

DC High Voltage Contactor
直流高压接触器 **WM684H**

L×W×H(mm):32×26.5×23.5mm



- 1 Form A 、 C contact arrangement;
- The working temperature is up to 85°C;
- Coils can be matched with diodes or resistors;
- Compact structure, good safety;
- With Arc-extinguishing devices;
- Typical applications: electric control system of electromobile, motor forklift, Accessory relays for high voltage system, air conditioner, warm air blower and other devices.

Ordering Information 订货说明

<u>WM684H</u>	<u>- 12</u>	<u>A</u>	<u>- M</u>	<u>- R</u>	<u>- P</u>	<u>XXX</u>
1	2	3	4	5	6	7
1 Part number 型号: WM684H						
2 Coil rated Voltage(VDC)线圈额定电压: 12: 12V; 24: 24V;						
3 Contact Form 触点形式: A: 1 Form A; C: 1 Form C						
4 Case 外壳: M: Metal Bracket 带金属安装背; Nil: Without Bracket 没有安装背						
5 Coil transient suppression 线圈瞬态抑制: D: with diode 带二极管.; R: with resistance 带电阻; Nil: standard 常规						
6 Terminals 引出脚方式: P: PCB type 为PCB焊接式; Nil: QC type 快接式						
7 xxx: Customer special code 客户特殊要求						

Contact Data 触点参数

Contact Form 触点形式	1A (1 Form A) ; 1C (1 Form C)
Contact Material 触点材料	Silver alloy
Contact Rating (resistive)触点负载 (阻性)	55A/60VDC
Max. Continuous current rating 最大连续电流	90 Amps @ 23 °C
Max. Switching Current 最大切换电流	120A @ 12.8V 3 Sec
Max. Switching Voltage 最大切换电压	110VDC
Max. Switching Power 最大切换功率	960W
Contact Resistance or Voltage drop 接触电阻或接触压降	≤60mV (@ 20A)
Mechanical Life 机械寿命	1×10 ⁶ cycles
Electrical Life 电气寿命 (at 23 °C) 常温 1s on 5s off 1秒通 5秒断	100000 cycles (55A/60VDC) 100000 cycles (30A/72VDC), 100000 cycles (25A/90VDC), 100000 cycles (7A/145VDC),

Coil Parameter 线圈参数

Dash numbers 规格	Coil voltage 线圈电压(VDC)		Coil resistance 线圈电阻 Ω±10%	Pickup voltage VDC (Max.) 最大起动电压	Release voltage VDC (Min.) 最小释放电压	Coil power 线圈功率	Operate Time 起动时间	Release Time 释放时间
	Rated 额定	Max. 最大						
12V	12	15.6	80	7.8	1.2	1.8W	<15 ms	<15 ms
24V	24	31.2	320	15.6	2.4			



Operation condition 工作条件

Insulation Resistance 绝缘电阻		100MΩ Min. (at 500VDC)
Dielectric Strength 介质耐压	Between Contacts	500VAC / 1 min. (test current: 10mA)
	Between Coil and Contacts	750VAC / 1 min. (test current: 10mA)
Ambient Temperature 环境温度		-40°C ~ +85°C
Shock resistance 抗冲击	Operating extreme 稳定性	42m/s ² {4.4G} (Sine half wave: 11ms, 10μs)
	Damage Limit 强度	288m/s ² {30G}(Sine half wave: 8ms, 10μs)
Vibration resistance 抗震		10 ~ 500Hz, 49m/s ² {5G}
Relative Humidity 相对湿度		25% ~ 80%RH (at 40°C)
Terminal type 脚位类型		PCB type 为 PCB 焊接式; QC type 快接式
Weight 重量(Approx.)		80g

Layout (Bottom views, Unit: mm)外形尺寸、接线图 (底视图)

Dimensions / Wiring diagram (Bottom views)

The technical drawings include:

- QC Type Dimensions:** Shows a top view with a diameter of 26.5 mm and a height of 14 mm. The bottom view shows a width of 35.75 mm and a terminal spacing of 7.9 mm. The terminal width is 1.2 mm.
- PCB Type Dimensions:** Shows a top view with a diameter of 15.3 mm and a height of 14 mm. The bottom view shows a width of 35.75 mm and a terminal spacing of 7.9 mm. The terminal width is 2.1 mm.
- Terminal Layouts:** Two diagrams showing the arrangement of terminals 85, 86, 87, 87a, and 30. Dimensions include a total width of 16.8 mm and a terminal spacing of 7.9 mm.
- Wiring Diagrams:**
 - Coil: standard:** Shows a simple coil circuit with terminals 85, 86, 87, 87a, and 30.
 - Coil: with Resistance:** Shows a coil circuit with a resistor connected to terminal 86.
 - Coil: with Diode:** Shows a coil circuit with a diode connected to terminal 86.
 - 1A and 1C:** Shows two different coil configurations for the 1A and 1C models.