



High Country Tek, Inc.

Hydraulic Fan System Controller — HFS - J

Electro-Hydraulic Solutions for Mobile, Industrial & Marine Applications.

Application Information:

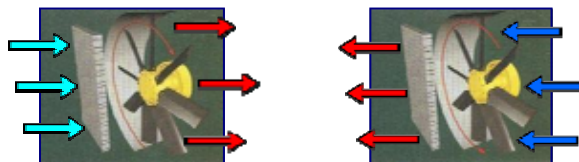
- Optimizes fan speed control relative to temperature requirements
- Engines or systems **with J1939** capability
- Bi-Directional fan feature allows radiator 'purge' or 'De-Ice'
- OEM, Re-power and Retro-fit opportunities
- On-road and Off-Road suitable mechanical package
- Very cost effective 'all-in-one' hydraulic fan system controller

Product Feature Overview:

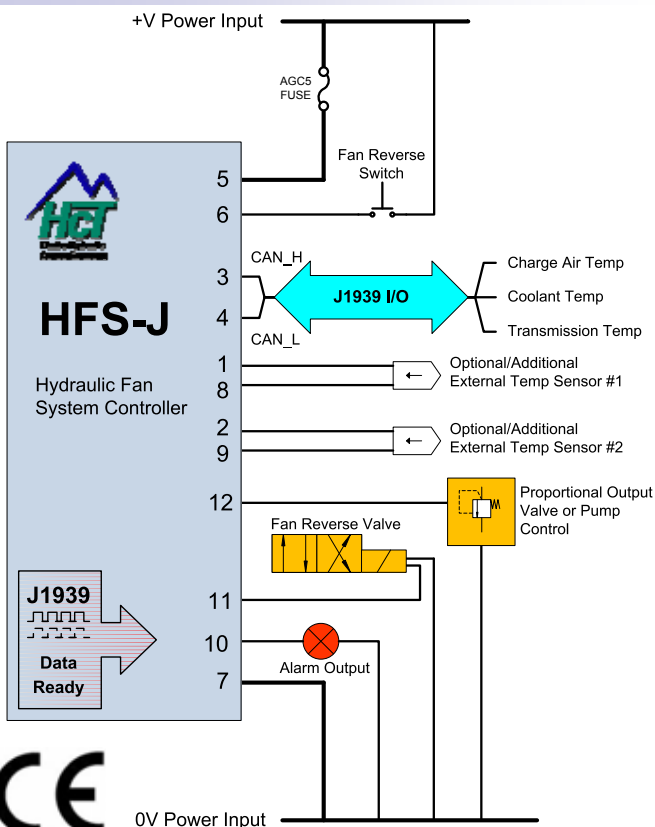
- Pre-written Windows™ software application, ready for user values
- **3 x temperature zone inputs direct from J1939 bus**
- 2 x discrete inputs for switches OR temperature sensors
- 1 x PWM output for any make of proportional valve or pump control
- 2 x ON/OFF outputs for fan reverse valve and external alarm
- J1455 (load dump) compliant power protection
- Heavy duty industry standard Deutsch connector
- System 'error' indicator LED with blink code
- Direct RS232 communications with PC



Bi-Direction fan direction and speed control



Electrical Connection Diagram:



Controller Specification Overview:

Housing Type:	HCT unique 'encapsulated' block.
Input Supply Voltage:	10 – 30VDC (Absolute Maximum)
Input Supply Current:	Valve Current Setting + 200mA Quiescent (Max)
Command Input Type(s):	J1939 for charge air, transmission and water temps 2 x additional discrete inputs for switch OR temperature sensors
Command Input Value(s):	Contact closure OR Ohms only (Max temp = 50 ΩMin temp = 2MΩ)
Dither Frequency :	Software adjustable, ~33 to 500Hz
Housing Material:	Black, Polycarbonate
Wire Connections:	12 way male Deutsch—polarized
Connector type:	DTF15-12PB
RS232 Communications:	4 way Weatherpak connector
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.



Hydraulic Fan System Controller: HFS - J

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

Additional Temperature Sensor

Supplier / Manufacturer:	Coolant Temperature Sensors:		Air Temperature Sensors:	
	Part Number:	Notes:	Part Number:	Notes:
NAPA AutoParts	ECHTSC200	-	ECHTSC300	-
AutoZone	47131	-	-	-
AC Delco	213-928	-	213-190	-
GM	15326386	Was 12146312	25036751	Was 12110446
Stanard	TX3	-	AX1	-
GP Sorensen	TSU81	-	779-19001	-
Niehoff	DR134AK	-	TS83631	Was DR-130W
Wells	SU106	Includes connector	SU107	-
MSD	2310	Includes connector	2320	Includes connector

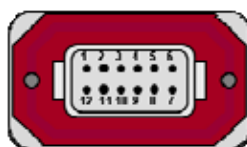


Connector Details:

NOTE:-

View looking at 12 way male connector on

HFS - J controller - **DTF15-12PB**



- Pin 1:- Thermistor #1 +signal input.
- Pin 2:- Thermistor #2 +signal input.
- Pin 3:- CAN_H Input (**J1939**)
- Pin 4:- CAN_L Input (**J1939**)
- Pin 5:- +Vin - 10 – 30VDC Power supply Input
- Pin 6:- Reverse fan input (Momentary)
- Pin 7:- 0V power input (Common)
- Pin 8:- 0V—Signal common #1
- Pin 9:- 0V—Signal common #2
- Pin 10:- Alarm output drive (3A max sourcing)
- Pin 11:- Reverse valve output drive (3A max sourcing)
- Pin 12:- Proportional valve output (3A max sourcing)

Mating connector Parts:-

Deutsch # DT06-12SB-P012

Deutsch # W12S – Lock

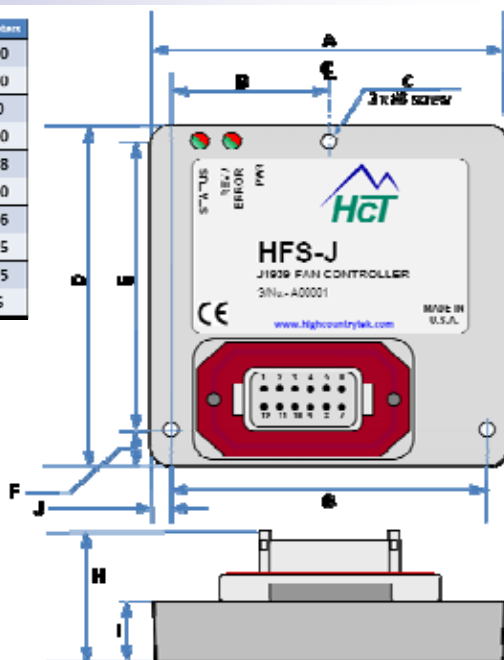
Deutsch # 0462-201-16141 – Socket pins

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	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	0.16	41.5
I	0.64	16.5
J	0.26	6.5



Notes:

- Unit weight is approx. 250 grams
- RS232 cable removed for clarity
- RS232 cable is approx 6" long
- Not to scale, please contact HCT for exact dimensions

Need More Information ?

For the latest company and product information, visit us at

www.highcountrytek.com or

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

info@highcountrytek.com



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