# HF3504 / HF3507

# **WIPER CONTROLLER**





#### Features

- Solid base design, stable structure
- Surface mounting technology, advanced craftwork
- Dust protected

### **Typical Applications**

Wiper control

#### **TYPE**

| Туре          | Nominal voltage | Operating voltage range | Nominal motor load | Dimensions       | Control mode   |
|---------------|-----------------|-------------------------|--------------------|------------------|----------------|
| HF3504 /12-G  | 12VDC           | 9VDC to 16VDC           | 50W                | (30 × 30 × 40)mm | special chip   |
| HF3504A /12-G | 12VDC           | 9VDC to 16VDC           | 50W                | (30 × 30 × 30)mm | special chip   |
| HF3507 /12-G  | 12VDC           | 9VDC to 16VDC           | 50W                | (30 × 30 × 40)mm | separated chip |
| HF3507 /24-G  | 24VDC           | 18VDC to 32VDC          | 80W                | (30 × 30 × 40)mm | separated chip |

12

-G

#### **CHARACTERISTICS**

| Wiping time           | 3.5s + 2.5s                     |
|-----------------------|---------------------------------|
| Intermission time     | 5.5s ± 1.5s                     |
| Electrical endurance  | 1×10⁵ ops (norminal motor load) |
| Internal voltage drop | 150mV max. (at 5A)              |
| Ambient temperature   | -40°C to 85°C                   |

| Vibration resistance | Sine   | 10Hz to 200Hz 49m/s <sup>2</sup>    |  |  |
|----------------------|--------|-------------------------------------|--|--|
| VIDIATION TESISTANCE | Random | 10Hz to 1000Hz 19.6m/s <sup>2</sup> |  |  |
| Shock resistance     |        | 196m/s <sup>2</sup>                 |  |  |
| Weight               |        | Approx. 35g                         |  |  |
| Mechanical data      |        | Cover retention: 160N min.          |  |  |
|                      |        | Terminal retention: 100N min.       |  |  |

-B

## **ORDERING INFORMATION**

HF3504 / HF3504A / HF3507 /

Suffix(A-Z) is for specific extending application

extending application

Nominal voltage 12: 12VDC 24: 24VDC

Trigger level G: High level start-up L: Low level start-up

Packing style B: With bracket Nil: Without bracket

**Customer special code** 

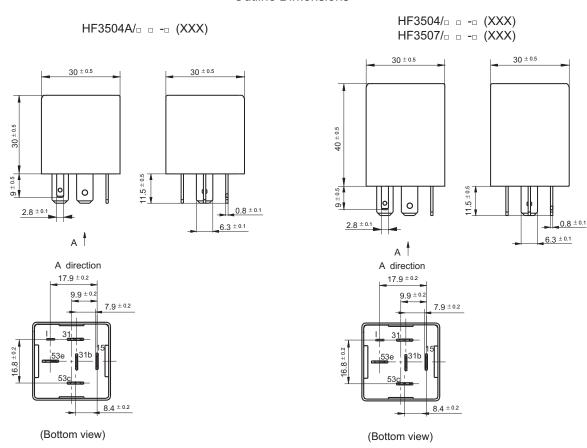


ISO9001, ISO/TS16949 , ISO14001, OHSAS18001, IECQ QC 080000 CERTIFIED

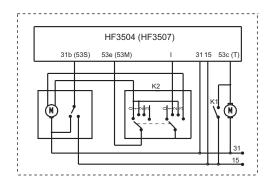
2012 Rev. 1.00

**Type** 

#### **Outline Dimensions**



#### Wiring Diagram



- As shown on left circuit, the terminal 15 is connected with positive electrode of power supply, terminal 31 is connected with negative electrode of power supply, the terminal I and 53e are connected with combined switch, the terminal 31b is connected with wiper motor switch, the terminal 53c is connected with washing bump switch.
- 2) Intermit wiping, when combined switch K2 is at position 2, the terminal I will receive 12V voltage, the internal relay will start function, the terminal 53e and 15 will be connected, the wiper motor will start to work, when terminal 31b receive the feedback signal from 0V, the internal relay will release and the terminal 53e and 15 will be opened, the wiper motor will stop and will remain at stop position. The above process will repeat after 5.5s±1.5s.
- 3) Washing wiping, when K1 is closed, the terminal 53c will receive 12V voltage, the internal relay will start function, the terminal 53e and 15 will be connected, the wiper motor will start to work, when K1 is opened and delayed for 3.5s + 2.5s, the internal relay will release and the wiper motor will stop and will remain at stop position.

#### Disclaimer

This datasheet is for the customers' reference. All the specifications are subject to change without notice.

We could not evaluate all the performance and all the parameters for every possible application. Thus the user should be in a right position to choose the suitable product for their own application. If there is any query, please contact Hongfa for the technical service. However, it is the user's responsibility to determine which product should be used only.

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