



High Country Tek, Inc.

Hydraulic Fan Controller **HFS-J/HFS-J-BUS**

Electronic Controller Solutions for Mobile, Industrial & Marine Applications

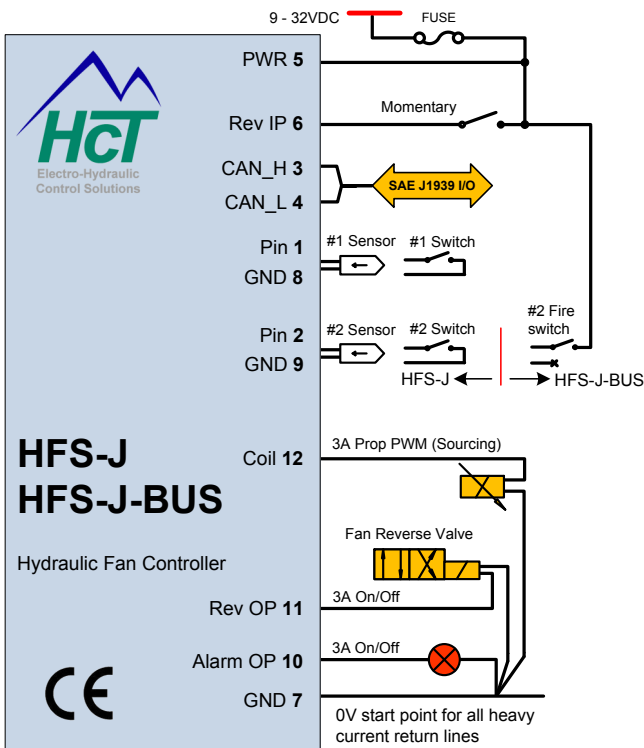
Product Feature Overview

- Optimizes hydraulic fan speed to reduce HP and fuel consumption
- SAE J1939 CAN messages and 2x temperature sensor / switch inputs
- Bi-directional fan control for radiator 'Purge' or 'De-Ice'
- PC based Graphical User Interface (GUI) for system configuration/diagnostics
- SAE J1455 (load dump) compliant power protection
- Diagnostic LED's with system "status" blink code indication
- USB or RS-232 communications with PC for setup/diagnostics
- External Data logging



RS232 connector removed for clarity

Basic Connection Diagram



J1939 inputs - Charge air T, Transmission oil T, Engine coolant T, Engine RPM.

Other cooling demand inputs upon customer request

Controller Specification Overview

Housing Type	HCT encapsulated block, flameproof
Power Supply Voltage	9 to 32VDC (<i>Absolute Maximum</i>)
Current Consumption	Load current + 200mA Quiescent (<i>Max</i>)
Command Inputs	SAE J1939 CAN messages for charge air, transmission oil & water temperature 1x option selection switch (<i>ON/Off</i>) 2x inputs for temp sensor/switch (#1 & #2) #2 switch is fire switch for HFS-J-BUS (<i>Max temp = 50W, min temp = 2mW</i>)
Outputs	1x 3A proportional PWM output (<i>sourcing, short circuit protection and open circuit alert</i>) 2x 3A On/Off output for reverse coil and alarm indicator
PWM Dither Freq.	Software adjustable - 33 to 500Hz
Module Connector	DTF15-12PB, 12-way Male
Communication	4-way Weatherpak for RS232
Housing Material	Black, polycarbonate
Mounting	3x No.8 (5mm) SAE Grade 2 screws
Temperature Range	-40 to +85°C (<i>Operational</i>) -60 to +90°C (<i>Storage</i>)
NEMA/IP Rating	NEMA 6P / IP67, 69K
CAN Data Rate	250Kbps and 500Kbps



Hydraulic Fan Controller HFS-J/HFS-J-BUS

Accessories



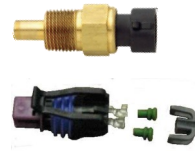
CD-HFS-J

- PC setup software
- System diagnostics
- Data logging feature



Connectors / Cables

- 999-10156 12-pin harness (3M)
- 999-10155 12-pin connector kit
- 999-10075 Comm. cable (4way/RS232)
- 108-00119 Comm. cable (USB/RS232)



Liquid Thermistor (-40 to +150°C)

- 206-00083 (3/8"-18NPT)
- 206-00083M (M12x1.5)
- 999-10213 (mating connector)



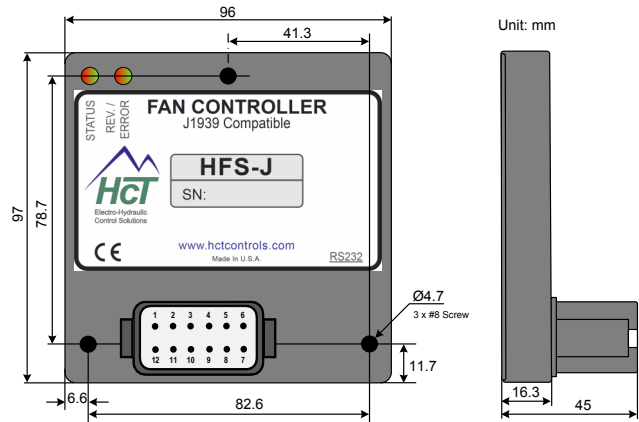
Dry Thermistor (-40 to +150°C)

- 206-00084 (3/8"-18NPT)
- 999-10213 (mating connector)

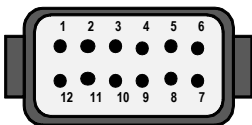
Connector Details

Dimensions

HFS-J/HFS-J-BUS Connector Designation	
12-way Deutsch Connector DTF15-12PB (Male, Plug)	
PIN	Name
Pin 1	Thermistor/Switch input +
Pin 2	Thermistor/Switch input + for HFS-J Fire switch input for HFS-J-BUS
Pin 3	CAN_HI (SAE J1939)
Pin 4	CAN_LO (SAE J1939)
Pin 5	9-32VDC power supply input +
Pin 6	Reverse fan input (Momentary)
Pin 7	0V - Power GND
Pin 8	0V - Signal GND
Pin 9	0V - Power GND
Pin 10	3A max On/Off for alarm indicator (sourcing)
Pin 11	3A max On/Off for reverse coil (sourcing)
Pin 12	3A Proportional PWM current output (sourcing)



- Weight is approx. 250g.
- Mount to a flat cool surface.
- Use Three #8 SAE Grade 2 screws.



HFS-J Qwik-Pick Solution Kit

999-10259

HFS-J-BUS Qwik-Pick Solution Kit (#2 switch is fire switch)

999-10274

www.hctcontrols.com



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