

DC High Voltage Contactor
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

<u>WM684H</u>	<u>- 12</u>	<u>A</u>	<u>- R</u>	<u>- P</u>	<u>- S</u>	<u>XXX</u>
1	2	3	4	5	6	7
1 Part number: WM684H						
2 Coil rated Voltage(VDC): 12: 12V; 24: 24V;						
3 Contact Form: A: 1 Form A; C: 1 Form C						
4 Coil transient suppression: D: with diode.; R: with resistance; Nil: standard						
5 Terminals: P: PCB type; Nil: QC type						
6 Enclosure: S: Sealed						
7 xxx: Customer special code						

Contact Data

Contact Form	1A (1 Form A) ; 1C (1 Form C)
Contact Material	Silver alloy
Contact Rating (resistive)	80A/28VDC, 55A/60VDC, 30A/72VDC, 25A/90VDC, 7A/145VDC
Min. switch current	100mA/ 12VDC
Max. Switching Current	150A @ 12.8V 3 Sec
Max. Switching Voltage	145VDC
Max. Switching Power	3300W
Contact Resistance or Voltage drop	≤60mV (@ 20A)
Mechanical Life	1×10 ⁶ cycles
Electrical Life (at 23 °C) 1s on 5s off	100000 cycles (80A/28VDC), 100000 cycles (55A/60VDC) 100000 cycles (30A/72VDC), 100000 cycles (25A/90VDC), 100000 cycles (7A/145VDC)

Coil Parameter

Dash numbers	Coil voltage (VDC)		Coil resistance Ω±10%	Pickup voltage VDC (Max.)	Release voltage VDC(Min.)	Coil power	Operate Time	Release Time
	Rated	Max.						
12V	12	15.6	90	7.8	1.2	1.6W	<15 ms	<15 ms
24V	24	31.2	360	15.6	2.4			

Operation condition

Insulation Resistance		100MΩ Min. (at 500VDC)
Dielectric Strength	Between Contacts	500VAC / 1 min. (test current: 10mA)
	Between Coil and Contacts	750VAC / 1 min. (test current: 10mA)
Ambient Temperature		-40°C ~ +85°C
Shock resistance	Operating extreme	42m/s ² {4.4G} (Sine half wave: 11ms,10μs)
	Damage Limit	288m/s ² {30G}(Sine half wave: 8ms, 10μs)
Vibration resistance		10 ~ 500Hz, 49m/s ² {5G}
Relative Humidity		25% ~ 80%RH (at 40°C)
Terminal type		PCB type: QC type
Weight(Approx.)		80g

Layout (Bottom views, Unit: mm)

Dimensions / Wiring diagram (Bottom views)

QC Type

PCB Type

Terminal Layout (Bottom views)

Wiring diagram (Bottom views)

Coil: standard Coil: with Resistance Coil: with Diode

1A 1C