

DC High Voltage Contactor
直流高压接触器 **WM684**

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>WM684</u>	<u>- 12</u>	<u>A</u>	<u>- B</u>	<u>- R</u>	<u>- P</u>	<u>XXX</u>
1	2	3	4	5	6	7
1 Part number 型号: WM684						
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)	20A/48VDC
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 (25A/36VDC) 100000 cycles (20A/48VDC), 100000 cycles (15A/72VDC), 100000 cycles (7A/110VDC),

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 起动作时间	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.)		65g

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

Dimensions / Wiring diagram (Bottom views)

The technical drawings are organized as follows:

- Dimensions (Top Row):** Shows side views for QC Type and PCB Type. QC Type dimensions include 15.3, 35.75, 0.8, 7.1, Max23.5, 11, 6.3, 0.8, Max26.5, and 7.9. PCB Type dimensions include 15.3, 35.75, 0.8, 7.1, Max23.5, 14, 4.4, 1, 6.3, 0.8, Max26.5, and Max32.
- Terminal Layout (Middle Row):** Shows bottom views of the terminal block for QC Type and PCB Type. Dimensions include 16.8, 7.9, 8, 17.9, 8.4, 5-6.3x0.8, 5-2.1x0.8, and 5-Φ2.3.
- Wiring Diagram (Bottom Row):** Shows three coil configurations:
 - Coil: standard
 - Coil: with Resistance
 - Coil: with Diode
 Additionally, it shows two contact wiring diagrams labeled 1A and 1C.