PR4060

MULTIPLEXED HVAC SYSTEM CONTROL UNIT

Product Sheet

Description

The PR4060 controller is a powerful unit designed to manage the major part of vehicles' HVAC (Heating – Ventilation – Air Conditioning) systems. It replaces relays and timers usually required in these controls and provides a fully automated control.

This product, completely developed by PRAN, can be fully integrated to the multiplexed communication network, which allows for significant reductions in total cable costs. The PR4060 is compatible with all PRAN multiplexed system products and is fully reprogrammable using VisionPlex III™ via the serial communications link.

The PR4060 provides automatic control and regulation of temperature. Indeed, this product supports all standard components, such as condenser and evaporator fans, air conditioner clutches, thermal and coolant valves, and more. It allows the management of a multizone HVAC system. Software settings allow fine tuning for maximum comfort.

Principal Characteristics

- Total maximum continuous current : 50 A ;
- Protection against reverse polarity and voltage drops ;
- Short-circuit self-protected outputs (continuous monitoring), without fuse ;
- Operating temperature range : -40 à +80°C ;
- Low power consumption mode (sleep mode), wake via signal input ;
- Input/output state indicator LEDs ;
- MID (PWM) mode for variable and flexible controls.

Applications

- HVAC systems ;
- Emergency vehicles ;
- Buses ;
- Specialized mobile equipment ;
- Machinery ;
- Distribution systems ;
- Armoured vehicles ;
- Mobile units.

Principal Advantages

- Compact, powerful and economical controller ;
- Better system control, optimization through programming ; Compatibility with PRAN control interfaces ;
- Ability to offer live diagnostics remotely or using a PRAN interface ;
- Multizone HVAC system control using one interface ;
- No fuse block or relay necessary ;
- 12 V and 24 V compatibility with the same controller ;
- 3 year warranty.

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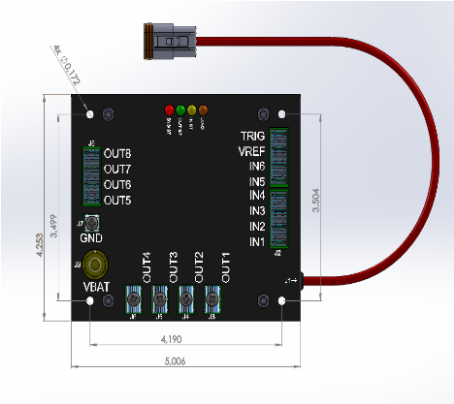
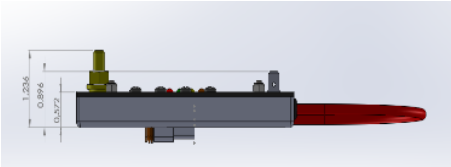
Dimensions





Technical Information

- Designed in accordance with SAE-J1455 standards ;
- Operating voltage : 9 to 32 V ;
- Protection against reverse polarity and voltage drops ;
- Operating temperature range : -40 to +80°C ;
- IP40 enclosure ;
- Low power consumption mode (sleep mode), wake via signal input ;
- 1 CAN 2.0b SAE-J1939 port ;
- Analogue – digital 10 bit converter ;
- 1 voltage reference (10V) ;
- I/O with LED indicators ;
- Total maximum continuous current : 50 A.

- **6 Inputs :**

- (**2**) (*DA10W*) software configurable : numeric : high side or low side, analog : 0-10 V, wake ;
- (**4**) (*DA10*) software configurable : numeric : high side or low side, analog : 0-10 V.

- **8 Outputs :**

- **(4)** (*H20F)* software configurable : transmitter (source) (20 A) : Numeric, MID *(PWM)* (1%), with current measurement ;
- **(2)** (*H.3A10)* transmitter (source) (**0,3 A**) : Analog : 0-10 V ;
- **(2)** (*H6FL.5F*) software configurable : transmitter (source) ;
- (**6 A**) : Numeric, MID *(PWM)* (1%), with current collector measurement (sink) (**0,5 A**) : Numeric, MID *(PWM)* (1 %).

Available Turnkey Solutions

Description	Kit No.
On demand	

PR4060-00-00-SXX Products

Description	Part No.
Delivered without application	PR4060-00-00-S00

Related Products

Description	Part No.
Set of terminals and coupling parts	MPM04060-GEN000
Vision*PlexIII™* software with CAN Bus USB connection interface	PR1001-00

For more information about related products and options, please contact a PRAN Systems representative.
Consult the products' specifications document for more details.