

# CATÁLOGO DE PRODUTOS RSE

PRODUTO: **RELÉ LM91**



**RSE**  
Automação e Componentes Eletrônicos

# RELÉ

## LM91



## LM91

### FEATURES

- 30A / 40A switching capacity
- 2.5KV Dielectric strength between coil and contacts
- 6000VA Max.Switching Power

### CONTACT DATA

|                                 |                                                                        |
|---------------------------------|------------------------------------------------------------------------|
| Contact form                    | 1A/1B/1C                                                               |
| Contact resistance<br>(Initial) | 100mΩ(at 1A 6VDC)                                                      |
| Contact rating-AC               | 1A: 40A/250VAC<br>1B: 30A/250VAC<br>1C: NO 40A/250VAC<br>NC 30A/250VAC |
| Contact rating-DC               | 1A: 40A/30VDC<br>1B: 30A/30VDC<br>1C: NO 40A/30VDC<br>NC 30A/30VDC     |
| Max.switching voltage           | 277VAC/30VDC                                                           |
| Max.carring power               | 7200VA/600W                                                            |
| Contact material                | Silver Alloy                                                           |

### CHARACTERISTICS

|                       |                                                                               |
|-----------------------|-------------------------------------------------------------------------------|
| Insulation resistance | 1000MΩ 500VDC                                                                 |
| Dielectric strength   | 1500VAC 1min. between coil to contacts<br>1500VAC 1min. between open contacts |
| Operate time          | 15 ms                                                                         |
| Release time          | 10 ms                                                                         |
| Vibration resistance  | 10-55Hz, at DA of 1.5mm                                                       |
| Shock resistance      | Functional: 100m/S <sup>2</sup><br>Destructive: 1000m/S <sup>2</sup>          |
| Humidity              | 35% ~ 85%RH                                                                   |
| Ambient Temp.         | -40°C ~ +85°C                                                                 |
| Electrical life       | 1×10 <sup>5</sup> ops (at rated coil voltage)                                 |
| Mechanical life       | 1×10 <sup>7</sup> ops                                                         |

### COIL DATA

| Rated voltage<br>(VDC) | Pick-up Voltage<br>VDC (Max.) | Drop-out Voltage<br>VDC (Min.) | Rated Current<br>(mA±10%) | Coil resistance<br>(Ω±10%) | Power<br>(mW) |
|------------------------|-------------------------------|--------------------------------|---------------------------|----------------------------|---------------|
| 5                      | 3.75                          | 0.5                            | 186                       | 27                         | 900           |
| 6                      | 4.5                           | 0.6                            | 150                       | 40                         | 900           |
| 9                      | 6.75                          | 0.9                            | 101                       | 89                         | 900           |
| 12                     | 9                             | 1.2                            | 76                        | 158                        | 900           |
| 18                     | 13.5                          | 1.8                            | 51                        | 356                        | 900           |
| 24                     | 18                            | 2.4                            | 38                        | 634                        | 900           |
| 36                     | 27                            | 3.6                            | 25.2                      | 1426                       | 900           |
| 48                     | 36                            | 4.8                            | 19                        | 2534                       | 900           |
| 110                    | 82.5                          | 11.0                           | 8.3                       | 13310                      | 900           |

Notes: 1) All values unspecified are at room temperature.  
2) Only typical loads are listed above. Other load specifications can be available upon request.  
3) For sealed type, the vent-hole cover should be excised.



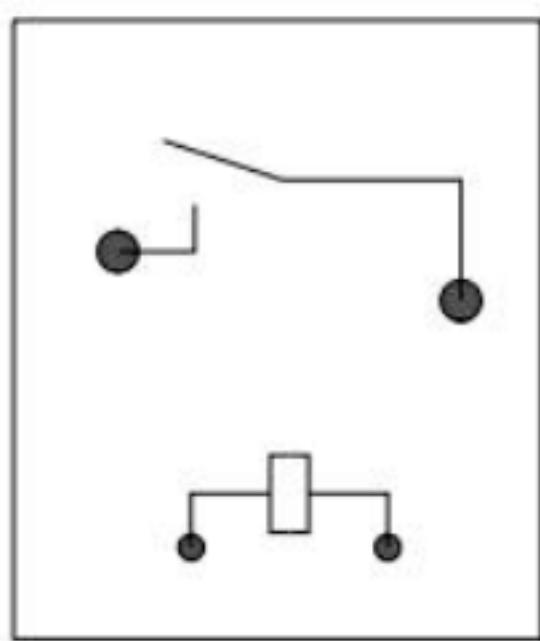
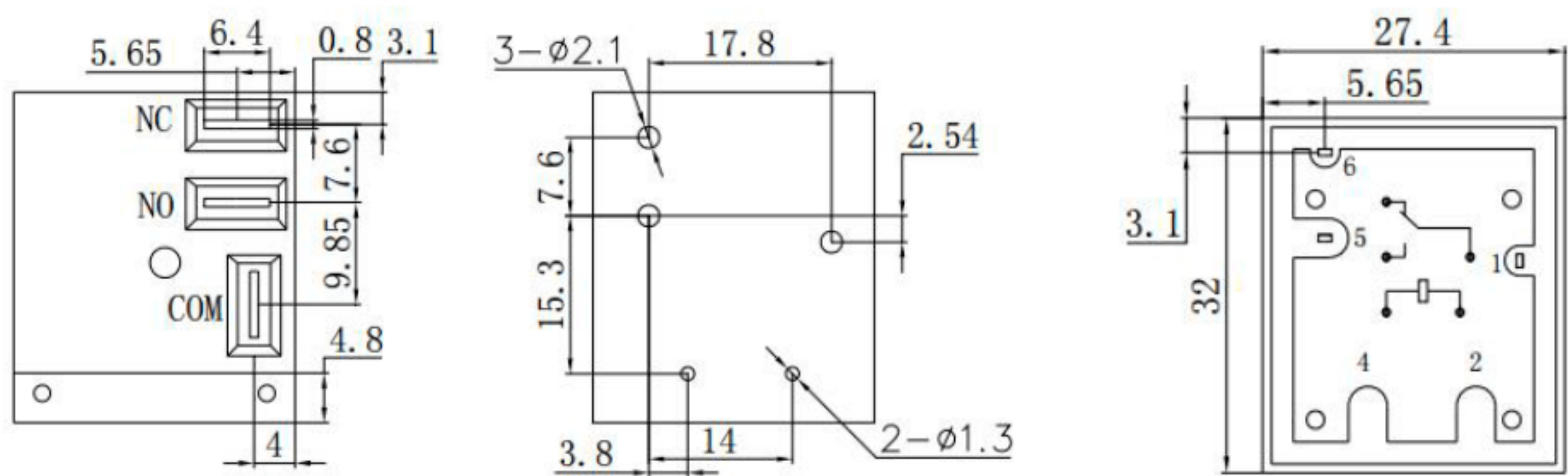
# LM91

## ORDERING INFORMATION

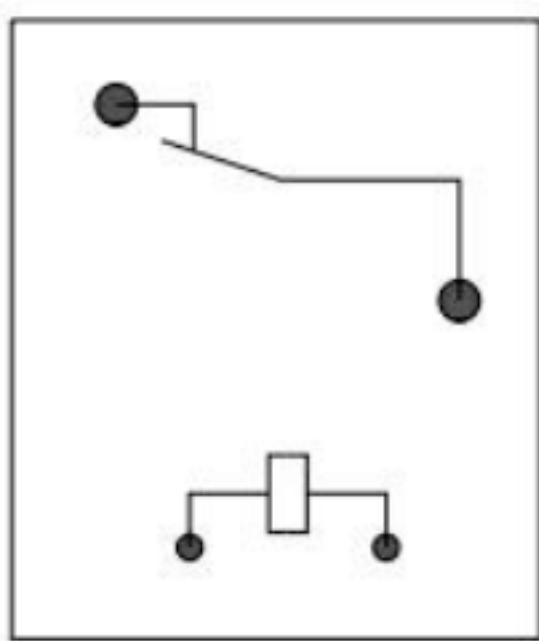
|             |                                |                     |              |            |                               |                              |
|-------------|--------------------------------|---------------------|--------------|------------|-------------------------------|------------------------------|
| <u>LM91</u> | - <u>S</u>                     | - <u>1</u>          | - <u>12</u>  | - <u>D</u> | - <u>M</u>                    | - <u>XX</u>                  |
| Type        | Construction                   | Contact arrangement | Coil voltage | Coil power | Contact Form                  | Special code                 |
| LM91        | S-Plastic sealed<br>SH- Sealed | 1                   | 5-110VDC     | D: 0.9W    | None: NO/NC<br>M: NO<br>B: NC | Customer special requirement |

## OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT (Unit: mm)

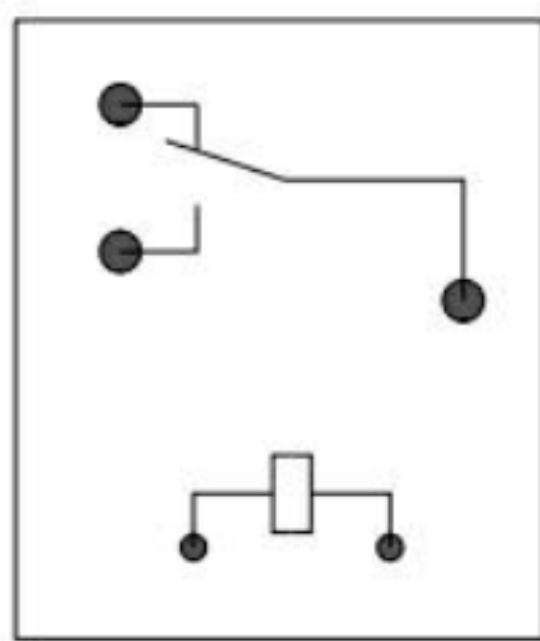
Tolerance±0.3



1A



1B



1C

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