

# HF 3504A (JA3504A)

# WIPER CONTROLLER



### Features

- Special integrate circuit, reliable
- Solid base design, stable structure
- Wiper automatic positioning implementation

### Typical Applications

Wiper control

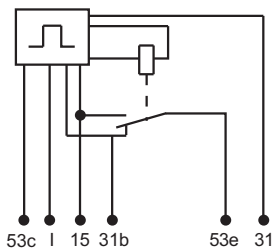
## CHARACTERISTICS

Norminal voltage	12VDC	Ambient temperature	-40°C to 85°C
Operating voltage range	9VDC to 16VDC	Vibration resistance	10Hz to 200Hz 49m/s <sup>2</sup>
Contact rating	Wiper: 5A 13.5VDC	Shock resistance	196m/s <sup>2</sup>
Wiping time	3.5s + 2.5s	Weight	Approx. 35g
Intermission time	5.5s ± 1.5s	Mechanical data	Cover retention: 250N min. Terminal retention: 100N min.
Electrical endurance	1×10 <sup>5</sup> OPS (Wiper 5A 13.5VDC)		

## OUTLINE DIMENSIONS AND WIRING DIAGRAM

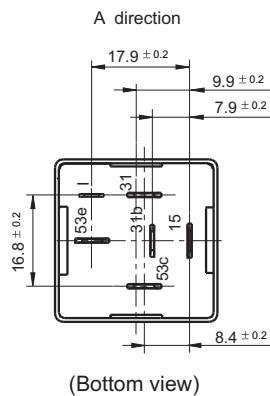
Unit: mm

Wiring Diagram

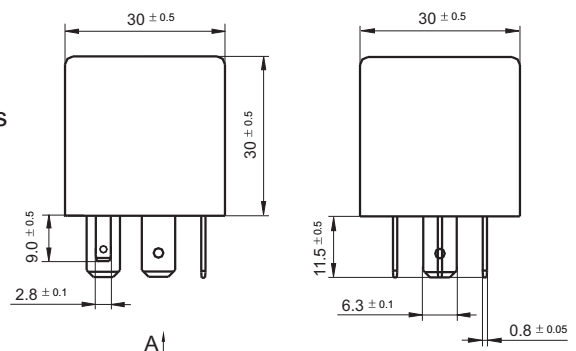


1. As is shown in left wiring diagram, for HF3504A, terminal 15 is connected with anode of 12VDC, terminal 31 with cathode, terminal I and 53e with combination switch, terminal 31b with wiper turbine switch, and terminal 53c with cleaning pump switch.
2. Interval wiping: When terminal 53e is connected with wiper through combination switch, terminal I is powered with 12VDC through combination switch, inner relay runs, terminal 53e and 15 close, wiper runs. After terminal 31b get the feedback signal of 0VDC, inner relay releases, terminal 53e and 15 open. 5.5s ± 1.5s later, repeat the course above.
3. Washing: when terminal 53c is powered with 12VDC, inner relay runs, terminal 53e and 15 close, wiper starts to run until the 12VDC voltage on terminal 53c disappears and time delay 3.5s + 2.5s. After terminal 31b gets the feedback signal of 0V, inner relay releases, and wiper stops running.
4. HF3504A includes the function of automatic positoning.

Terminal Layout



Outline Dimensions



HONGFA RELAY

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

2008 Rev. 1.00