元则继电器
YUANZE RELAY
PRINCIPLE MASTERING THE FUTURE

Miniature PCB Automotive Relay

YAR-Series

Features

- Miniature automotive relay.
- Max. switching current: 30A.
- High power automotive relay.
- Both single and dual relays available.

Contact Capacity

Model	YAR
Nominal Switching Capacity	N0/NC：40A/30A 13.5VDC
Max.swithing current	40A
Max.swithing voltage	30VDC
Max.swithing power	560W

Characteristic Data

Contact material		Silver alloy
Initial contact resistance		100mΩ Max.
Operate time		10 msec. Max.
Release time		10 msec. Max.
Initial insulation resistance		100MΩ Min.(DC500V)
Initial dielectric strength		Between open contacts: AC500V,50/60HZ 1Min.
		Between coil and contacts: AC500V,50/60HZ 1Min.
Vibration resistance		6G 10-55 HZ
Shock resistance		30G 10-55HZ
Endurance (operations)	Mechanical	5,000,000 times
	Electrical	Res.Load:300,000 20A 13.5 VDC
		Wiper motor:300,000 25A on, 5A off ,L=1.0mh
		Motor locker:100,000 20A 13.5 VDC L=0.77mh
		Lamp load(N0):100,000 inrush current 100A ,steady current 10A
		Flashing light(No) : 1, 000, 000 3x21W
Ambient temperature		-40℃ ~ +125℃(no condensation)
Unit weight		One type: Approx.16.0g; Sealed type: Approx20. 5g

Coil Data(at 20℃)

Nominal voltage (VDC)	Nominal operating current ±10% (mA)	Coil resistance ±10% (Ω)	Allowable voltage (Max.)	Pick-up voltage (Max.)	Drop-out voltage (Min.)	Nominal operating power
6	266.67	22.5	150%of nominal voltage	58%of nominal voltage	10%of nominal voltage	Approx. 1.60W
9	180.00	50				
12	133.33	90				
18	89.11	202				
24	66.67	360				
48	33.33	1,440				

Note: Specifications and dimensions in this catalog are subjected to change without notice.

Ordering Information

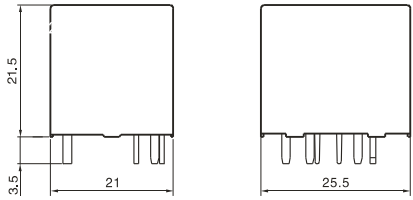
Nomenclature

YAR – SS – 1 | 12 | D | M | U | 1 – XX

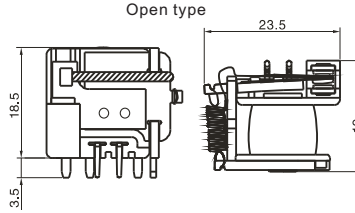
- XX: Special Parameter: Nil-Standard type; Letter or number-Special requirement
- 1: Yoke Terminal Arrangement: Nil-3yoke terminal, 1-2yoke terminal
- U: Terminal Arrangement: U-USA E-European
- M: Contact Form: M-Form A,B-Borm B, Nil-Form C
- D: Coil Power: D-1.60W
- 12: Coil Voltage(VDC):06,09,12,18, 24, 48
- 1: Number of Pole: 1-Single relay, 2-Dual relay
- SS: Portective Construction: Nil-Open type, SS-Flux proofed; SH-Sealed type washable
- YAR: Type Designation: YAR

Outline Dimensions,Wiring Diagram,Mounting Holes(Unit:mm)

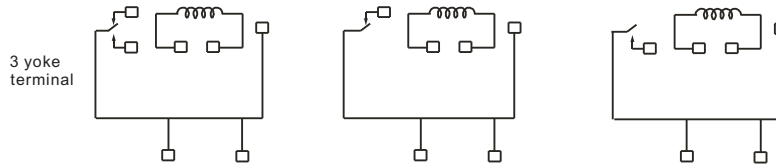
Sealed type

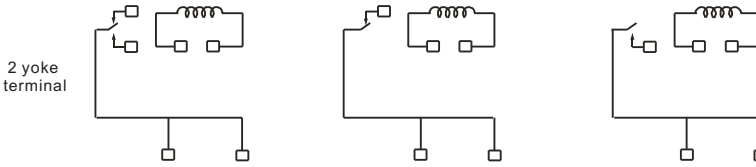


Open type



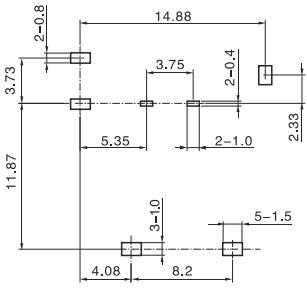
Unless otherwise specified:
<1mm,tolerance,±0.2mm;
1-5mm,tolerance,±0.3mm;
>5mm,tolerance,±0.4mm;
Note: 1. Extended terminal dimension is dimension before soldering.
2. Tolerance of PCB layout: ±0.1mm



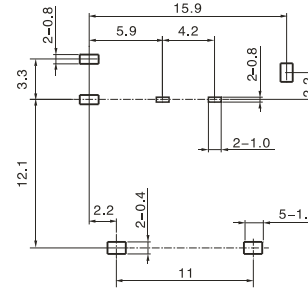


1c 1b 1a

Wiring Diagram(bottom view)



YAR-U



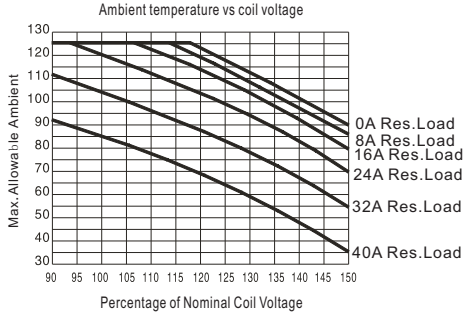
YAR-E

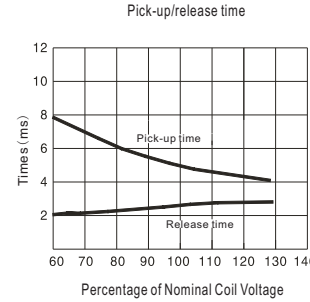
Mounting Holes(bottom view)

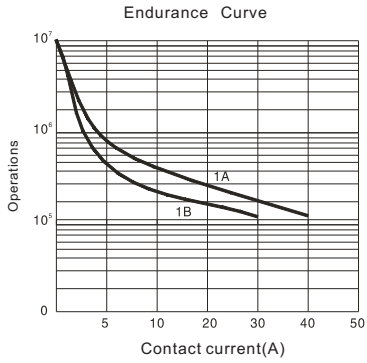
Typical Applications

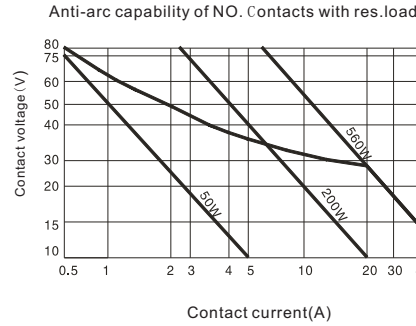
● Automotive control, switching box,automation,etc.

Characteristic Curves









Note: Specifications and dimensions in this catalog are subjected to change without notice.