

### Features

- High contact capability.
- Standard designed and manufactured according to DIN IEC 225.
- 1-00/VDE 0435 part 201 and LVD compliant requirement.
- High anti-vibration performance.
- Single and dual coil relays available.

### Safety Approval

CQC File No.: CQC09002033441

### Contact Capacity

|  |            |
|--|------------|
| Model                                  | SY74       |
| Nominal switching capacity (res. load) | 40A 250VAC |
| Max. switching current                 | 40A        |
| Max. switching voltage                 | 250VAC     |
| Max. switching power                   | 10,000 VA  |

### Charateristic Data

|   |   |   |
|---|---|---|
| Contact material                        | Silver alloy                                      |   |
| Initial contact resistance (at 6VDC 1A) | 2mΩ Max.  |   |
| Operate time (at nominal volt.)         | 10msec. Max.                                      |   |
| Release time (at nominal volt.)         | 10msec. Max.                                      |   |
| Initial insulation resistance           | 1,000MΩ Min.(DC500V)                              |   |
| Initial dielectric strength             | Between open contacts: AC1,500V, 50/60Hz 1Min.    |   |
|   | Between coil and contact: AC4,000V, 50/60Hz 1Min. |   |
| Vibration resistance                    | Functional  | 10 ~ 60Hz at double amplitude of 1.5 mm |
|   | Destructive                                       | 10 ~ 60Hz at double amplitude of 1.5 mm |
| Shock resistance                        | Functional  | 10G Min.                                |
|   | Destructive                                       | 100G Min.                               |
| Endurance (operations)                  | Mechanical (at 3,600 ops./h)                      | 100,000                                 |
|   | Electrical (at 600 ops./h)                        | 10,000                                  |
| Ambient temperature                     | -40°C ~ +70°C (no condensation)                   |   |
| Unit weight                             | Approx. 36.0 g                                    |   |

### Coil Data (at 20°C)

Sensitivity type

| Nominal voltage (VDC) | Nominal operating current ± 10% (mA) | Dual coil resistance ± 10% (Ω) |       | Single coil resistance ± 10% (Ω) | Set voltage (Max.)      | Reset voltage (Max.)    | Pulse duration (ms) | Nominal operating power |
|-----------------------|--------------------------------------|--------------------------------|-------|----------------------------------|-------------------------|-------------------------|---------------------|-------------------------|
| 5                     | 200                                  | 12.5                           | 12.5  | 25                               | 80 % of nominal voltage | 80 % of nominal voltage | 20 Min.             | Single/Dual: 1.0W/2.0W  |
| 6                     | 166.7                                | 18                             | 18    | 36                               |                         |                         |                     |                         |
| 9                     | 111                                  | 40.5                           | 40.5  | 81                               |                         |                         |                     |                         |
| 12                    | 83                                   | 72                             | 72    | 144                              |                         |                         |                     |                         |
| 15                    | 66.67                                | 112.5                          | 112.5 | 225                              |                         |                         |                     |                         |
| 18                    | 55.56                                | 162                            | 162   | 324                              |                         |                         |                     |                         |
| 24                    | 41.7                                 | 288                            | 288   | 576                              |                         |                         |                     |                         |
| 48                    | 20.8                                 | 1,152                          | 1,152 | 2,304                            |                         |                         |                     |                         |

**Coil Data** (at 20°C)

Standard type

| Nominal voltage (VDC) | Nominal operating current ± 10% (mA) | Dual coil resistance ± 10% (Ω) |       | Single coil resistance ± 10% (Ω) | Set voltage (Max.)      | Reset voltage (Max.)    | Pulse duration (ms) | Nominal operating power |
|-----------------------|--------------------------------------|--------------------------------|-------|----------------------------------|-------------------------|-------------------------|---------------------|-------------------------|
| 5                     | 300                                  | 8.68                           | 8.68  | 17.36                            | 80 % of nominal voltage | 80 % of nominal voltage | 20 Min.             | Single/Dual: 1.5W/3.0W  |
| 6                     | 250                                  | 12.5                           | 12.5  | 25                               |                         |                         |                     |                         |
| 9                     | 166.66                               | 28.12                          | 28.12 | 56.25                            |                         |                         |                     |                         |
| 12                    | 125                                  | 50                             | 50    | 100                              |                         |                         |                     |                         |
| 15                    | 100                                  | 112.5                          | 112.5 | 225                              |                         |                         |                     |                         |
| 18                    | 83.33                                | 162                            | 162   | 324                              |                         |                         |                     |                         |
| 24                    | 62.50                                | 200                            | 200   | 400                              |                         |                         |                     |                         |
| 48                    | 33.25                                | 800                            | 800   | 1,600                            |                         |                         |                     |                         |

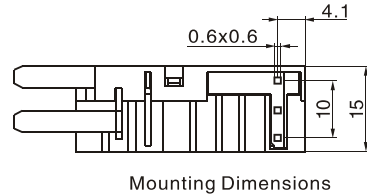
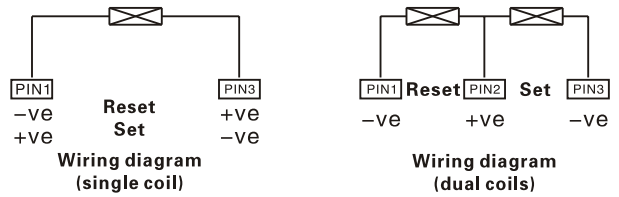
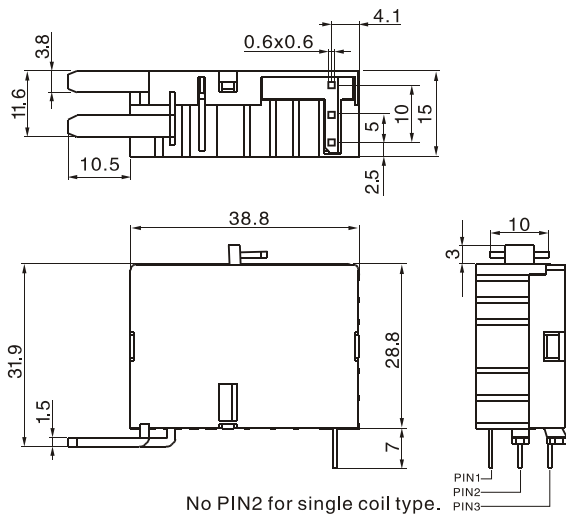
**Safety Approval Ratings**

|                  |                |
|------------------|----------------|
| Approval         | CQC            |
| File No.         | CQC09002033441 |
| Approved ratings | 40A 250VAC     |

**Ordering Information**

|  |    |    |   |   |   |    |     |
|--|----|----|---|---|---|----|-----|
| Nomenclature   |    |    |   |   |   |    |     |
| SY74   | -1 | 12 | D | M | 1 | -M | -XX |
| Special Parameter: Nil—Standard type, Letter or number—Special requirement |    |    |   |   |   |    |     |
| Terminal Type: M—Soldering   |    |    |   |   |   |    |     |
| Coil Type: 1—Single coil, 2—Dual coils                                     |    |    |   |   |   |    |     |
| Contact Form: M—Form A   |    |    |   |   |   |    |     |
| Coil Power: L—single/dual: 1.0W/2.0W;<br>D—single/dual: 1.5W/3.0W          |    |    |   |   |   |    |     |
| Coil Voltage (VDC): 05, 06, 09, 12, 15, 24, 48                             |    |    |   |   |   |    |     |
| Number of Poles: 1—1 Pole  |    |    |   |   |   |    |     |
| Type Designation: SY74   |    |    |   |   |   |    |     |

**Outline Dimensions, Wiring Diagram, Mounting Holes (unit: mm)**



Unless otherwise specified:  
 If dimension < 1mm, tolerance:  $\pm 0.2\text{mm}$ ;  
 If dimension 1~5mm, tolerance:  $\pm 0.3\text{mm}$ ;  
 If dimension > 5mm, tolerance:  $\pm 0.4\text{mm}$ .  
 Note: 1. Extended terminal dimension is dimension before soldering.  
 2. Tolerance of mounting holes :  $\pm 0.1\text{mm}$ .

**Typical Applications**

- Electrical equipment
- Air adjustor
- Industrial machinery