



High Country Tek, Inc.

Hydraulic Fan System Controller - HFS 4

Electronic Controller Solutions for Mobile, Industrial & Marine Applications.

Application Information:

- Direct connect to low frequency PWM engine ECU fan speed signal
- 10 to 32VDC supply range with 1200mA maximum output
- Can be used with all types of fluid control products
- Uni directional open loop pump stroker or valve controller
- Die-cast aluminum housing for bulkhead mounting

Product Feature Overview:

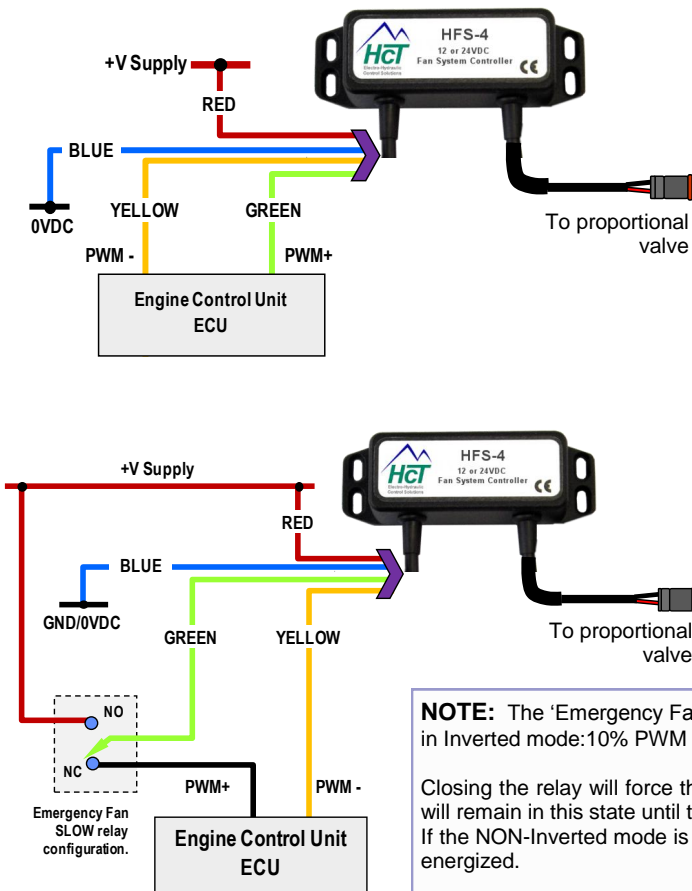
- Single PWM output for any make of proportional valve or pump control
- Solidly 'Potted' in flame resistant epoxy resin for durability
- ALL settings by potentiometers under unit lid
- Pre-connected color coded cables for easy connections
- Meets latest CE latest test standards & Sealed to meet NEMA 6P or IP 67



Order **HFS 4** for this unit

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)
Command Input Type:	PWM from engine ECU / DCU
Command Input Value:	8V - 30V (10% to 90% PWM)
CMD I/P Frequency:	20 to 125Hz PWM
Input Resistance:	1200 Ohms
Dither Frequency :	Adjustable, ~100 to ~250Hz (± 20%)
Housing Material:-	Die-cast aluminum
Wire Connections:-	pre-connected color coded cable
Encapsulation:-	Flameproof epoxy resin filled
Mounting:-	Bulkhead / flat surface
Temperature range:-	-20 to +70 °C (operational)
NEMA/IP Rating:	NEMA 6P/67 when assembled and mounted to coil correctly

NOTE: The 'Emergency Fan SLOW' configuration shown below assumes that the controller is being used in Inverted mode: 10% PWM = fan full on, 90% PWM = fan full off.

Closing the relay will force the input to input supply voltage and the fan will be controlled to fully OFF and will remain in this state until the relay is released. If the NON-Inverted mode is selected, the relay should be connected to 0V to achieve fan OFF when relay energized.



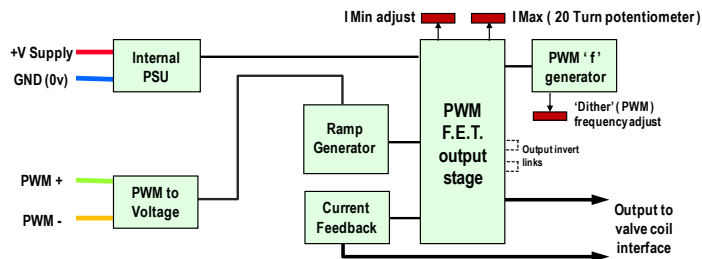
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Adjustment Guide:

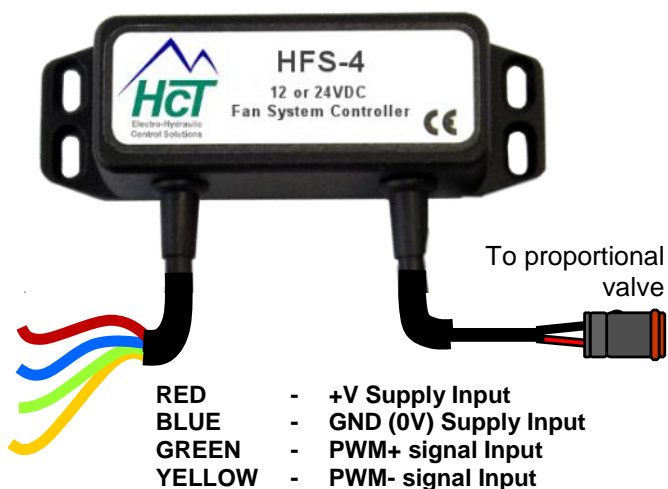


View of HFS 4 with lid removed and no cable shown for clarity

Block Diagram:

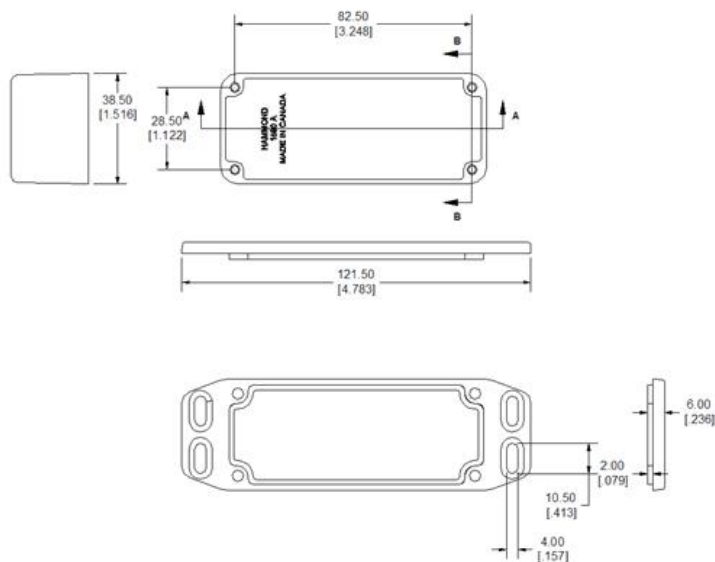


Connection Details:



- IMax potentiometer is 20 turn with end travel clutch
- All other potentiometers are single turn variety - adjust with care
- ALL potentiometers are clockwise to increase respective value
- Unit is fully encapsulated in flame resistant black epoxy resin
- Controller M3 x 40 mounting screw and gasket supplied

Dimensional Data:



Pre-wired cable removed for clarity

Prewired and pre-fitted output connector type:

Deutsch - DT06-2S

The HFS 4 controller comes pre-wired, with the main input cable being 18 inches of 4 core color coded cable.

The output cable is 12 inches in long of 2 core color coded cable. Both cables are selected for harsh environments and meet:

4 core, 16/02 with PVC outer protection to Def Standard 16-12 Part 5 (Screened) 2.5 Amps/core @ 70°C Max Operating Temp.

Need More Information ?

For customer service, pricing, order placement and application support, contact us through E-mail at: info@highcountrytek.com

www.highcountrytek.com



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