



High Country Tek, Inc.

Multi-Function Controller — Power-Line

Electronic Control Solutions for the Global Fluid Power Industry



Application Information:

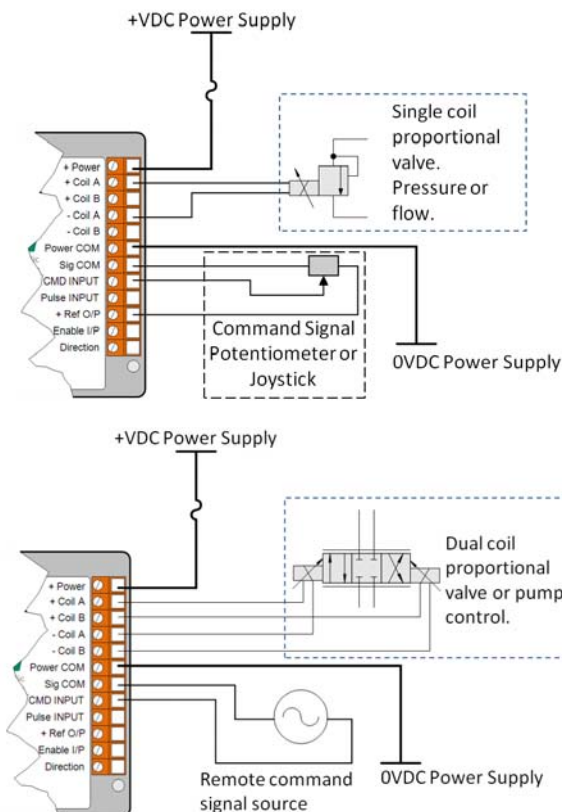
- General purpose open loop single OR dual coil valve driver
- Can be used with all types of fluid control products
- Uni or bi-directional open loop pump stroker or valve controller
- Anti-stall option with auto - reverse feature
- Accepts all common analog command signals

Product Feature Overview:

- Pre-written Windows™ software application, ready for user values
- Dual PWM outputs for any make of proportional valve or pump control
- Available in multiple current ranges to give best control resolution
- +5Vref @ 5mA for local command joysticks, potentiometers e.t.c.
- Heavy duty screw style or Weatherpack connector options
- LED diagnostics show full controller operation at all times
- System 'error' indicator LED with blink code
- Designed to meet CE latest test standards
- Unit uses Opto3000 system for set-up and PC communications



Electrical Connection Diagrams:



Controller Specification Overview:

Housing Type:-	HCT unique 'encapsulated' block.
Input Supply Voltage:	10 - 32VDC (Absolute Maximum)
Input Supply Current:	Valve Current Setting + 200mA Quiescent (Max)
Reference Voltage:-	+5V @ 5mA (current limited 1KΩ)
Command Input Type(s):	Voltage and current
Command Input Value(s):	0-5V, 0-10V, 4-20mA & 12±8mA
Feedback Input Type(s):	Pulse only - software selectable
Feedback Input Value(s):	Frequency Range selectable
Feedback Input Value(s):	0-±1V, 0-1.25V, 0-2.5V, 0-5V & 0-10V
Dither Frequency :	Software adjustable, ~30 to 250Hz
Housing Material:-	Black, Polycarbonate.
Wire Connections:-	12 way screw type (Standard)
PC Communications:	Opto2000 or Opto3000
Encapsulation:-	Flameproof epoxy resin
Mounting:-	3 x No. 8 (5mm) screws .
Temperature range:-	-40 to +85 °C (operational)
NEMA/IP Rating:	NEMA 6P/68 (module only) derate for connector as required.



Multi-Function Controller: Power-Line

Ordering Guide:

P L D E Q

The Power-Line controller is designed to be very flexible with multiple user selectable configurations and is offered with standard In-line screw terminals or optional industry standard 2 part Weatherpack connectors that will allow the unit it be used in externally mounted applications.

Max. Current Range:

- Y = 0mA to 250mA
- Z = 0mA to 500mA
- E = 0mA to 1A
- K = 0A to 1.7A
- G = 0A to 3A

Contact factory for any other current ranges needed

'Q' Option mating connector kit for Shroud: **P/n: 999-10159**
'Q' Option mating connector kit for Tower: **P/n: 999-10160**

'Q' Option mating 3-meter harness kit: **P/n: 999-10224**, for both shroud & tower.

Connector Type:

NO Letter (i.e. Blank) = Standard screw type terminal block
Q = WeatherPack option - 6 way tower and 6 way shroud on 6 inch cables will be provided.

Connector Details:

- Ferrules must be used for stranded cable to prevent shorts.
- Always fit strain relief on cables to prevent vibration and movement causing bad connections.
- Use the correct gauge of wire for the application.

Pin 1:- +Vin - 10 – 32VDC Power supply Input

Pin 2:- +Output to Coil A

Pin 3:- +Output to Coil B

Pin 4:- -Output to Coil A

Pin 5:- -Output to Coil B

Pin 6:- 0V power input (Common)

Pin 7:- 0V - Signal common

Pin 8:- CMD Input

Pin 9:- Pulse Input

Pin 10:- +Vref Output (5v @ 5mA)

Pin 11:- Controller Enable Input

Pin 12:- Force Output steering (Coil A or B) select Input

Need More Information ?

For customer service, pricing, order placement and application support, contact us through E-mail at:

info@hctcontrols.com

Opto3000 PC to Module Interface:

This separate unit is the required interface between the PC and the Power-Line controller.

Part No: Opto3000

The Opto 3000 unit is Powered from the USB port on the host PC and requires NO external power supply or batteries to function.

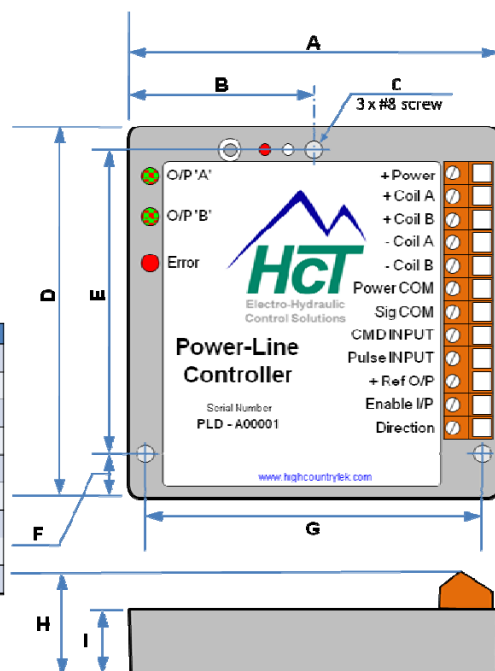


Dimensional Data:

Note:

- Unit weight is approx. 250 grams
- Not to scale, please contact HCT for exact dimensions

Label	Inches	Millimeters
A	3.77	96.0
B	1.89	48.0
C	Ø 0.186	5.0
D	3.82	97.0
E	3.10	78.8
F	0.46	12.0
G	3.25	82.6
H	0.90	23.0
I	0.64	16.5



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