

勝特力材料 886-3-5753170
 勝特力电子(上海) 86-21-34970699
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 Http://www.100y.com.tw



20×10×12

UL E158859 R50044268

M4S

Features

- DIL Pitch Terminals , High Sensitivity.
- Conforms to FCC Part 68 1.5kV Surge and Dielectric 1000VAC.
- Fully sealed (immersion cleaning).
- High Reliability bifurcated Contact.
- Application for Telecommunication Equipment, Office Equipment, Security Alarm Systems, Measuring instruments, Medical Monitoring Equipment, Audio Visual Equipment, Flight Simulator, Sensor Control.

Ordering Information

M4S 12 H A W
 1 2 3 4 5

1 Part number: M4S

2 Coil rated voltage: DC:3:3V; 5:5V; 6:6V; 9:9V;
 12:12V; 18:18V; 24:24V; 48:48V

3 Enclosure: H: Sealed Type

4 Nominal coil power: Nil:0.15W; A:0.2W
 5 Contact material: W: AgNi

Contact Data

Contact Arrangement	2C (DPDT(B-M))		
Contact Material	AgNi(Gold clad)		
Contact Rating (resistive)	1mA/10mV to 2A,3A/30VDC; 0.6A/125VAC		
Max. Switching Power	90W 125VA	Min. Switching load: 1mA/10mV (Reference Value)	
Max. Switching Voltage	220VDC 250VAC	Max. Switching Current:3A	
Contact Resistance or Voltage drop	≤100mΩ	Item 4.12 of IEC 61810-7	
Operational life	Electrical	1×10 ⁵	Item 4.30 of IEC 61810-7
	Mechanical	10 ⁶	Item 4.31 of IEC 61810-7

CAUTION:

Relays previously tested or used above 10mA resistive at 6VDC maximum or peak AC open circuit are not recommended for subsequent use in low level applications.

Coil Parameter

Dash numbers	Coil voltage VDC		Coil resistance Ω ±10%	Pick up voltage VDC(max) (70% of rated voltage)	Release voltage VDC(min) (5% or 10% of rated voltage)	Coil power W	Operate Time ms	Release Time ms
	Rated	Max						
M4S-003	3	7.5	60	2.1	0.15	0.15	Approx. 4.5	Approx. 1.5
M4S-005	5	12.5	167	3.5	0.25	0.15		
M4S-006	6	15.0	240	4.2	0.3	0.15		
M4S-009	9	22.5	540	6.3	0.45	0.15		
M4S-012	12	30.0	960	8.4	0.6	0.15		
M4S-018	18	40.0	1620	12.6	0.9	0.20		
M4S-024	24	52.9	2880	16.8	1.2	0.20		
M4S-048	48	84.9	7680	33.6	2.4	0.30		
M4S-003A	3	6.5	45	2.1	0.3	0.2	Approx. 4.5	Approx. 1.5
M4S-005A	5	10.8	125	3.5	0.5	0.2		
M4S-006A	6	13.0	180	4.2	0.6	0.2		
M4S-009A	9	19.5	405	6.3	0.9	0.2		
M4S-012A	12	26.5	720	8.4	1.2	0.2		
M4S-024A	24	52.9	2880	16.8	2.4	0.2		
M4S-048A	48	103.9	11520	33.6	4.8	0.2		

- CAUTION:** 1.The use of any coil voltage less than the rated coil voltage will compromise the operation of the relay.
 2.Pickup and release voltage are for test purposes only, and are not to be used as design criteria.

Characteristics

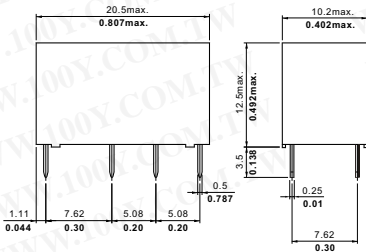
Electrostatic capacitance		
Between open Contacts	Approx.0.7pF	Item 4.41 of IEC 61810-7
Between coil & Contacts	Approx.1.0pF	Item 4.41 of IEC 61810-7
Between Contact Poles	Approx.0.9pF	Item 4.41 of IEC 61810-7
Insulation Resistance	1000M Ω min (at 500VDC)	Item 7 of IEC 60255-5
Dielectric Strength		
Between open Contacts	1000VAC 1min	Item 6 of IEC 60255-5
Between coil & Contacts	1000VAC 1min	Item 6 of IEC 60255-5
Between Contact Poles	1000VAC 1min	Item 6 of IEC 60255-5
Surge Withstand Voltage		
Between open Contacts	1500V	FCC 68
Between coil & Contacts	1500V	FCC 68
Between Contact Poles	1500V	FCC 68
Shock resistance		
	Functional:100m/s ² 11ms; Survival:1000 m/s ² 6ms	IEC 68-2-27 Test Ea
Vibration resistance		
	10Hz~55Hz Double amplitude Functional:1.5mm Survival:5mm	IEC 68-2-6 Test Fc
Terminals strength		
	5N	IEC 68-2-21 Test Ua1
Solderability		
	235C \pm 2C 3s \pm 0.5s	IEC 68-2-20 Test Ta method 1
Temperature Range		
	-40C~90C (-40 $^{\circ}$ F~194 $^{\circ}$ F) (-40C~80C for 0.3W Coil)	
Mass		
	Approx. 4.5g	

Safety approvals

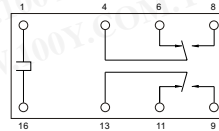
Safety approval	UL&CUR	TUV
Load	2A,3A/30VDC 0.6A/125VAC	2A/30VDC、0.6A/125VAC

Dimensions

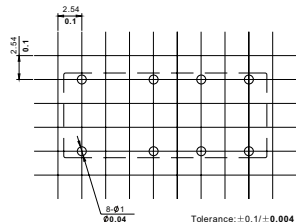
mm/inch



Dimensions



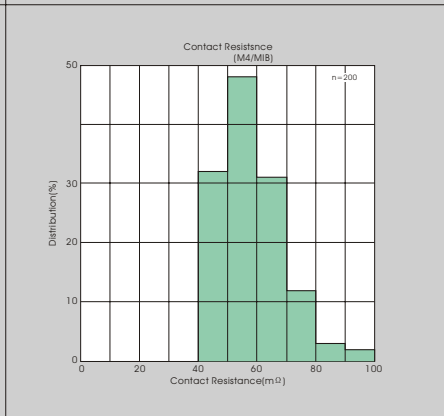
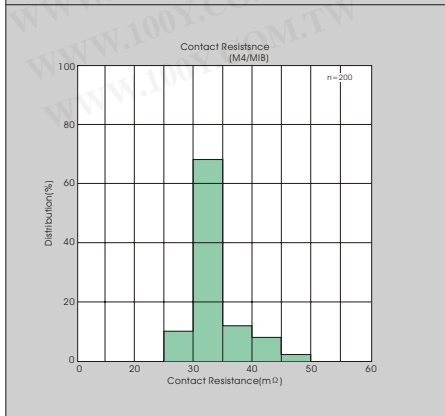
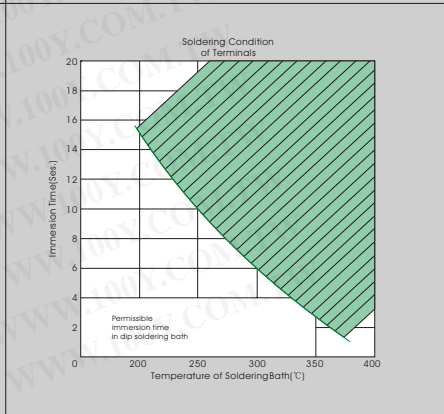
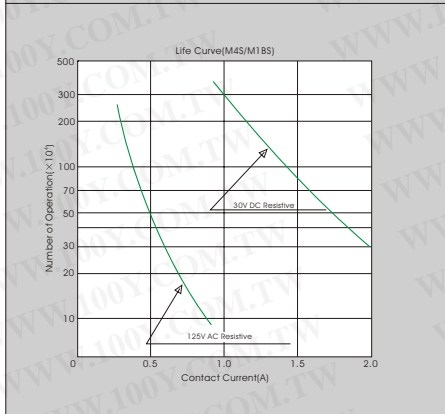
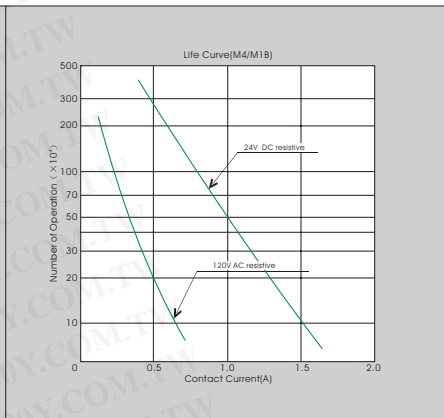
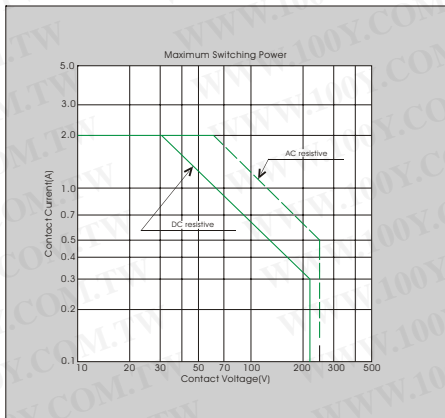
Wiring diagram
(Bottom view)

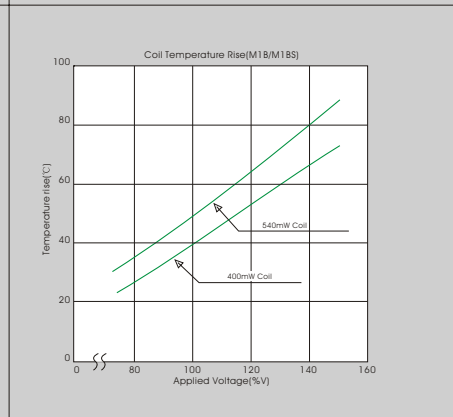
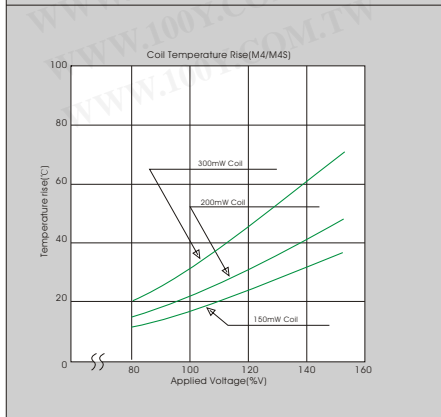
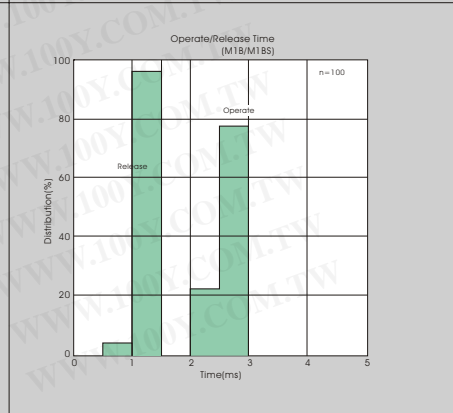
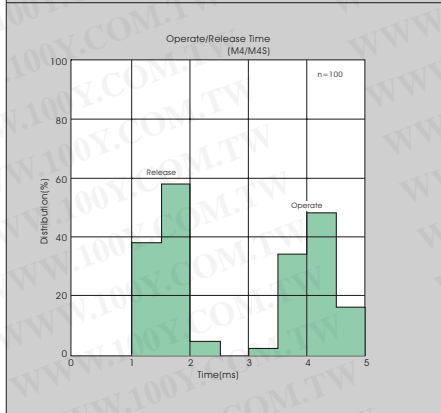
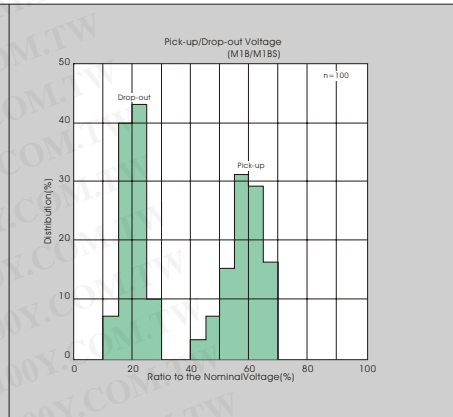
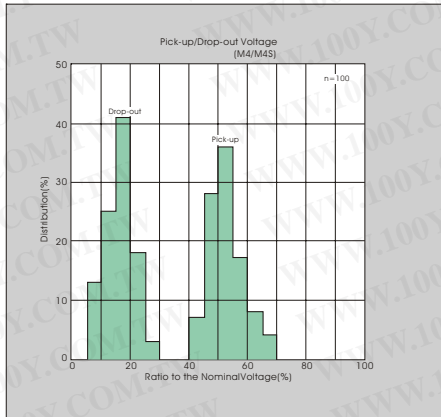


Mounting (Bottom view)

NOTES 1).Dimensions are in millimeters.

2).Inch equivalents are given for general information only.









20×10×12

M4S


 US E158859
 
 R50044268

特点

- 双列式、高灵敏型继电器。
- 符合FCC69要求，冲击电压1.5kV。介质耐压1000VAC。
- 试水式密封。
- 高可靠分叉式触点。
- 用于通信设备、办公设备、教学视听设备及医疗设备、测量仪表、仿真器和安全报警、探测器等。

订货信息

M4S 12 H A W

1 2 3 4 5

1 型号: M4S	3 封装: H:试水式
2 线圈额定电压: DC:3.3V; 5.5V; 6.6V; 9.9V; 12:12V; 18:18V; 24:24V; 48:48V	4 线圈功耗: 无:0.15W; A:0.2W
	5 触点材料: W: AgNi

触点参数

触点形式	2C (DPDT(B-M))		
触点材料	AgNi(镀金)		
触点负载 (阻性)	2A,3A/30VDC; 0.6A/125VAC		
最大切换功率	90W 125VA	最小切换负载: 1mA/10mV (参考值)	
最大切换电压	220VDC 250VAC		
	最大切换电流: 3A		
接触电阻	≤100mΩ	IEC 61810-7中第4.12条	
寿命	电气	1×10 ⁸	IEC 61810-7中第4.30条
	机械	10 ⁶	IEC 61810-7中第4.31条

注: 已经在开路电压为6V(直流最大, 交流峰值)和大于10mA(阻性)负载下试验检验和使用过的产品, 建议不再用于低电平。

线圈参数

规格序号	线圈电压 VDC		线圈电阻 Ω ±10%	吸合电压 VDC(最大) (额定电压的70%)	释放电压 VDC(最小) (额定电压的 5%或10%)	线圈 功耗 W	动作时间 ms	释放时间 ms		
	额定	最大								
M4S-003	3	7.5	60	2.1	0.15	0.15	大约 4.5	大约1.5		
M4S-005	5	12.5	167	3.5	0.25	0.15				
M4S-006	6	15.0	240	4.2	0.3	0.15				
M4S-009	9	22.5	540	6.3	0.45	0.15				
M4S-012	12	30.0	960	8.4	0.6	0.15				
M4S-018	18	40.0	1620	12.6	0.9	0.20				
M4S-024	24	52.9	2880	16.8	1.2	0.20				
M4S-048	48	84.9	7680	33.6	2.4	0.30				
M4S-003A	3	6.5	45	2.1	0.3	0.2			大约 4.5	大约1.5
M4S-005A	5	10.8	125	3.5	0.5	0.2				
M4S-006A	6	13.0	180	4.2	0.6	0.2				
M4S-009A	9	19.5	405	6.3	0.9	0.2				
M4S-012A	12	26.5	720	8.4	1.2	0.2				
M4S-024A	24	52.9	2880	16.8	2.4	0.2				
M4S-048A	48	103.9	11520	33.6	4.8	0.2				

注意: 1. 使用的线圈电压低于线圈额定电压时将会损害继电器的工作。
2. 吸合、释放电压仅供检测用, 不是设计的使用指标。

技术特性

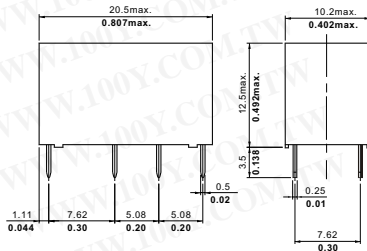
分布电容		
断开触点间	大约0.7pF	IEC 61810-7中第4.41条
触点与线圈间	大约1.0pF	IEC 61810-7中第4.41条
触点组之间	大约0.9pF	IEC 61810-7 中第4.41条
绝缘电阻	最小1000MΩ (500VDC)	IEC 61810-5 中第7条
介质耐压		
断开触点间	1000VAC 1分钟	IEC 60255-5中第6条
触点与线圈间	1000VAC 1分钟	IEC 60255-5中第6条
触点组之间	1000VAC 1分钟	IEC 60255-5中第6条
冲击电压		
断开触点间	1500V	FCC 68
触点与线圈间	1500V	FCC 68
触点组之间	1500V	FCC 68
耐冲击	稳定性:100m/s ² 11ms; 强度:1000 m/s ² 6ms	IEC 68-2-27 试验 Ea
抗振动	10Hz~55Hz 双振幅 稳定性:1.5mm 强度:5mm	IEC 68-2-6 试验 Fc
引出端强度	5N	IEC 68-2-21 试验 Ua1
可焊性	235℃ ± 2℃ 3s ± 0.5s	IEC 68-2-20 试验 Ta 方法 1
环境温度	-40℃~90℃ (-40° F~194° F) (-40℃~80℃ 对0.3W 线圈)	
质(重)量	约4.5g	

安全认证

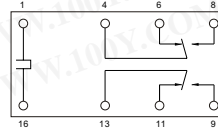
安全认证	UL&CUR	TUV
负载	2A,3A/30VDC 0.6A/125VAC	2A/30VDC、0.6A/125VAC

外形尺寸

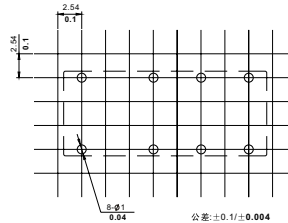
mm/英寸



外形尺寸图

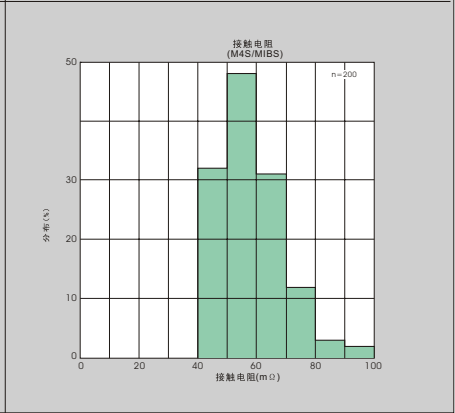
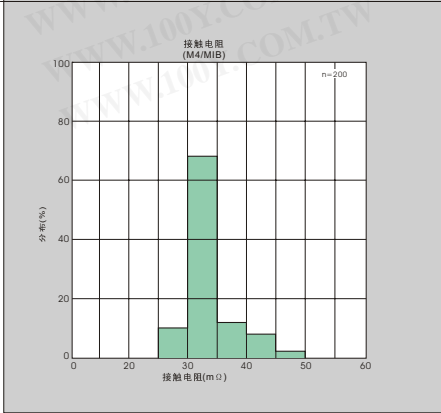
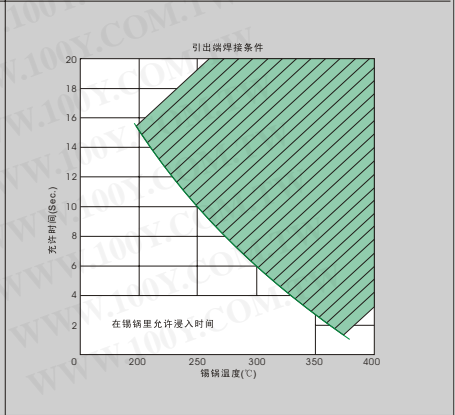
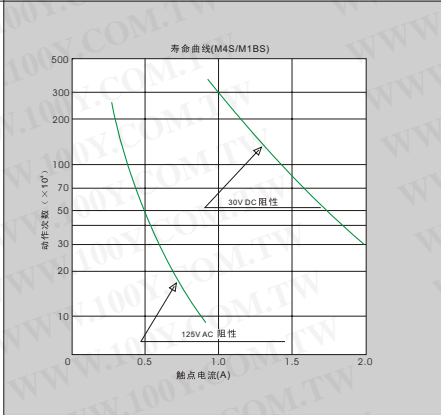
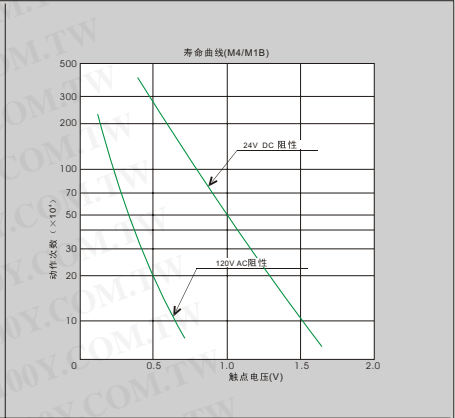
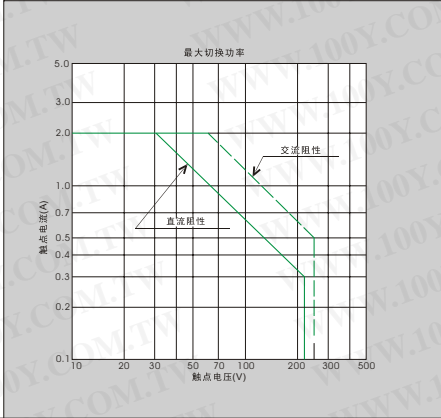


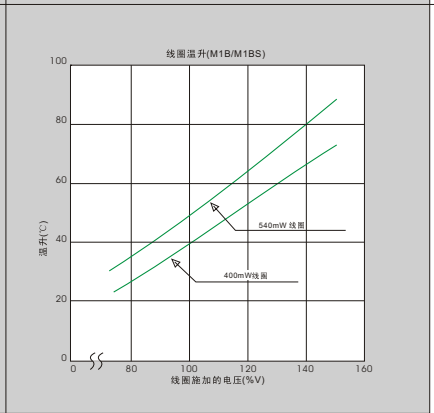
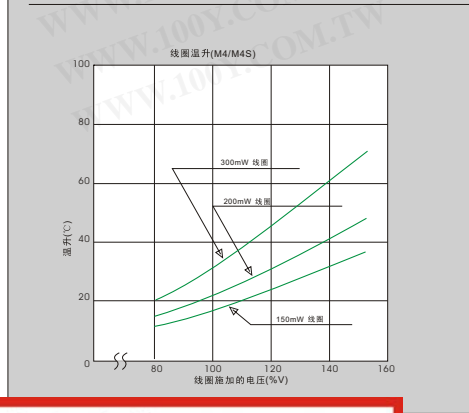
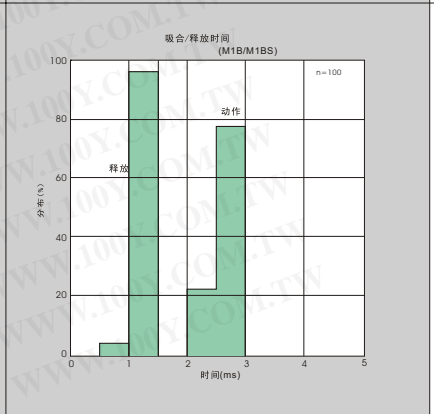
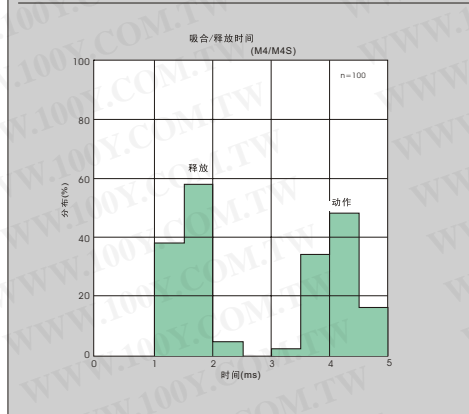
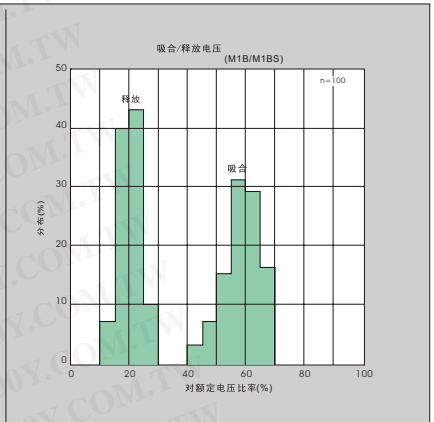
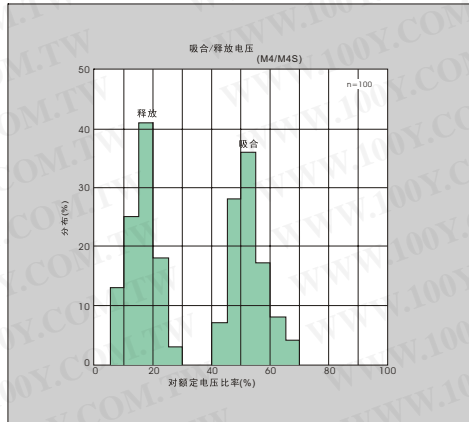
接线图 (底视图)



安装尺寸图 (底视图)

- 注: 1) 尺寸以毫米为单位。
2) 给出的等量英寸值仅供参考。





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