Vrms	**- Note:** Minimum
Properties		
Connector	Deutsch DT04-4P	**- Note:** (mates with DT06-4S)
Environmental Ratings		
Ingress protection	IP61	

Dimensions



To Order

EACD-1: Part No. 4002782
Mating connector: Part No. 4001953