

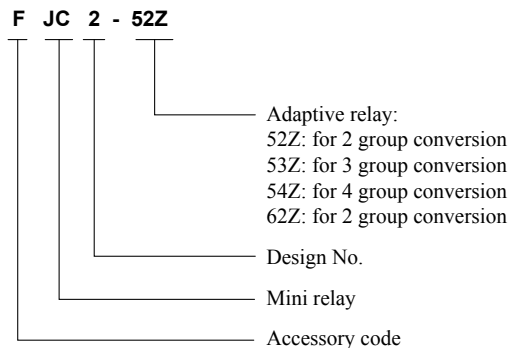
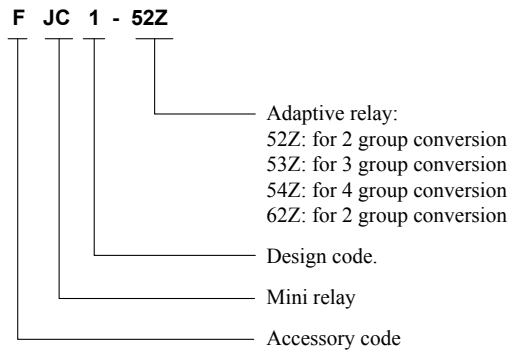
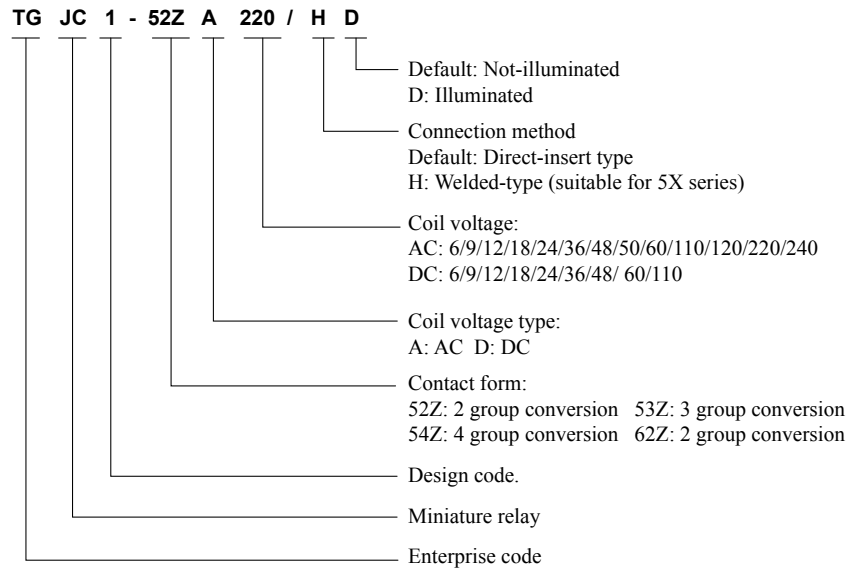
TGJC1 Series Mini Electromagnetic Relay



1 Product overview

There are 2Z, 3Z, and 4Z contact forms with complete AC/DC specifications and high contact reliability for PLC control; packaged by a transparent dust cover; the device-type socket options are provided; there are various installation methods; the status indicator specification can be optional.

2 Type designation



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3 Main technical parameters

3.1 Contact parameters

Contact form	2Z (C)、3Z(C)、4Z(C)
Initial contact resistance	100mΩ
Contact material	Silver alloy
Contact load (COSΦ=1.0)	52Z、53Z: 5A ; 54Z: 3A ; 62Z: 10A(220VAC/28VDC)
Max. switching voltage	250VAC/125VDC
Max. switching current	52Z、53Z: 5A ; 54Z: 3A ; 62Z: 10A
Max. switching power	52Z、53Z: 1100VA/140W ; 54Z: 660VA/84W ; 62Z: 2200VA/280W
Electrical life (times)	35×10^4
Mechanical life (times)	2×10^7

3.2 Performance and characteristic parameters

Insulation resistance		100MΩ(500VDC)
Medium withstand voltage	Between contact coils, between different sets of contacts	1500VAC
	Between break contacts	1000VAC
Action time		≤20ms
Release time		≤20ms
Shock (stability)		10G (half sine wave pulse: 11ms)
Vibration		Double amplitude 1mm, (10~55) Hz
Outgoing terminal form		Plug-in type, PCB type
Dimensions (mm)		27.5x21.5x35.5

3.3 Coil parameters

Rated power	DC:0.9W AC:1.2VA
Operating voltage	DC: ≤ 75% of rated voltage; AC: ≤ 80% of rated voltage
Release voltage	DC: ≥ 10% of rated voltage; AC: ≥ 30% of rated voltage
Max. voltage	110% rated voltage

3.4 Working and installation conditions

Temperature range	-25℃ ~ +55℃
Relative humidity	Up to 95% at +25℃
Atmospheric pressure	86kPa ~ 106kPa
Work location	Upright or side (reed on top)

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3.5 Specifications

Rated voltage VAC	Operating voltage VAC	Release voltage VAC	Coil resistance $\Omega \pm 10\%$
6	4.8	1.8	12
9	7.2	2.7	25
12	9.6	3.6	45
18	14.4	5.4	105
24	19.2	7.2	180
36	28.8	10.8	450
48	38.4	14.4	735
50	40.0	15.0	760
60	48.0	18.0	1050
110	88.0	33.0	3750
120	96.0	36.0	4550
220	176.0	66.0	14500

Rated voltage VAC	Operating voltage VAC	Release voltage VAC	Coil resistance $\Omega \pm 10\%$
6	4.8	0.6	40
9	6.75	0.9	90
12	9.0	1.2	160
18	13.5	1.8	360
24	18.0	2.4	650
36	27.0	3.6	1450
48	36.0	4.8	2600
60	45.0	6.0	4000
110	82.5	11.0	13450

Remark: The coil parameters are the values when the coil temperature is at 20°C .

4 Accessories

Relay model	TGJC1-52Z(D)
Model of matched socket	FJC1-52Z/FJC2-52Z
Socket dimensions (mm)	76×23×30/71×23×30
Socket lead form	Screw type terminal (device type, rail type) PCB type

Relay model	TGJC1-53Z(D)
Model of matched socket	FJC1-53Z/FJC2-53Z
Socket dimensions (mm)	76×30×30/71×30×30
Socket lead form	Screw type terminal (device type, rail type) PCB type

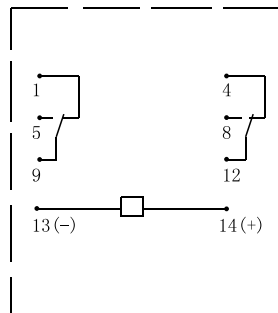
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Relay model	TGJC1-54Z(D)
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Socket dimensions (mm)	76×30×30/71×30×30
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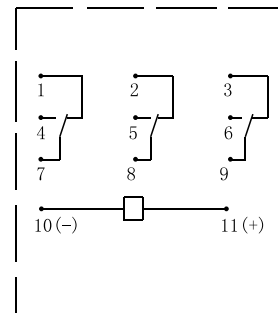
Relay model	TGJC1-62Z(D)
Model of matched socket	FJC1-62Z/FJC2-62Z
Socket dimensions (mm)	79×28×30/71×23×30
Socket lead form	Screw type terminal (device type, rail type) PCB type

5 Outline and installation dimensions

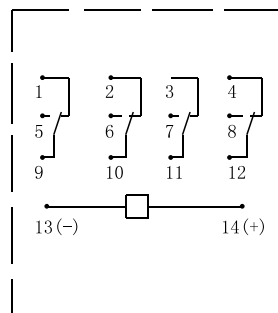
5.1 Bottom view of wiring diagram



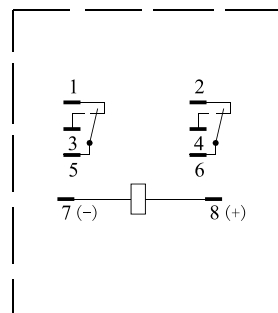
TGJC1-52Z



TGJC1-53Z



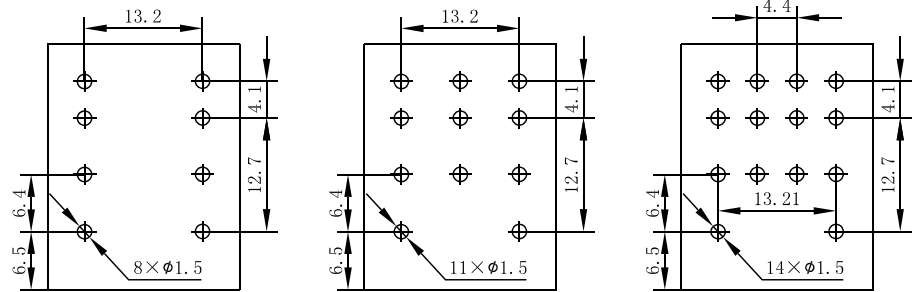
TGJC1-54Z



TGJC1-62Z

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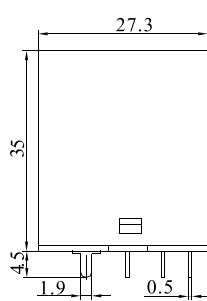
5.2 PCB mounting hole locations diagram



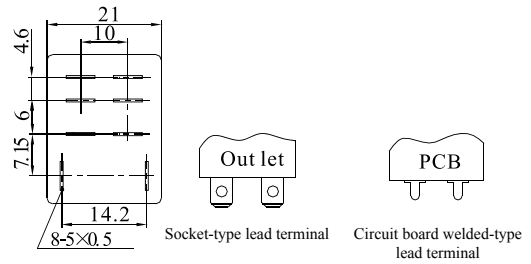
TGJC1-52Z

TGJC1-53Z

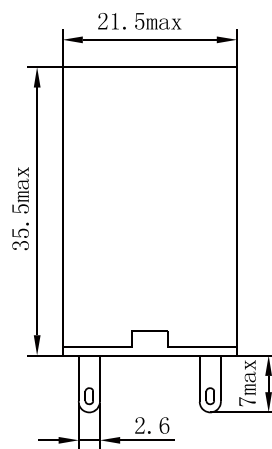
TGJC1-54Z



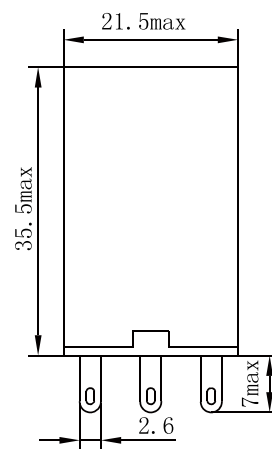
TGJC1-62Z



5.3 Outline drawing (plug-in type)

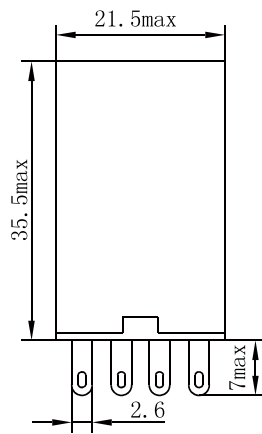


TGJC1-52Z

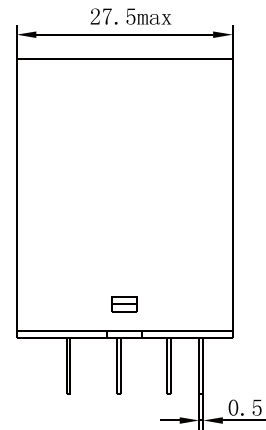


TGJC1-53Z

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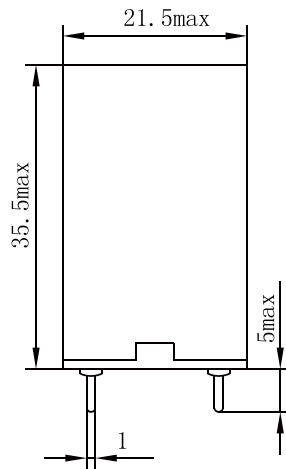


TGJC1-54Z

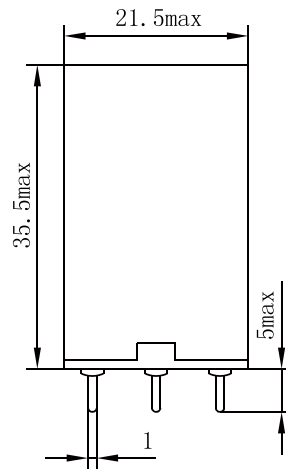


Left view

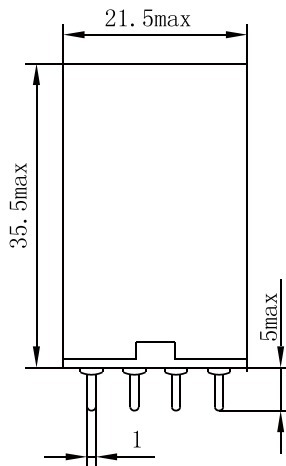
5.4 Outline drawing (PCB type)



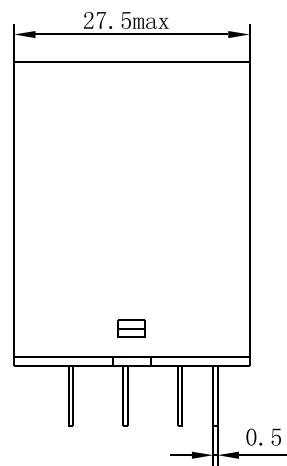
TGJC1-52Z



TGJC1-53Z



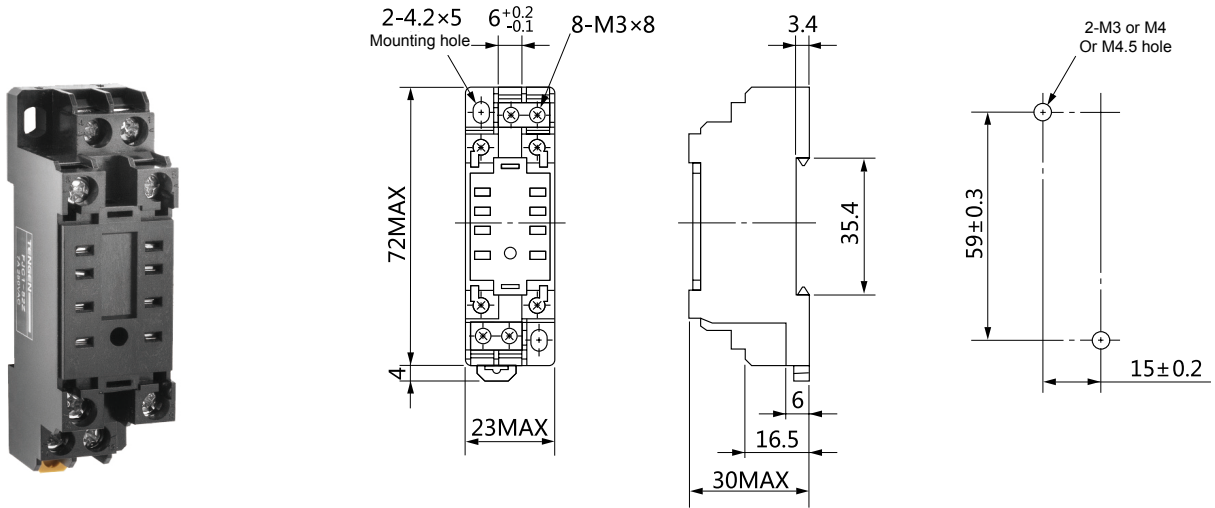
TGJC1-54Z



Left view

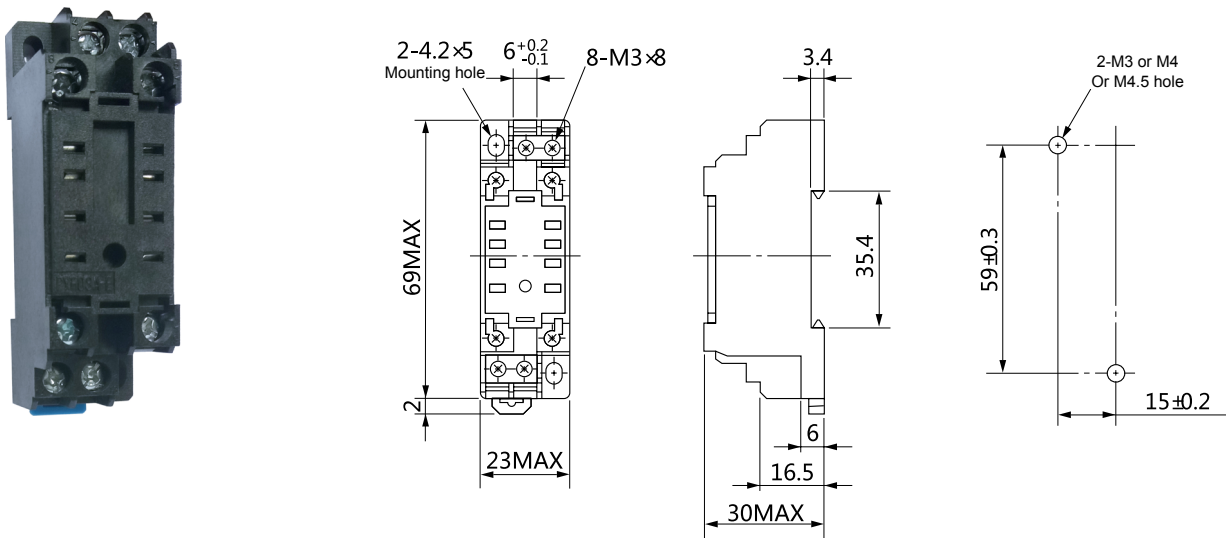
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5.5 FJC1-52Z outline and installation dimensions



Suitable for relay model: TGJC1-52Z(D)

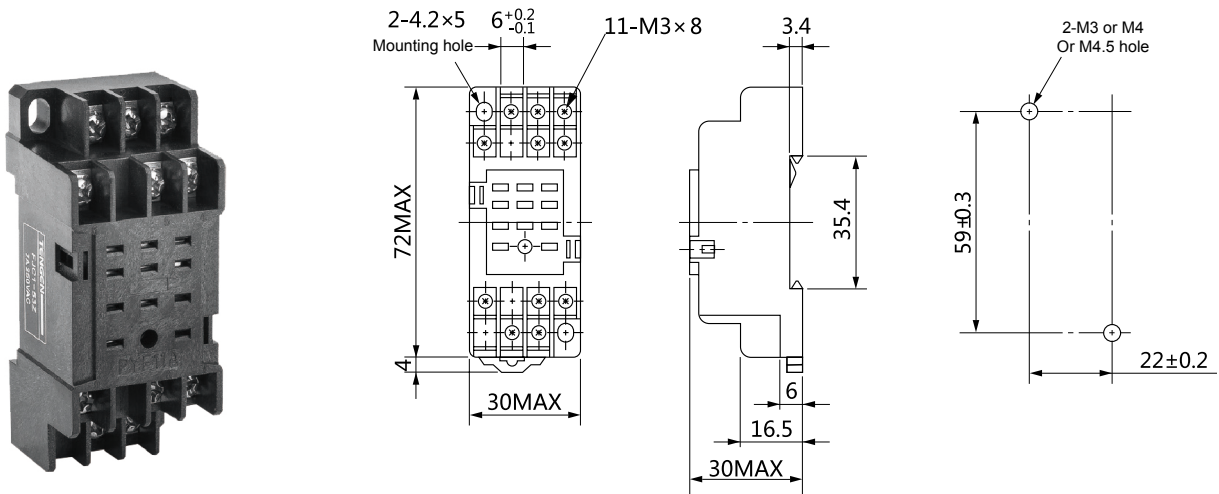
5.6 FJC2-52Z outline and installation dimensions



Suitable for relay model: TGJC1-52Z(D)

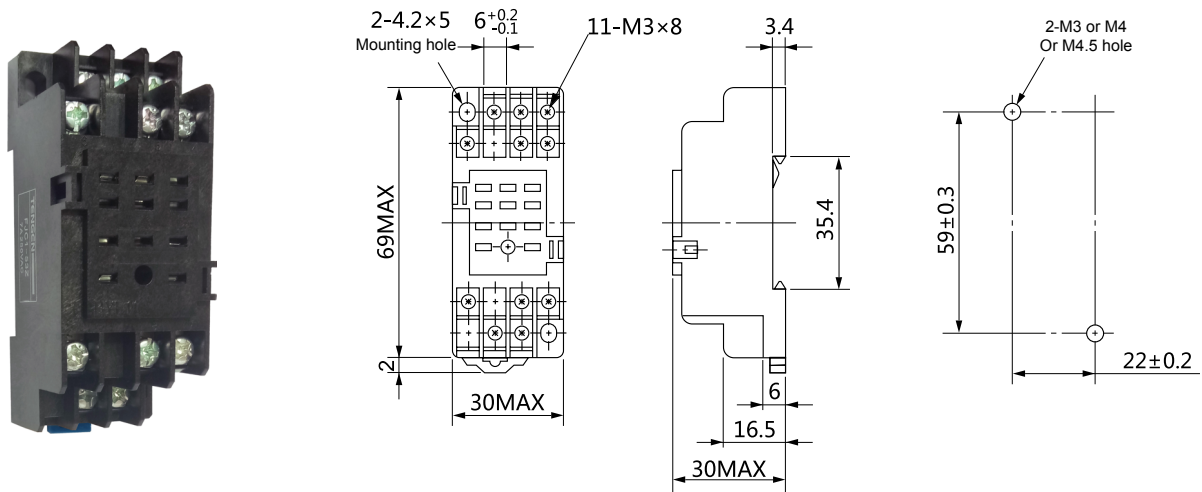
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5.7 FJC1-53Z outline and installation dimensions



Suitable for relay model: TGJC1-53Z(D)

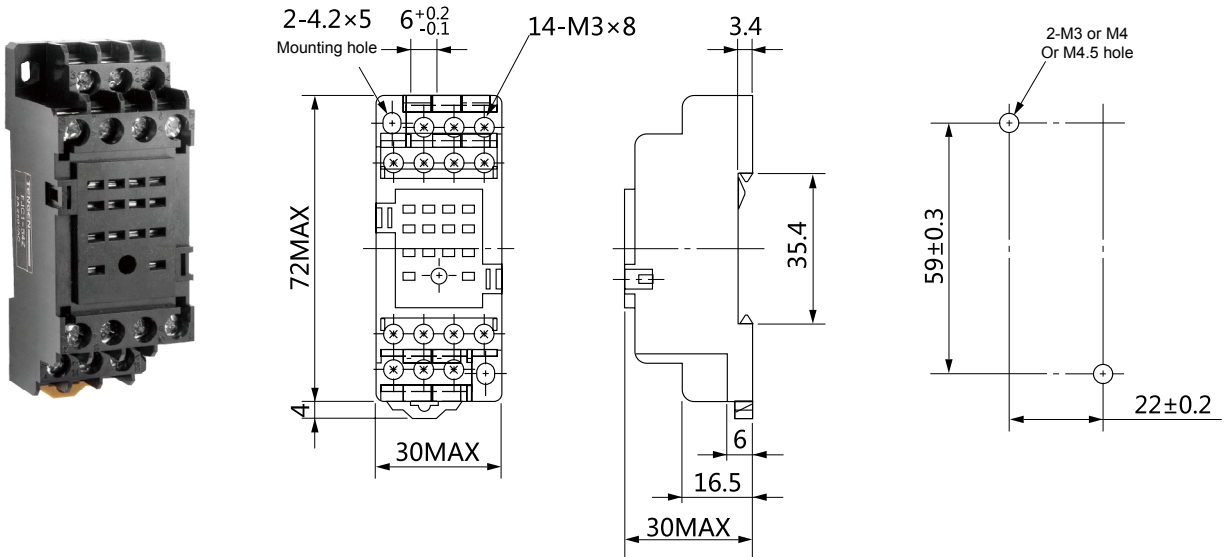
5.8 FJC2-53Z outline and installation dimensions



Suitable for relay model: TGJC1-53Z(D)

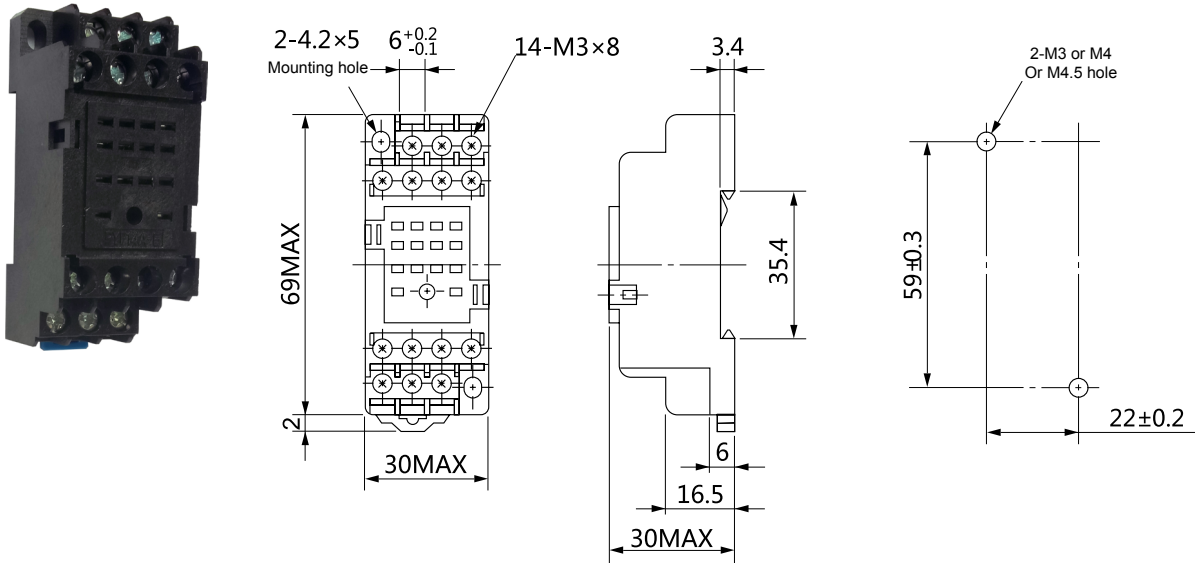
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5.9 FJC1-54Z outline and installation dimensions



Suitable for relay model: TGJC1-54Z(D)

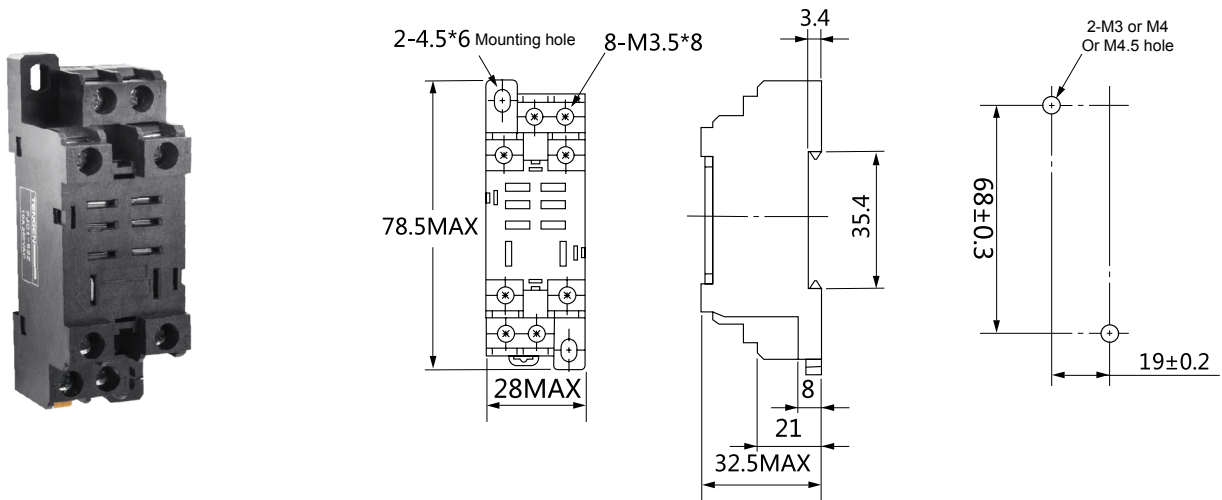
5.10 FJC2-54Z outline and installation dimensions



Suitable for relay model: TGJC1-54Z(D)

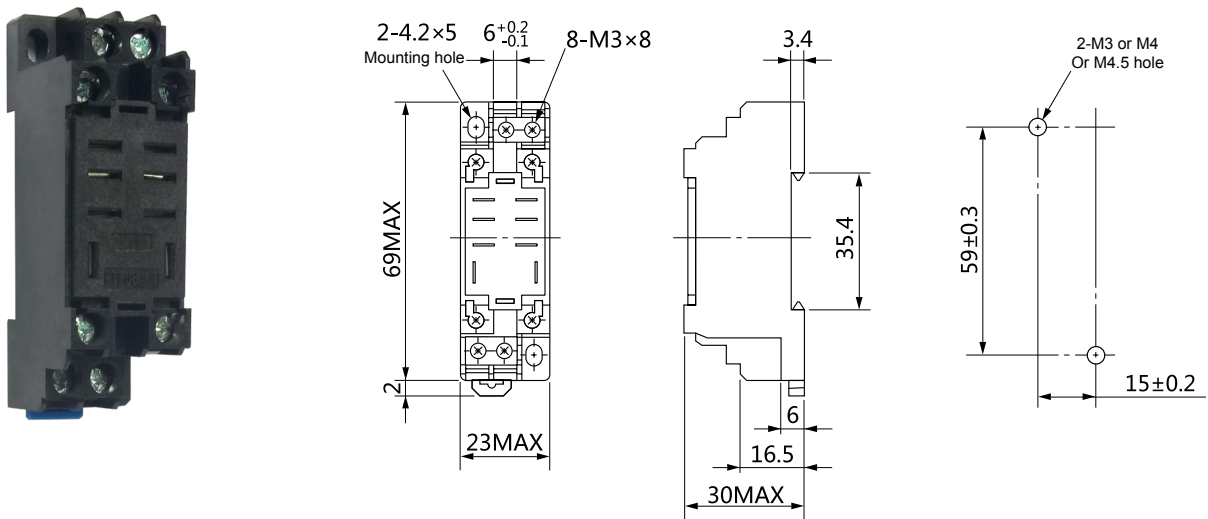
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5.11 FJC1-62Z outline and installation dimensions



Suitable for relay model: TGJC1-62Z(D)

5.12 FJC2-62Z outline and installation dimensions



Suitable for relay model: TGJC1-62Z(D)

6 Order information

Please specify the following items when ordering:

6.1 Complete name, model, specification and quantity of the product

6.2 Rated control power voltage of coil

6.3 Order example: TGJC1 miniature relay, coil voltage DC 110V, 2 sets of changeover contacts, direct-insert installation method, illuminated; specified as: TGJC1-52ZD110/D