

Y32F Series

Power relay

Feature explanation

- 16A contact switching capability
- Highly sensitive products are available, with coil power consumption of 200mW.
- Creepage distance and air distance ≥ 6.5 mm
- Products available with an operating temperature of 105°C in the environment.
- Environmentally friendly product (compliant with ROHS).
- Dimensions: (18.4×10.2×15.3)mm
- Primary applications: smart switches, smart outlets, household appliances.



Performance Overview

Specifications	project	
Contact point parameters.	Contact configuration.	1A
	Contact resistance (initial value)	$\leq 100\text{m}\Omega$ (6VDC 1A)
	Contact material.	AgSnO ₂
Rated load.	Load control (resistance-based).	5A 250VAC 10A 250VAC 8A 250VAC 16A 250VAC
	Maximum switching voltage.	277VAC
	Maximum switching current.	16A
	Maximum conversion power.	4000VA
Electrical performance.	Insulation resistance (initial value)	1000M Ω (500VDC)
	Medium withstand voltage. (Initial value)	Disconnect the contacts. 1000VAC, 50/60Hz 1 Min
		Between the contact and the coil. 4000VAC, 50/60HZ 1 Min
	Closing time.	$\leq 10\text{ms}$
	Release time.	$\leq 8\text{ms}$
Mechanical properties	to attack	stability 98m/s ² (10G)
		strength 980m/s ² (100G)
	vibration 10Hz~55Hz 1.5mm Double amplitude.	
Durability.	Mechanics	1×10 ⁷ 次
	Electrical (room temperature).	10A 250VAC 1×10 ⁵ 次(ON/OFF=1s/9s)
		16A 250VAC 5×10 ⁴ 次(ON/OFF=1s/9s)
Conditions of Use	environmental temperature	-40℃~85/105℃
	humidity	5% to 90%
Termination method.		Printed board type.
weight		Approximately 7g
Packaging method.		Plastic-coated type, anti-soldering formulation.

■ Coil specifications (23°C)

■ Standard model.

Rated voltage.	Closing voltage VDC	Release voltage VDC	Rated current (±10%)	Coil resistance (±10%)	Rated power.	Maximum permissible voltage.
DC 3V	≤2.25	≥0.15	150 mA	20Ω	450mW	DC 3.9V
DC 5V	≤3.75	≥0.25	90 mA	55.5Ω		DC 6.5V
DC 6V	≤4.50	≥0.30	75 mA	80Ω		DC 7.8V
DC 9V	≤6.75	≥0.45	50 mA	180Ω		DC 11.7V
DC 12V	≤9.00	≥0.60	37.5 mA	320Ω		DC 15.6V
DC 15V	≤11.25	≥0.75	30 mA	500Ω		DC 19.5V
DC 18V	≤13.50	≥0.90	25 mA	720Ω		DC 23.4V
DC 24V	≤18.00	≥1.20	18.8 mA	1280Ω		DC 31.2V
DC 48V	≤36.00	≥2.40	10.4 mA	4608Ω	500mW	DC 62.4V

■ Sensitive type.

Rated voltage.	Closing voltage VDC	Release voltage VDC	Rated current (±10%)	Coil resistance (±10%)	Rated power.	Maximum permissible voltage.
DC 3V	≤2.4	≥0.15	66.7mA	45Ω	200mW	DC 3.9V
DC 5V	≤4.0	≥0.25	40 mA	125Ω		DC 6.5V
DC 6V	≤4.8	≥0.30	33.3mA	180Ω		DC 7.8V
DC 9V	≤7.2	≥0.45	22.2 mA	405Ω		DC 11.7V
DC 12V	≤9.6	≥0.60	16.7mA	720Ω		DC 15.6V
DC 15V	≤12.0	≥0.75	13.3 mA	1128Ω		DC 19.5V
DC 18V	≤14.4	≥0.90	11.1 mA	1620Ω		DC 23.4V
DC 24V	≤19.2	≥1.20	8.3 mA	2880Ω		DC 31.2V

■ Order information.

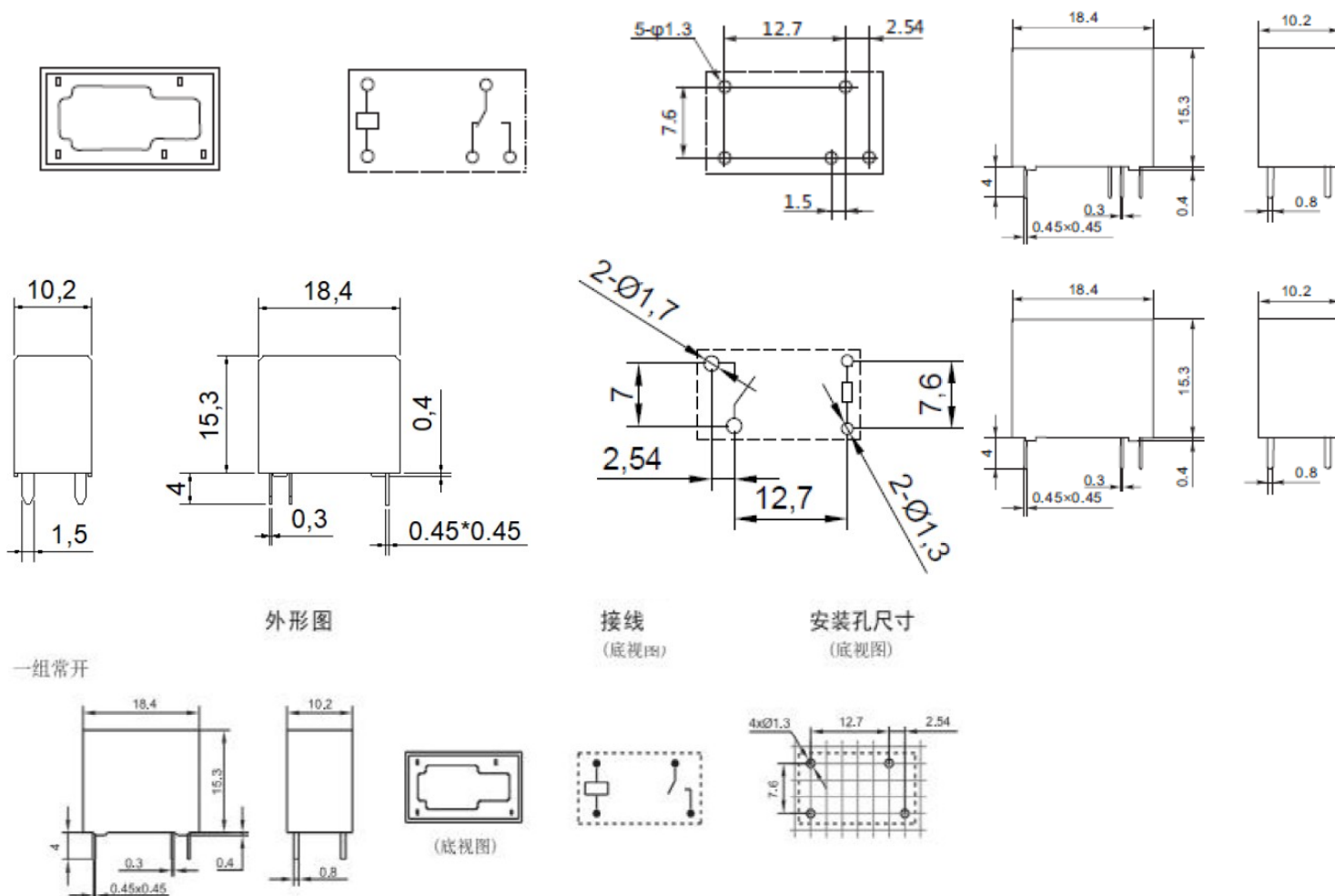
Y32F -1 12 D M X

- Product model
- Number of contact groups.: Contact Pole 1—1 pole
- Coil specifications (VDC) : 03 05 06 09 12 18 24 48
- Rated power: D = Standard Model; L = Sensitive Model
- Contact configuration:M-Form A Z-Form C
- Special code: represented by numbers or letters.

(1)When used in a clean environment (free from pollutants such as H₂S, SO₂, NO₂, and dust), it is recommended to choose the anti-soldering formulation. For use in polluted environments (containing H₂S, SO₂,NO₂, and dust), it is suggested to opt for the plastic-sealed type. Please contact our company if you need to perform a comprehensive cleaning or surface treatment.

(2)In situations where relays generate significant surge currents upon the activation of their contacts, it is recommended to use AgSnO₂ contact materials.

■ Dimensions, wiring, and installation specifications (unit: mm).



Note: (1) The tolerance of size is $\pm 0.2\text{mm}$ when the size is $\leq 1\text{mm}$; When the external dimension is $1\text{mm} \sim 5\text{mm}$, the tolerance is $\pm 0.3\text{mm}$; When the external dimension $\geq 5\text{mm}$, the tolerance is $\pm 0.5\text{mm}$.

(2) The installation dimensions do not specify any tolerance, which is $\pm 0.1\text{ mm}$.

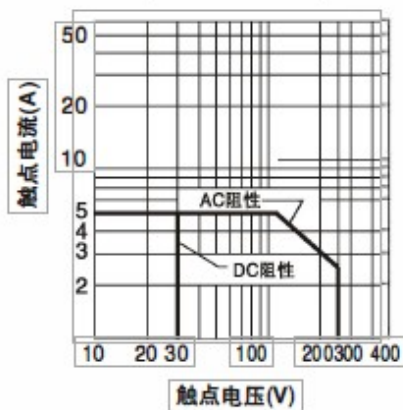
■ Security authentication.

Type of certification.	Certification number.	Contact configuration.	Contact material.	Authentication load.		
UL	E497292	1A	AgSnO ₂	10A	250VAC	85°C
				16A	250VAC	85°C
TUV	R 50411922	1A	AgSnO ₂	5A	250VAC	85°C
				12A	250VAC	85°C
				16A	250VAC	85°C
CQC	CQC18002201362	1A	AgSnO ₂	5A/10A	250VAC	85°C
				16A	250VAC	85°C

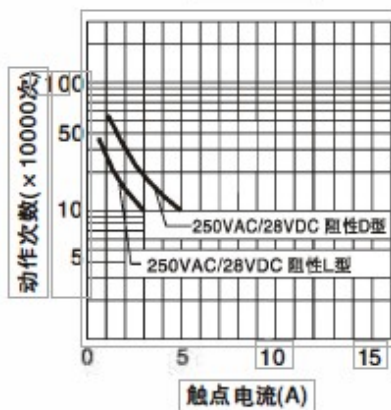
■ Performance curve graph

性能曲线图

最大切换功率



寿命曲线



线圈温升

