

HF3606

WIPER CONTROLLER



Typical Applications

Automotive wiper control

Features

- Wiper operation (HS, LS, intermit) controls
- Motor stall protection
- Solid base design, stable structure
- Surface mounting technology, advanced craftwork

TYPE

Type	Nominal voltage	Operating voltage range	Nominal motor load	Dimensions
HF3606/ 12-G	12VDC	9VDC to 16VDC	50W	(30 × 30 × 40)mm
HF3606/ 12-L	12VDC	9VDC to 16VDC	50W	(30 × 30 × 40)mm

CHARACTERISTICS

Wiping time	3.5s + 2.5s		
Intermittent time	4s ± 0.6s (at 0 Ω)		
	12s ± 1s (at 10k Ω)		
Electrical endurance	1×10 ⁵ OPS (Nominal motor load)		
Ambient temperature	-40°C to 85°C		
Vibration resistance	sine	10Hz ~ 200Hz 49m/s ²	
	random	10Hz ~ 1000Hz 19.6m/s ²	
Shock resistance	196m/s ²		
Weight	Approx. 36g		
Mechanical data	Cover retention: 160N min.		
	Terminal retention: 28N min. (2.8mm)		
	100N min. (6.3mm)		

ORDERING INFORMATION

Type	HF3606 /	12	-G	-B	(XXX)
Nominal voltage	12: 12VDC				
Trigger level	G: High level start-up		L: Low level start-up		
Packing style	B: With bracket		Nil: Without bracket		
Special code ¹⁾	XXX: Customer special requirement		Nil: Standard		

Notes: 1) The customer special requirement express as special code after evaluating by Hongfa. e.g. (170) stands for flasher load. The performance parameters of products with characteristic numbers shall be subject to the specific specifications provided by Hongfa.



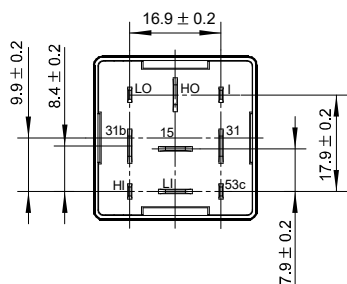
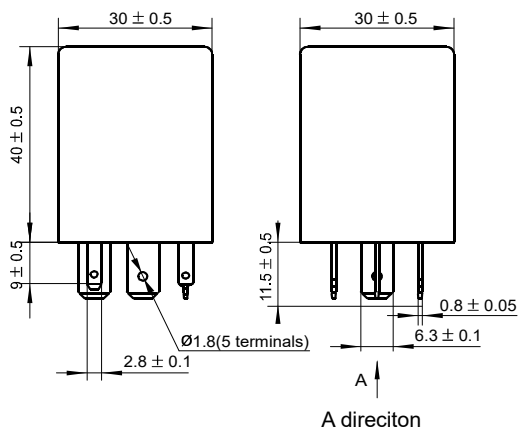
HONGFA RELAY

ISO9001, IATF16949, ISO14001, ISO45001, IECQ QC 080000, ISO/IEC 27001 CERTIFIED

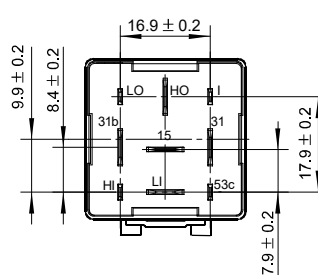
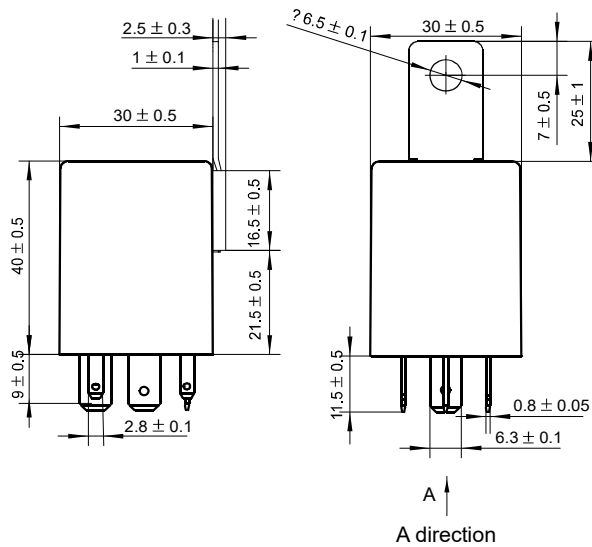
2021 Rev. 1.01

Outline Dimensions

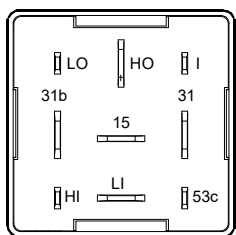
HF3606/12-□(XXX)



HF3606/12-□-B(XXX)

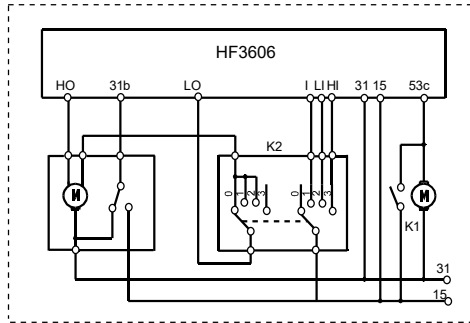


Terminal function



- HI: Wiper HS control signal
- LI: Wiper LS control signal
- 53c: Washing control signal
- 31b: Wiper parking signal
- 15: Power supply positive
- 31: Power supply negative
- HO: Wiper motor HS control
- LO: Wiper motor LS control
- I: Wiper intermittent control signal

WIRING DIAGRAM



- 1) 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,LO,LI and HI 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 1, the terminal I will receive 12V voltage, the internal relay will start function, the terminal LO and 15 will be connected, the wiper motor will start to work, when terminal 31b receive feedback signal from 0V, the internal relay will release and the terminal LO and 15 will be open, the wiper motor will stop. The above process will repeat after $4.0s \pm 0.4s$.
- 3) Low speed wiping, when combined switch K2 is at position 2, the terminal LI will receive 12V voltage, the internal relay will start function, the terminal LO and 15 will be connected, the wiper motor will start to work at low speed.
- 4) High speed wiping, when combined switch K2 is at position 3, the terminal HI will receive 12V voltage, the internal relay will start function, the terminal HO and 15 will be connected, the wiper motor will start to work at high speed.
- 5) Washing wiping, when K1 is closed, the terminal 53c will receive 12V voltage, the internal relay will start to function, the terminal LO 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

The specification is for reference only. See to "Terminology and Guidelines" for more information. Specifications subject to change without notice. In case there is specific criterion (such as mission profile, technical specification, PPAP etc.) checked and agreed by and between customer and Hongfa, this specific criterion should be taken as standard regarding any requirement on Hongfa product.

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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