



High Country Tek, Inc.

Hydraulic Fan System Controller: **HFS**

Electronic Control Solutions for the Global Fluid Power Industry



Application Information:

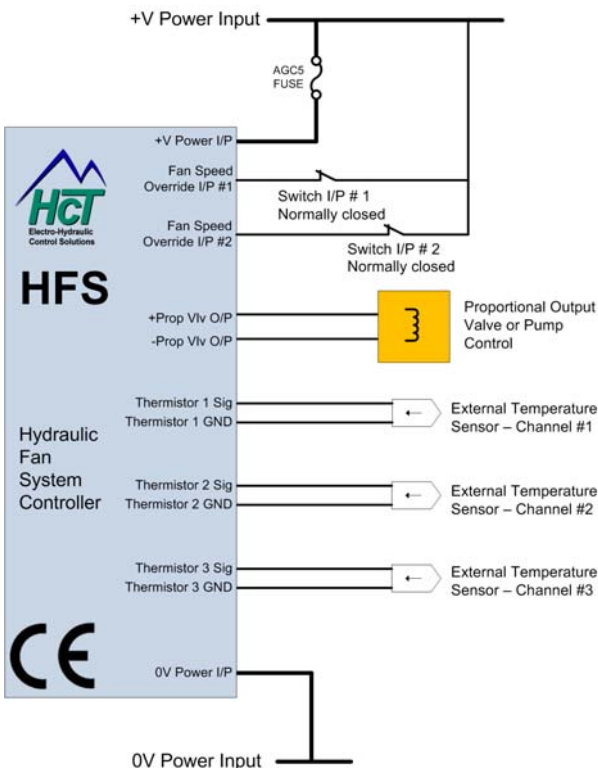
- Optimizes fan speed control relative to temperature requirements.
- **Engines or systems without SAE J1939 capability.**
- Uni-Directional hydraulic fan drive applications.
- OEM, Re-power and Retro-fit opportunities.
- On-road and Off-Road suitable mechanical package.
- Complimentary controller to expand existing system functionality.

Product Feature Overview:

- Pre-written Windows™ software application, ready for user values.
- **3 x discrete temperature zone sensor inputs**
- 2x discrete switch inputs for fan speed override (A/C on e.t.c.)
- 1x 3A PWM output for any make of proportional valve or pump control.
- Open and short circuit cable protection with monitoring
- Heavy duty industry standard Deutsch connector.
- System 'error' indicator LED with blink code.
- Unit uses Opto 3000 system for set-up and PC communications.



Electrical Connection Diagram:



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:** 3 x 2 wire Thermistor, temperature switch (software selectable)
2 x on/off inputs for fan speed override (software selectable).
- Command Input Value:** Ohms only (Max temp = 50 Ω
Min temp = 2MΩ)
Additional 2 x Contact closure.
- Dither Frequency :** Software adjustable, ~30 to 250Hz
- Housing Material:-** Black, Polycarbonate
- Wire Connections:** 12 way male Deutsch—polarized
- Connector type:** DT15-12PA
- Encapsulation:** Flameproof epoxy resin
- Mounting:** 3 x No. 8 (5mm) screws .
- Temperature range:** - 40 to +75 °C (operational)
- NEMA/IP Rating:** NEMA 6P/68
(Module only)
derate for connector as required.



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Ordering Guide:

To make certain we offer you the best product for your application, please contact our sales and customer support department at **High Country Tek, Inc.** in California to discuss your project.

Due to time zones, we recommend you use the E-mail address to guarantee a timely response or if you prefer, use the office numbers given below.

Either way, our experienced customer service personnel will be glad to work with you on your order

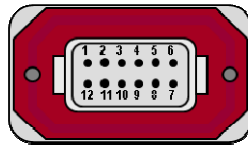
Temperature Sensor Specifications:

Supplier / Manufacturer:	Coolant Temperature Sensors:		Air Temperature Sensors:	
	Part Number:	Notes:	Part Number:	Notes:
NAPA Autoparts	ECHTSC200	-	ECHTSC300	-
AutoZone	(0)47131	-	-	-
AC Delco	213-928	-	213-190	-
GM	15326386	Was 12146312	25036751	Was 12110446
Standard	TX3	-	AX1	-
GP Sorensen	TSU81	-	779-19001	-
Niehoff	DR134AK	-	TS83631	Was DR-136W
Wells	SU109	Includes connector	SU107	-
Wells	254	-	235	-
Conductite/Dorman	-	-	-	-
MSD	2310	Includes connector	2320	Includes connector
	= Supplier		= Manufacturer	

Connector Details:

NOTE:-

View looking at 12 way male connector on HFS controller - DT15-12PA



- Pin 1:- Thermistor #1 +signal input.
- Pin 2:- Thermistor #2 +signal input.
- Pin 3:- Thermistor #3 +signal input.
- Pin 4:- Over-ride Switch #1 I/P.
- Pin 5:- +Vin - 10 – 32VDC Power supply Input.
- Pin 6:- +Proportional Valve Output.
- Pin 7:- -Proportional Valve Output.
- Pin 8:- 0V Power Supply Input.
- Pin 9:- Over-ride Switch #2 input.
- Pin 10:- Thermistor #1 signal common
- Pin 11:- Thermistor #2 signal common
- Pin 12:- Thermistor #3 signal common

Mating connector Parts:-

- Deutsch # DT06-12SA Plug
- Deutsch # W12S – Lock
- Deutsch # 0462-201-16141 – Socket pins
- Deutsch distributor U.S.:
- Ladd Industrial sales – 1-800-223-1236

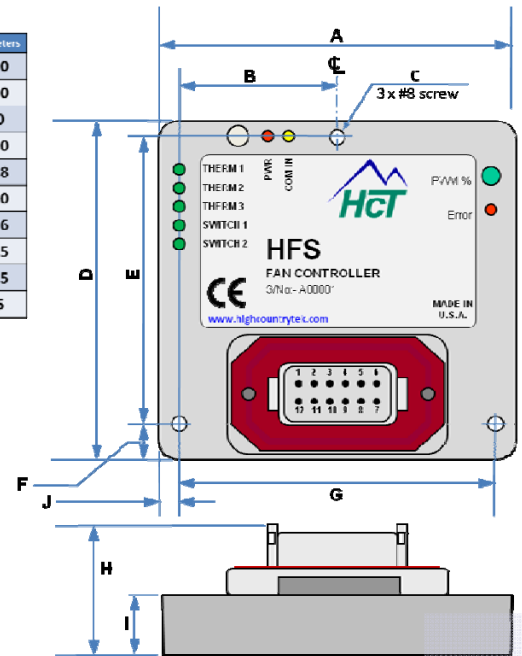
Dimensional Data:

Label	Inches	Millimeters
A	3.77	96.0
B	1.89	48.0
C	∅ 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	0.16	41.5
I	0.64	16.5
J	0.26	6.5

Notes:

Unit weight is approx. 250 grams

Not to scale, please contact HCT for exact dimensions



Need More Information ?

For the latest company and product information customer service, pricing, order placement and application support, contact us through E-mail at: info@hctcontrols.com

www.hctcontrols.com



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