

**Features**

- Miniature;
- Contact load capacity up to 100A, 150A;
- Terminal types as inserting;
- Suitable for automobile.

**Ordering Information 订货说明**

<b>WM648</b>	<b>- 12</b>	<b>A</b>	<b>- R</b>	<b>- P</b>	<b>- S</b>	<b>150</b>
1	2	3	4	5	6	7
1 Part number 继电器型号: WM648						
2 Coil rated Voltage(VDC)线圈额定电压: 6: 6V; 12: 12V; 24: 24V						
3 Contact Form 触点形式: A: 1A; C: 1C						
4 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						
5 Terminals 引出脚方式: P: PCB type 为PCB 焊接式; Nil: QC type 快接式						
6 Enclosure 封装方式: S: Sealed 封胶						
7 Contact load 触点负载: 150: 150A/14VDC; Nil: 100A/14VDC (Standard 常规)						

**Contact Data 触点参数**

Contact Form 触点形式	1A (SPSTNO)、1C (SPDT(B-M))		
Contact Material 触点材料	Ag Alloy		
Contact Rating (resistive) 触点负载 (阻性)		1A	1C
	100A	100A/14VDC	NO: 100A/14VDC, NC: 70A/14VDC
	150A	150A/14VDC	NO: 150A/14VDC, NC: 80A/14VDC
Max. Switching Voltage 最大切换电压	75VDC		
Max. Switching Current 最大切换电流	100A; 150A		
Max. Switching Power 最大切换功率	1400W; 2100W		
Contact Resistance or Voltage drop 接触电阻或接触压降	≤100mΩ		
Electrical Life 电气寿命	100A: 1×10 <sup>5</sup> ops (1s on, 3s off)		
	150A: 1×10 <sup>5</sup> ops (1s on, 3s off)		
Mechanical Life 机械寿命	1×10 <sup>7</sup> ops		

**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.) 最大起动车电压	Release voltage VDC(Min.) 最小释放电压	Coil power 线圈功率	Operate Time 起动车时间	Release Time 释放时间 *See notes
	Rated 额定	Max. 最大						
6V	6V	7.8V	12.5	3.9V	0.6V	2.9W	≤10 ms	≤10 ms *1)
12V	12V	15.6V	50	7.8V	1.2V			
24V	24V	31.2V	200	15.6V	2.4V			

Notes: \*1) With resistance + 5ms; With diode + 10ms

\*2) With diode + 10ms

### Operation condition 工作条件

Insulation Resistance 绝缘电阻		100MΩ Min. (at 500VDC)
Dielectric Strength 介质耐压	Between Contacts	50Hz 500VAC / 1 minute
	Between Coil and Contacts	50Hz 750VAC / 1 minute
Shock resistance 抗冲击		147m/s <sup>2</sup> 11ms
Vibration resistance 抗震		10~40Hz double amplitude 1.5mm
Terminals strength 引出端强度		100N
Solderability 可焊性		235℃±2℃ 3±0.5s
Ambient Temperature 环境温度		-40℃ ~ +85℃(Standard 常规); -40℃ ~ +125℃(Special 特殊需求要说明)
Relative Humidity 相对湿度		85% (at 40℃)
Weight 重量(Approx.)		61g

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

Dimensions / Wiring diagram (Bottom views)

The technical drawings illustrate the physical dimensions and electrical connections for two relay types: QC type and PCB type. The QC type drawings show a height of 34mm and a base width of 16.8mm. The PCB type drawings show a height of 34mm and a base width of 16.8mm. The terminal layout shows a 16.8mm wide base with terminals 86, 87, 87a, and 85. The wiring diagrams show the internal coil and contact connections for standard, resistance, and diode coils, and for 1A and 1C configurations.

QC type

PCB type

Terminal Layout (Bottom views)

Wiring diagram (Bottom views)

1A

1C