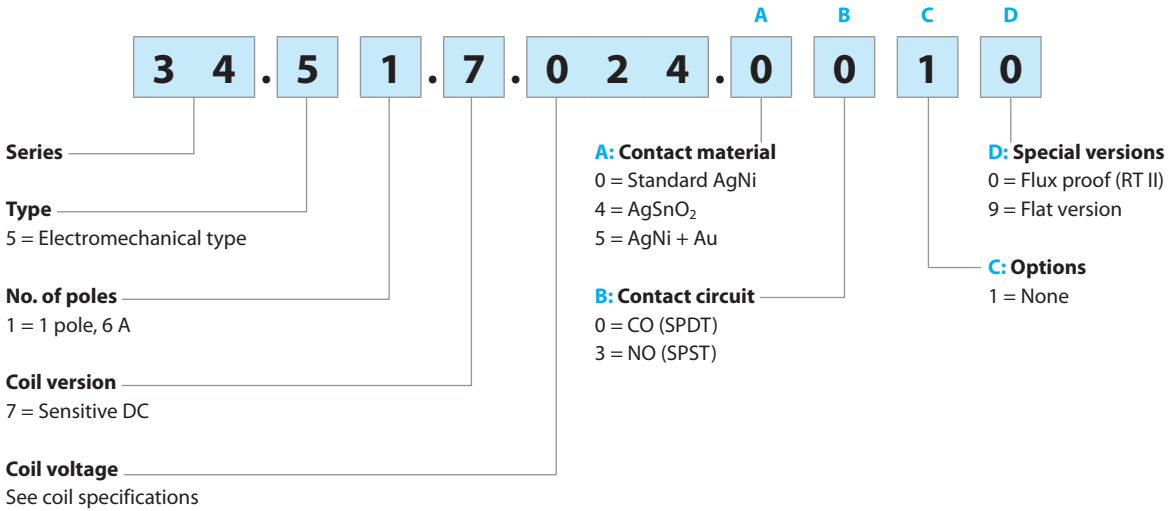


## Ordering information

### Electromechanical relay (EMR)

Example: 34 series slim electromechanical relay, 1 CO (SPDT) 6 A contacts, 24 V sensitive DC coil.



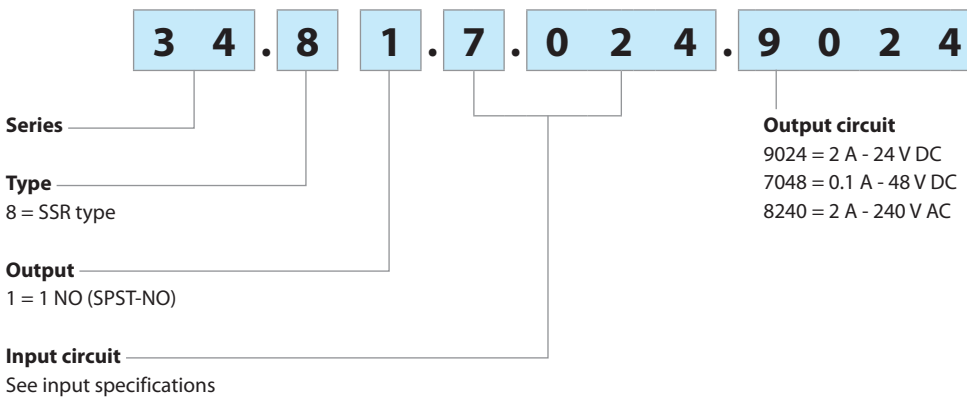
**Selecting features and options: only combinations in the same row are possible.**

Preferred selections for best availability are shown in **bold**.

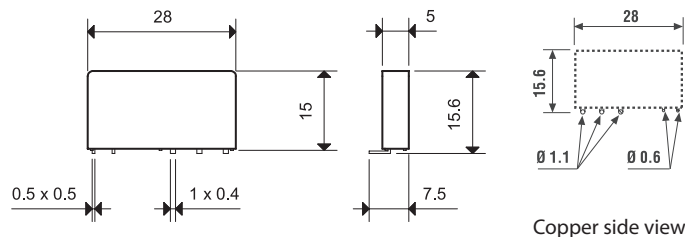
| Type  | Coil version | A                | B            | C        | D        |
|-------|--------------|------------------|--------------|----------|----------|
| 34.51 | sens. DC     | <b>0</b> - 4 - 5 | <b>0</b> - 3 | <b>1</b> | <b>0</b> |
| 34.51 | sens. DC     | 0 - 4 - 5        | 0            | 1        | 9        |

### Solid state relay (SSR)

Example: 34 series SSR relay, 2 A output, 24 V DC supply.



## Flat pack version



Option = 34.51.7xxx.x019

Environmental protection RT I



## Electromechanical relay

### Technical data

A

#### Insulation according to EN 61810-1

|                                  |      |         |     |
|----------------------------------|------|---------|-----|
| Nominal voltage of supply system | V AC | 230/400 |     |
| Rated insulation voltage         | V AC | 250     | 400 |
| Pollution degree                 |      | 3       | 2   |

#### Insulation between coil and contact set

|                       |                     |            |  |
|-----------------------|---------------------|------------|--|
| Type of insulation    |                     | Reinforced |  |
| Overvoltage category  |                     | III        |  |
| Rated impulse voltage | kV (1.2/50 $\mu$ s) | 6          |  |
| Dielectric strength   | V AC                | 4000       |  |

#### Insulation between open contacts

|                       |                          |                     |  |
|-----------------------|--------------------------|---------------------|--|
| Type of disconnection |                          | Micro-disconnection |  |
| Dielectric strength   | V AC/kV (1.2/50 $\mu$ s) | 1000/1.5            |  |

#### Conducted disturbance immunity

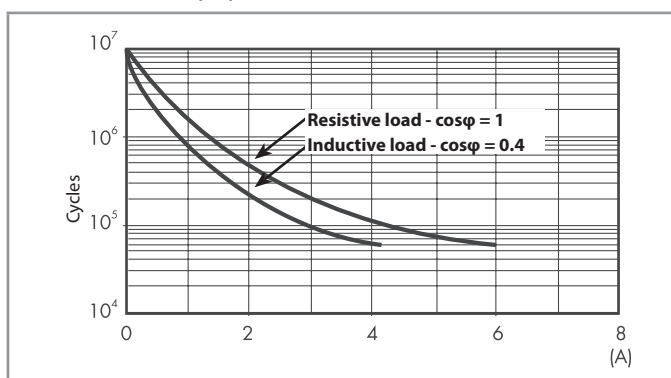
|   |              |                |
|---|--------------|----------------|
| Burst (5...50)ns, 5 kHz, on A1 - A2                   | EN 61000-4-4 | level 4 (4 kV) |
| Surge (1.2/50 $\mu$ s) on A1 - A2 (differential mode) | EN 61000-4-5 | level 3 (2 kV) |

#### Other data

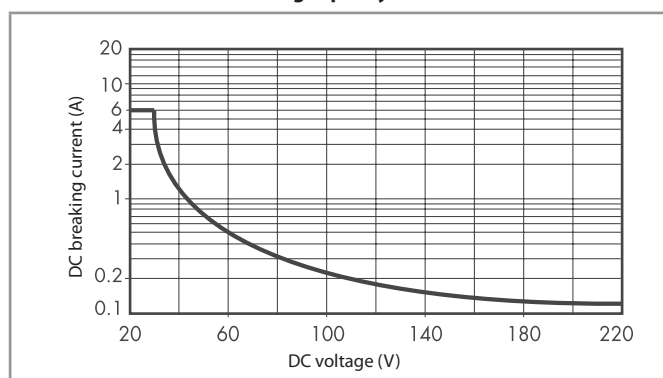
|  |                         |          |     |
|--|-------------------------|----------|-----|
| Bounce time: NO/NC                                 | ms                      | 1/6      |     |
| Vibration resistance (5...55)Hz: NO/NC             | g                       | 10/5     |     |
| Shock resistance                                   | g                       | 20/14    |     |
| Power lost to the environment                      | without contact current | W        | 0.2 |
|  | with rated current      | W        | 0.5 |
| Recommended distance between relays mounted on PCB | mm                      | $\geq 5$ |     |

### Contact specification

#### F 34 - Electrical life (AC) v contact current



#### H 34 - Maximum DC1 breaking capacity



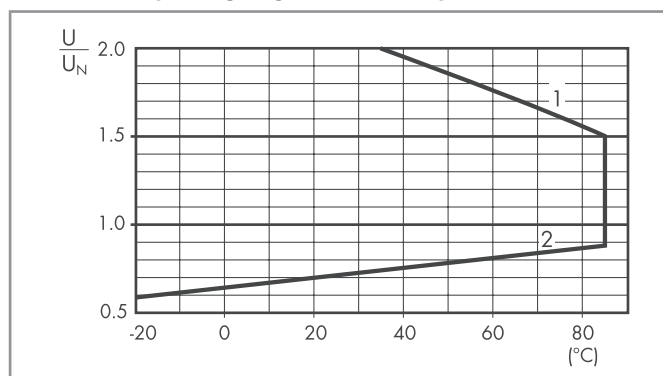
- When switching a resistive load (DC1) having voltage and current values under the curve, an electrical life of  $\geq 60 \cdot 10^3$  can be expected.
- In the case of DC13 loads, the connection of a diode in parallel with the load will permit a similar electrical life as for a DC1 load.  
Note: the release time for the load will be increased.

### Coil specifications

#### DC coil data

| Nominal voltage<br>$U_N$ | Coil code | Operating range |           | Resistance<br>R | Rated coil consumption<br>I at $U_N$ |
|--------------------------|-----------|-----------------|-----------|-----------------|--------------------------------------|
|                          |           | $U_{min}$       | $U_{max}$ |                 |                                      |
| V                        |           | V               | V         | $\Omega$        | mA                                   |
| 5                        | 7.005     | 3.5             | 7.5       | 130             | 38.4                                 |
| 12                       | 7.012     | 8.4             | 18        | 840             | 14.2                                 |
| 24                       | 7.024     | 16.8            | 36        | 3350            | 7.1                                  |
| 48                       | 7.048     | 33.6            | 72        | 12300           | 3.9                                  |
| 60                       | 7.060     | 42              | 90        | 19700           | 3                                    |

#### R 34 - DC coil operating range v ambient temperature



- 1 - Max. permitted coil voltage.
- 2 - Min. pick-up voltage with coil at ambient temperature.