

Application 1 - Cooling a single compartment heat exchanger

Use a single thermistor in order to prioritize the cooling demands of a single compartment heat exchanger.

Fan Bank Control

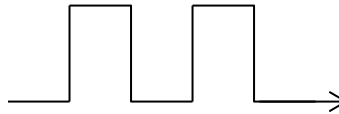
ON-DEMAND

- Configure inputs
- Set maximum and minimum temperature limits
- Setup e-Fan operational profile



+ Controller
- Supply Power
(9-32VDC, 200mA Max)

1X Fan Diagnostic



PWM % Output

Provides PWM output based upon the % fan speed demand



Heat Exchanger

Single compartment heat exchanger with one thermistor.

+ Fan
- Supply Power

Application 2 - Cooling a two compartment heat exchanger

Receive J1939 CAN values with two additional thermistor inputs in order to prioritize the cooling demands of a two compartment heat exchanger.

Fan Bank Control

ON-DEMAND

- Configure inputs
- Select J1939 messages
- Set maximum and minimum temperature limits
- Setup e-Fan operational profile

+ Controller
- Supply Power
(9-32VDC, 200mA Max)



Switch Inputs

Ignition
Reverse



2X Fan Diagnostics

PWM % Output

Provides PWM output based upon the % fan speed demand



SAE J1939

Receive

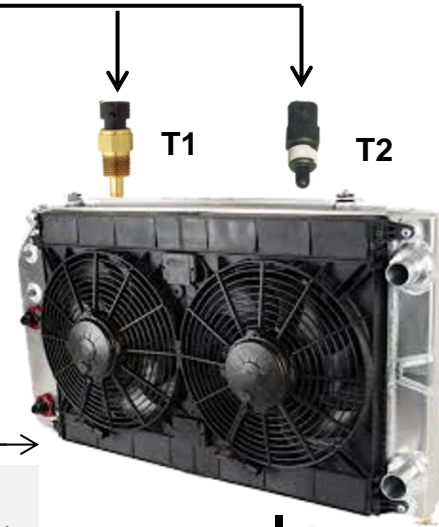
- Engine RPM (EEC1)
- T1 temperature
- T2 Temperature

Transmit

- Fan bank % fan speed
- Calculated fan RPM
- T1 & T2 temperatures
- T1 & T2 % duty cycle demand

Heat Exchanger

Two compartment heat exchanger with a thermistor for each compartment.



+ Fan
- Supply Power

Application 3 - Cooling a three compartment heat exchanger

Receive J1939 CAN values in order to prioritize the cooling demands of a three compartment heat exchanger. For completely isolated fan control, use the EMC-6 multi-fan bank controller.

Fan Bank Control

ON-DEMAND

- Configure inputs
- Select J1939 messages
- Set maximum and minimum temperature limits
- Setup e-Fan operational profile

+ Controller
- Supply Power
(9-32VDC, 200mA Max)



6X Fan Diagnostics

PWM % Output

Provides PWM output based upon the % fan speed demand



Heat Exchanger

- Engine Coolant
- Transmission Oil
- Charge Air

+ Fan
- Supply Power

J1939
Data Ready



SAE J1939

Receive

- Engine RPM (EEC1)
- CM1-Engine % Fan Request (E000)
- Engine Coolant temperature (EEEE)
- Transmission Oil temperature (FEF8)
- Charge Air temperature (FEF6)

Transmit

- Fan bank % fan speed
- Calculated fan RPM
- J1939 received values
- J1939 received values % duty cycle demand

Application 4 - Cooling a single compartment heat exchanger with Set-Point

Tune air handling packages with the PID Set-Point feature for precision cooling capabilities.

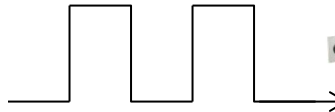
Fan Bank Control

SET-POINT

- Configure inputs
- Set target temperature
- Setup e-Fan operational profile
- Tune cooling system by setting PID values



1x to 6x Fan Diagnostic



PWM % Output

Provides PWM output based upon the % fan speed demand

+ Controller
- Supply Power
(9-32VDC, 200mA Max)



Optional Switch Inputs

Ignition
Reverse
Fire



SAE J1939

Receive

- Engine RPM (EEC1)
- T1 temperature

Transmit

- Fan bank % fan speed
- Calculated fan RPM
- T1 temperatures
- T1 % duty cycle demand

Heat Exchanger

Single compartment heat exchanger with a single fan or multiple fan bank using a single thermistor input or J1939 CAN message.

+ Fan
- Supply Power