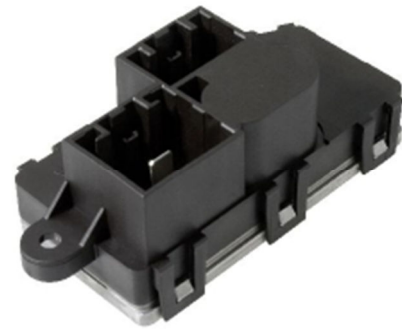




# Air-Conditioner Fan Control

## 1. Application

The propulsion of an air-conditioner fan motor



## 2. Product description

This PWM controller can be used to activate actuators such as DC motors, pumps, etc with up to 400 W. The output voltage for the fan motor depends on the reference value. The battery voltage - as long as the reference value is lower - has no impact on the output voltage.

With 18kHz, the output frequency is outside the audible range.

The current is virtually a direct current through the inductance of the motor and therefore does not generate any torque fluctuations.

The patented slope control results in a very low degree of EMC emission.

## 3. Technical data

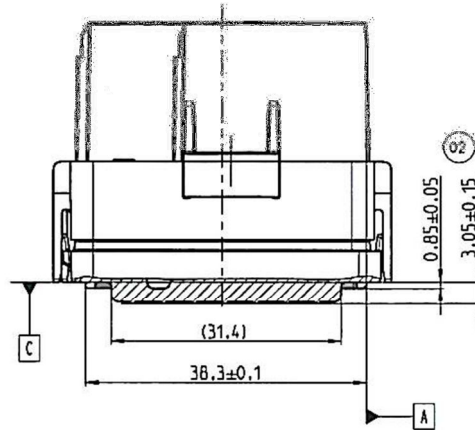
- Voltage regulator with 12V or 14V output voltage
- Maximum output current 33A
- Switching frequency 18kHz
- PWM interface up to 1kHz or LIN
- Nominal temperature range  $-40^{\circ}\text{C}$  to  $+75^{\circ}\text{C}$
- Limited function range with reduced performance  $>75^{\circ}\text{C}$
- Reverse polarity proof for 1 minute
- Protection class: IP54 cooling unit for HVAC  
IP52 with inserted plug

Weight: <120g

Installation: With a screw



#### 4. Dimensions



#### 5. Function description

- Error recognition with error message
- Blockage recognition
- Short-circuit recognition
- Semi-conductor error
- Commutator short circuit
- Heavy load recognition
- Overheating temperature
- Overvoltage
- Undervoltage charge pump

*Our products are subject to a constant development process. Rights regarding changes in the product line, the manufacture, the performance characteristics and the application areas are reserved. Solely the specifications / the contract text or the order confirmation are definitive.*

#### HKR Automotive GmbH

Am Wasserturm 21 · 74635 Kupferzell

Telefon: +49 7944 94399-0

Telefax: +49 7944 94399 -50

info@hkr-automotive.de  
www.hkr-automotive.de