



FEATURES

- 40A switching capability
- 1 form A、1form B、1 form C、2 form A contact arrangement
- Various mounting terminations available
- Sealed IP67 and dust cover types available
- Outline dimensions:28.0×28.0×25.0mm

CHARACTERISTICS

Contact arrangement	1A, 1B, 1C, 2A	
Voltage drop (initial) ¹⁾	Typical :40mV(at 10A)	
	Max.:250mV(at 10A)	
Max.switching current	NO:120A, NC:45A	
Max.switching voltage	NO:60A(20℃) NC:40A(20℃)	
Min.contact load	1A 6VDC	
Electrical life	1×10 ⁵ ops	
Mechanical life	1×10 ⁷ ops	300ops/min
Initial insulation resistance	100MΩ (500VDC)	
Dielectric strength	500VAC (1min)	
	500VAC (1min,leakage current less than 1mA)	
Operate time	Max:10ms	
Release time	Max:5ms	
Ambient temperature	-40℃~+85℃	
Storage temperature	-40℃~+85℃	
Vibration resistance	10Hz~40Hz 1.5mm	
	10Hz~40Hz 1.5mm DA	
Shock resistance	Functional:98m/s ² (10g)	
	Destructive:196m/s ² (20g)	
Termination	QC&PCB	
Construction	Sealed & Dust cover	
Unit weight	Wather-proof cover:Approx:55g Others:Approx:35g	
	Cover retention:(pull & push)245N	
Mechanical data	Terminal retention:(pull & push)100N	
	Terminal resistance to bending(front & side)10N	

1)Equivalent to the max,initial contact resistance is 100mΩ (1A 6VDC);

2)Peak surge current of lamp load under the voltage of 13.5VDC;

COIL DATA

at 23℃

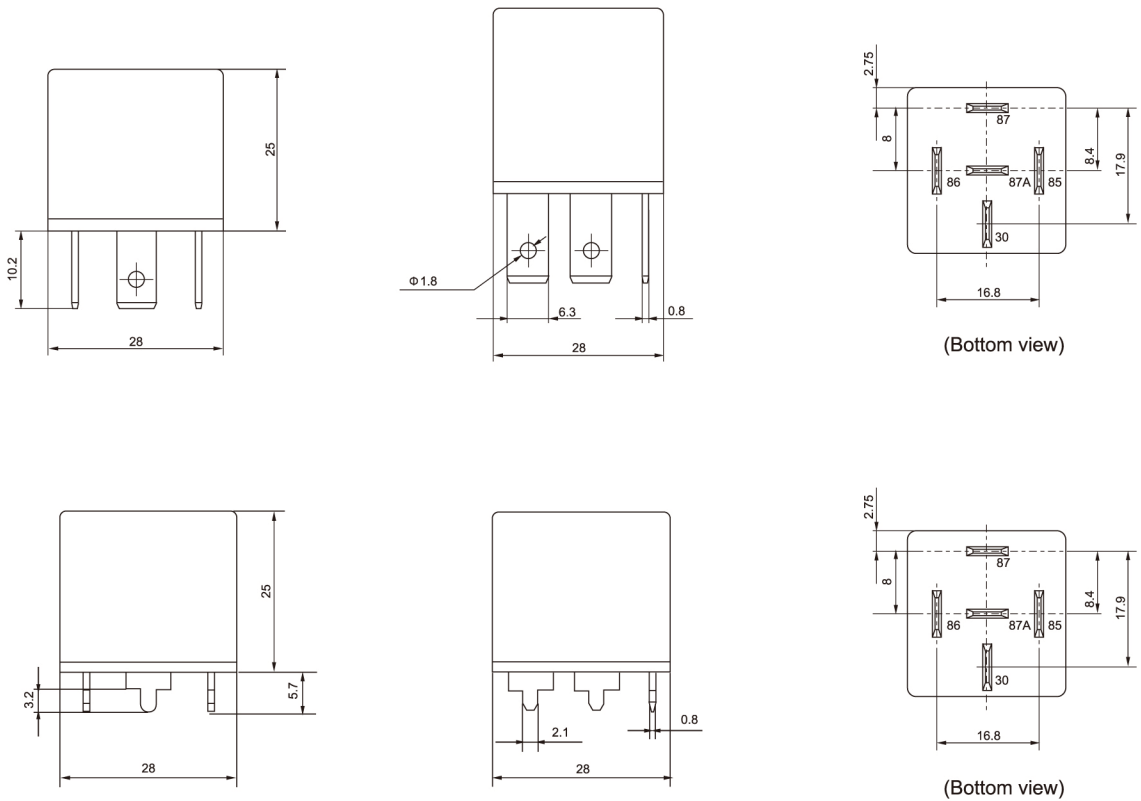
	Normal voltage (VDC)	Pick-up voltage (VDC)	Drop-out voltage (VDC)	Coil resistance (Ω ±10%)	Parallel resistance (Ω ±5%)	Equivalent resistance (Ω ±10%)	Power consumption (W)	Max.allowable overdrive voltage ¹⁾ (VDC)	
								20℃	85℃
Standard	6	4.2	0.6	22	-	-	1.6	10.1	7.9
	6	4.2	0.6	22	180	20	1.8	10.1	7.9
	12	8.4	1.2	90	-	-	1.6	20.2	15.7
	12	8.4	1.2	90	680	79.5	1.8	20.2	15.7
	24	16.8	2.4	360	-	-	1.6	40.5	31.5
	24	16.8	2.4	360	2700	317.6	1.8	40.5	31.5
	24	16.8	2.4	250	-	-	2.3	40.5	31.5

1)Max. Allowable overdrive voltage is stated with no load applied, illustrated with dust cover version.

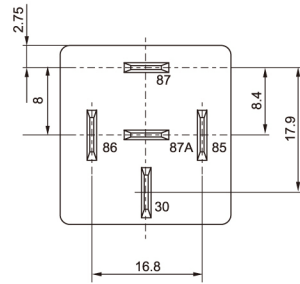
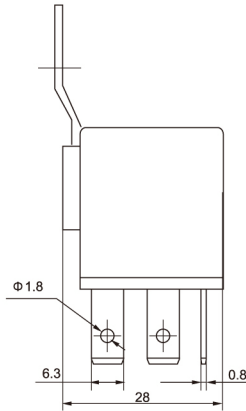
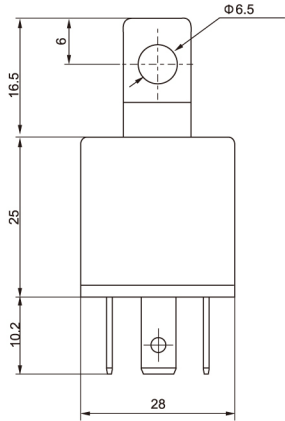
ORDERING INFORMATION

Type	MAH	-S-	1	12	-C-	1	R
Construction	S-Sealed nil-Open type						
Contact group	1 : 1group						
Coil voltage	6, 12, 24VDC						
Contact form	A-NO B-NC C-NO/NC 2A-2NO						
Version	1.Cover without bracket 2.PCB layout 3.Cover with metal bracket 4.Cover with plastic bracket						
Parallel resistor	R: with resistor D1: Diode anode connect to pin #86 D2:Diode anode connect to pin #85 nil- no components						

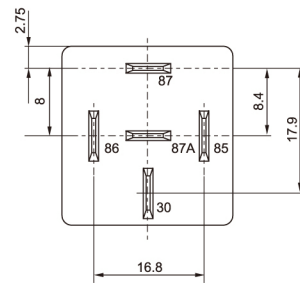
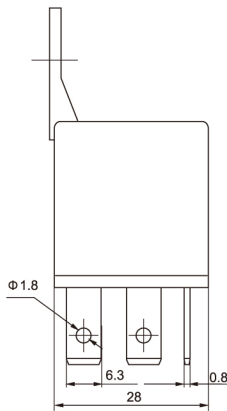
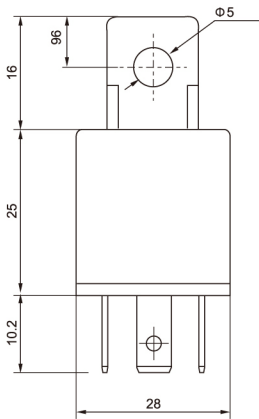
EXTERNAL DIMENSIONS



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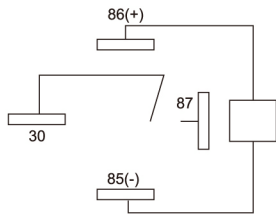


(Bottom view)

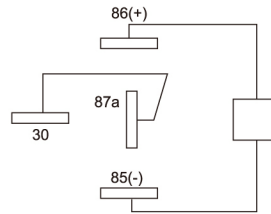


(Bottom view)

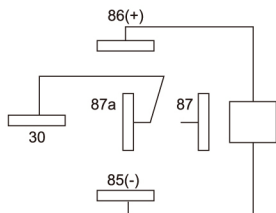
Remark: 1) In case of no tolerance shown in outline dimension: outline dimension $\leq 1\text{mm}$, tolerance should be $\pm 0.2\text{mm}$; outline dimension $> 1\text{mm}$ and $\leq 5\text{mm}$, tolerance should be $\pm 0.3\text{mm}$; outline dimension $> 5\text{mm}$, tolerance should be $\pm 0.4\text{mm}$.
2) The tolerance without indicating for PCB layout is always $\pm 0.1\text{mm}$.



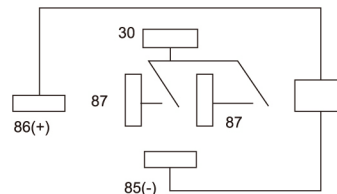
1A



1B



1C



2A