



High Country Tek, Inc.

Hydraulic Fan System Controller: HFS-2Q

Electronic Control Solutions for the Global Fluid Power Industry



Application Information:

- Optimizes fan speed control relative to temperature requirements.
- **Engines or systems without J1939 capability.**
- Uni **or** Bi-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:

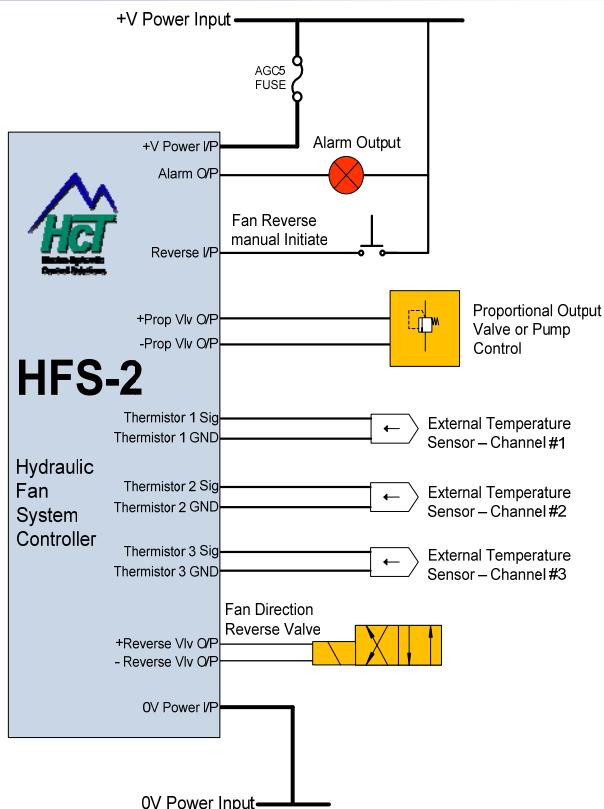
- Pre-written Windows™ software application, ready for user values.
- **3 x discrete temperature zone sensor inputs**
- Automatic or Manually initiated fan reverse cycle
- Charge air priority/limiting and noise test features
- 1 x PWM output for any make of proportional valve or pump control.
- 1 x ON/OFF output for reverse fan direction valve
- 1 x ON/OFF output for alarm integration into host system
- Open and short circuit cable protection with monitoring
- Heavy duty industry standard WeatherPak connectors.
- System 'error' indicator LED with blink code.
- Unit uses Opto3000 system for set-up and PC communications.



HFS-2Q:

Hydraulic Fan system controller with Weatherpack connectors

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(s):	3 x 2 wire Thermistor, temperature
Command Input Value(s):	Ohms only (Max temp = 50Ω Min temp = 2MΩ)
Proportional Output:	1 x PWM up to 3.3A max current
Reverse cycle I/P:	Lo to Hi logic input with software de-bounce
Reverse valve Output:	1 x ON/OFF up to 3.3A max current
Alarm Output:	1 x ON/OFF up to 3.3A max current
Dither Frequency :	Software adjustable, ~30 to 250Hz
Housing Material:-	Black, Polycarbonate
Wire Connections:-	Weatherpack connectors
Connector type:-	Weatherpack (Q option) sealed
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.



Hydraulic Fan System Controller: **HFS-2Q**

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.

Connector Details:

HFS-2Q: - This option is fitted with waterproof:-

1 x 6 way Weatherpack **FEMALE** for all thermistor inputs.

- Thermistor 3 SIG
 - Thermistor 3 GND
 - Thermistor 2 SIG
 - Thermistor 2 GND
 - Thermistor 1 SIG
 - Thermistor 1 GND
- } Female 6 way Shroud

2 x 4 way Weatherpack's for:

- Reverse I/P +
 - +V Power IP
 - +Prop Vlv O/P
 - + Reverse Vlv O/P
- } Female 4 way Shroud

- - Reverse Vlv O/P
 - Alarm O/P
 - -Prop Vlv O/P
 - 0V Power I/P
- } Male 4 way Tower



4-way tower #WPT-412015797



4-way shroud #WPS-412010974

Order complete mating connector kit for HFS-2Q from HCT:

Part Number: 999-10163


Need More Information ?

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


Temperature Sensor Information:

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



Dimensional Data:

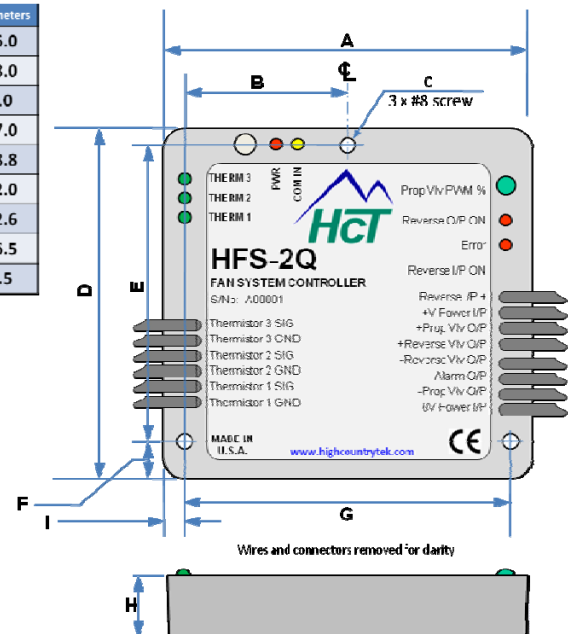
Label	Inches	Millimeters
A	3.77	96.0
B	1.89	48.0
C	Ø 0.186	5.0
D	3.82	97.0
E	3.10	78.8
F	0.46	12.0
G	3.25	82.6
H	0.64	16.5
I	0.26	6.5

Notes:

Unit weight is approx. 250 grams

Not to scale, please contact HCT for exact dimensions

HFS-2 Module shown with 'Q' option Weatherpack Connectors



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