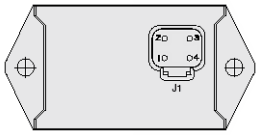
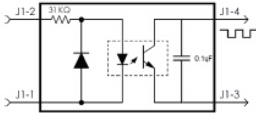




## Overview



### 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	- <b>Note:</b> RMS
Input frequency range	0 to 130 Hz	
Input resistor	16 kohm	
Output voltage	40 Vdc	- <b>Note:</b> Maximum
Output current	2.5 mA	- <b>Note:</b> Maximum
Electrical isolation	1500 Vrms	- <b>Note:</b> Minimum

### Properties

Connector	Deutsch DT04-4P	- <b>Note:</b> (mates with DT06-4S)
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### Environmental Ratings

Ingress protection	IP61
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