CAN-FIRE

VEHICLE FIRE SYSTEM

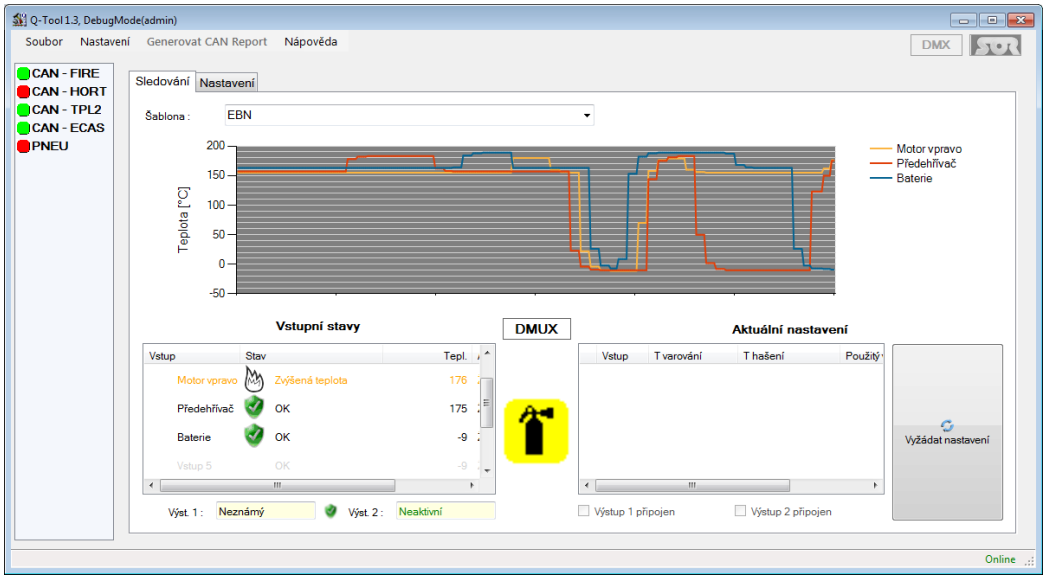
Basic information

- Vehicle fire system control unit.
- Used to indicate increased temperatures (up to 6 temperature sensors) in any part of the vehicle and to activate extinguisher
- Includes software for configuring the module

This module is designed to monitor operating temperatures, indicate the state of fire protection and to activate fire-fighting equipment in commercial vehicles and mobile machinery.

Function

Module inputs are connected to sensors monitoring temperatures in areas with an increased risk of fire: engine compartment and turbochargers, auxiliary heating areas, exhaust area. For each measurement input, the configuration/diagnostic software set values for “Temperature warning” and “Fire alarm temperature”, which are stored in a separate memory module. The module operates independently of the vehicle control system; i.e., any activation of the fire protection system is performed on the basis of its own assessment of the current status of the inputs and settings. All inputs and outputs are diagnosable; outputs are permanently protected against short-circuits. The CAN bus module continuously transmits information on the current status of the sensors, thus in the event of a fire, the machine’s control system can take further appropriate measures: stopping the engine, opening doors, switching on the hazard warning lights, sending messages to the master system , etc. Module status information is transmitted via DM1 messages (SAE J1939 / 73); for service technicians , diagnostic software is available for the Windows operating system.



Module settings and monitoring using diagnostic software for Windows

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Product specification

Product Name	CAN_FIRE
Applications	Buses, trucks, mobile machinery
Environment	Operating temperature range: -40° - +85° C, Relative humidity up to 90%, Electronics box IP 42, temperature sensors IP67, Resistance to vibration up to 5 g
Housing	Plastic box
	Tyco 929504-7 terminal block, JPT socket, 22 poles
Power	+9 – +32 V DC
Measurement range	-30 - +220°C
CAN-bus	As per SAE J1939 (250/125 kbps according to module firmware)
Internal resistance	1 internal resistor of 120 Ohm internally connected to the CAN
Customisations	Firmware modifications,optional galvanic isolation from the CAN
CAN messages sent	FireMeas1, FireMeas2, FireMeas3, DM1, FWInfo (info on firmware version)
CAN messages received	SetFire (module configuration)

LED indication

Stavy LED 1	**Funkce**	**Stavy LED 2 (stav modulu)**	**Funkce**
Red LED	the temperature of at least one input used is above the value to activate fire fighting	green (blink)	No error
Orange LED	the temperature of at least one input used is increased	red (blink)	CAN FIRE module error
Not active	the temperatures of all inputs used are within the normal range	green > red	no settings in module or wrong parameters
		green > orange	výpadek napájení výstupů (pin 3)
		green > orange > red	input / output error

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Rozměry a zapojení konektoru

Pin	Function
1	+24V power
2	GND
3	+24V power of the output switches
4	„15“ („key“)
5	output valve 1 "Increased temperature", loadability ... 4 A
6	output valve 2 "Activation of extinguishing", loadability ... 4 A
7	CAN L 120
8	output reserve
9	CAN H
10	CAN L
11,12	Channel 1 input (PT1000 sensor) Temperature sensor T1, measuring range: ... (-30 - + 220 °C) °C
13,14	Input channel 2 (PT1000 sensor) Temperature sensor T2, measuring range: ... (-30 - + 220 °C) °C
15,16	Channel Input 3 (PT1000 Sensor) Temperature sensor T3, measuring range: ... (-30 - + 220 °C) °C
17,18	Channel Input 4 (PT1000 Sensor) Temperature sensor T4, measuring range: ... (-30 - + 220 °C) °C
19,20	Input channel 5 (PT1000 sensor) Temperature sensor T5, measuring range: ... (-30 - + 220 °C) °C
21,22	Channel 6 input (PT1000 sensor) Temperature sensor T6, measuring range: ... (-30 - + 220 ° C) °C