34 SERIES
Slim electromechanical PCB relays 6 A

Ultra-slim 1 Pole - 6 A relay
Printed circuit mount
- direct or via PCB socket
35 mm rail mount
- via screw, screwless or push-in terminal sockets
• 1 Pole changeover contacts or 1 Pole normally open contact
• Ultra slim, 5 mm, package
• Sensitive DC coil - 170 mW (Dual AC/DC coil drive possible using 93 series sockets)
• UL Listing (certain relay/socket combinations)
• Cadmium Free contact materials
• 8/8 mm clearance/creepage distance
• 6 kV (1.2/50 μs) insulation, coil-contacts

For UL ratings see:
“General technical information” page V

For outline drawing see page 5

Contact specification
Contact configuration 1 CO (SPDT) 1 CO (SPDT)
Rated current/ Maximum peak current A 6/10 6/10
Rated voltage/ Maximum switching voltage V AC 250/400 250/400
Rated load AC1 VA 1500 1500
Rated load AC15 (230 V AC) VA 300 300
Single phase motor rating (230 V AC) kW 0.185 0.185
Breaking capacity DC1: 30/110/220 V A 6/0.2/0.12 6/0.2/0.12
Minimum switching load mW (V/mA) 500 (12/10) 50 (5/2)
Standard contact material AgNi AgNi + Au

Coil specification
Nominal voltage (U_n) V AC (50/60 Hz) — —
V DC 5 - 12 - 24 - 48 - 60 5 - 12 - 24 - 48 - 60
Rated power AC/DC VA (50 Hz)/W —/0.17 —/0.17
Operating range AC — —
DC (0.7...1.5)U_n (0.7...1.5)U_n
Holding voltage AC/DC —/0.4 U_n —/0.4 U_n
Must drop-out voltage AC/DC —/0.05 U_n —/0.05 U_n

Technical data
Mechanical life AC/DC cycles —/10 - 10^6 —/10 - 10^6
Electrical life at rated load AC1 cycles 60 - 10^3 60 - 10^3
Operate/release time ms 5/3 5/3
Insulation between coil and contacts (1.2/50 μs) kV 6 (8mm) 6 (8mm)
Dielectric strength between open contacts V AC 1000 1000
Ambient temperature range °C -40…+85 -40…+85
Environmental protection RT II RT II
Approvals (according to type)
**34 SERIES**

**Slim solid state PCB relays (SSR) 0.1 - 2 A**

**Ultra-slim - Solid State Relays**
- **Printed circuit mount**
  - direct or via PCB socket
- **35 mm rail mount**
  - via screw, screwless or push-in terminal sockets
- Single circuit output switching options
  - 2 A, 24 V DC
  - 0.1 A, 48 V DC
  - 2 A, 240 V AC
- Silent, high speed switching with long electrical life
- Ultra slim, 5 mm, package
- Sensitive DC Input circuits (Dual AC/DC input drive possible using 93 series sockets)
- UL Listing (certain relay/socket combinations)
- Wash tight: RT III
- 2500 V insulation, input-output

**Output circuit**
- **Contact configuration**
  - 1 NO (SPST-NO)
  - 1 NO (SPST-NO)
  - 1 NO (SPST-NO)
- **Rated current**
  - Maximum peak current (10 ms) A
    - 2/20
    - 0.1/0.5
    - 2/40
- **Rated voltage**
  - Maximum blocking voltage V
    - (24/33)DC
    - (48/60)DC
    - (240/—)AC
  - Switching voltage range V
    - (1.5…24)DC
    - (1.5…48)DC
    - (12…275)AC
  - Repetitive peak off-state voltage $V_{pk}$ — — 600
- **Minimum switching current** mA
  - 1
  - 0.05
  - 22
- **Max. "OFF-state" leakage current** mA
  - 0.001
  - 0.001
  - 1.5
- **Max. "ON-state" voltage drop** V
  - 0.12
  - 1
  - 1.6

**Input circuit**
- **Nominal voltage** V DC
  - 5
  - 12
  - 24
  - 60
  - 24
  - 60
  - 5
  - 12
  - 24
  - 60
- **Rated power AC/DC** W
  - 0.035
  - 0.087
  - 0.17
  - 0.18
  - 0.17
  - 0.18
  - 0.060
  - 0.087
  - 0.17
  - 0.18
- **Operating range** V DC
  - 35…12
  - 8…17
  - 16…30
  - 35…72
  - 16…30
  - 35…72
  - 16…30
  - 35…72
  - 16…30
  - 35…72
  - 16…30
  - 35…72
- **Control current** mA
  - 7
  - 7.2
  - 7
  - 3
  - 7
  - 3
  - 12
  - 7.2
  - 7
  - 3
  - 12
  - 7.2
  - 7
  - 3
  - 12
  - 7.2
  - 7
  - 3
  - 12
  - 7.2
  - 7
  - 3
  - 12
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  - 12
  - 7.2
  - 7
  - 3
  - 12
  - 7.2
  - 7
  - 3
  - 12
  - 7.2
  - 7
  - 3

**Technical data**
- **Operate/release time** ms
  - 0.1/0.6* 0.04/0.6* 12/12*
- **Dielectric strength** between input/output V
  - 2500
  - 2500
  - 2500
- **Ambient temperature range** °C
  - -20…+60
  - -20…+60
  - -20…+60
- **Environmental protection**
  - RT III
  - RT III
  - RT III

**Approvals (according to type)**

*Note: all technical data relates to using the relay directly on PCB or PCB socket type 93.11.*

If the relay is used with 35 mm rail socket type 93.51, refer to the technical data of 38 Series; if used with types 93.60, 93.61, 93.62, 93.63, 93.64, 93.65, 93.66, 93.67, 93.68 and 93.69, refer to the technical data of the *MasterINTERFACE* 39 Series.
# 34 SERIES
## Ultra-Slim PCB relays

### Ordering information

**Electromechanical relay (EMR)**

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

<table>
<thead>
<tr>
<th>Series</th>
<th>Type</th>
<th>No. of poles</th>
<th>Coil version</th>
<th>A: Contact material</th>
<th>B: Contact circuit</th>
<th>C: Options</th>
<th>D: Special versions</th>
</tr>
</thead>
<tbody>
<tr>
<td>34.51</td>
<td>sens. DC</td>
<td>1 pole, 6 A</td>
<td>7 = Sensitive DC</td>
<td>0 = Standard AgNi</td>
<td>1 = CO (SPDT)</td>
<td>1 = None</td>
<td>0 = Flux proof (RT II)</td>
</tr>
</tbody>
</table>

Selecting features and options: only combinations in the same row are possible. Preferred selections for best availability are shown in **bold**.

<table>
<thead>
<tr>
<th>Type</th>
<th>Coil version</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>34.51</td>
<td>sens. DC</td>
<td>0 - 4 - 5</td>
<td>0 - 3</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

**Solid state relay (SSR)**

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

<table>
<thead>
<tr>
<th>Series</th>
<th>Type</th>
<th>Output</th>
<th>Output circuit</th>
</tr>
</thead>
<tbody>
<tr>
<td>34.81</td>
<td>8 = SSR type</td>
<td>1 = 1 NO (SPST-NO)</td>
<td>9024 = 2 A - 24 V DC</td>
</tr>
</tbody>
</table>

Input circuit
See input specifications

### Flat pack version

Option =34.51.7xxx.x019

Environmental protection RT I

Copper side view
Electromechanical relay

Technical data

**Insulation according to EN 61810-1**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal voltage of supply system</td>
<td>V AC 230/400</td>
</tr>
<tr>
<td>Rated insulation voltage</td>
<td>V AC 250, 400</td>
</tr>
<tr>
<td>Pollution degree</td>
<td>3, 2</td>
</tr>
</tbody>
</table>

**Insulation between coil and contact set**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of insulation</td>
<td>Reinforced</td>
</tr>
<tr>
<td>Overvoltage category</td>
<td>III</td>
</tr>
<tr>
<td>Rated impulse voltage</td>
<td>kV (1.2/50 μs) 6</td>
</tr>
<tr>
<td>Dielectric strength</td>
<td>V AC 4000</td>
</tr>
</tbody>
</table>

**Insulation between open contacts**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of disconnection</td>
<td>Micro-disconnection</td>
</tr>
<tr>
<td>Dielectric strength</td>
<td>V AC/kV (1.2/50 μs) 1000/1.5</td>
</tr>
</tbody>
</table>

**Conducted disturbance immunity**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burst (5…50)ns, 5 kHz, on A1 - A2</td>
<td>EN 61000-4-4 level 4 (4 kV)</td>
</tr>
<tr>
<td>Surge (1.2/50 μs) on A1 - A2 (differential mode)</td>
<td>EN 61000-4-5 level 3 (2 kV)</td>
</tr>
</tbody>
</table>

**Other data**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bounce time: NO/NC</td>
<td>ms 1/6</td>
</tr>
<tr>
<td>Vibration resistance (5…55)Hz NO/NC</td>
<td>g 10/5</td>
</tr>
<tr>
<td>Shock resistance</td>
<td>g 20/14</td>
</tr>
<tr>
<td>Power lost to the environment</td>
<td>W without contact current 0.2</td>
</tr>
<tr>
<td></td>
<td>W with rated current 0.5</td>
</tr>
<tr>
<td>Recommended distance</td>
<td>mm ≥ 5</td>
</tr>
</tbody>
</table>

**Contact specification**

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

- When switching a resistive load (DC1) having voltage and current values under the curve, an electrical life of ≥ 60 · 10³ 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**

<table>
<thead>
<tr>
<th>Nominal voltage $U_n$</th>
<th>Coil code</th>
<th>Operating range</th>
<th>Resistance $R$</th>
<th>Rated coil consumption $I$ at $U_n$</th>
</tr>
</thead>
<tbody>
<tr>
<td>$V$</td>
<td>$V$</td>
<td>$V$</td>
<td>$V$</td>
<td>mA</td>
</tr>
<tr>
<td>5</td>
<td>7.005</td>
<td>3.5</td>
<td>7.5</td>
<td>130</td>
</tr>
<tr>
<td>12</td>
<td>7.012</td>
<td>8.4</td>
<td>18</td>
<td>840</td>
</tr>
<tr>
<td>24</td>
<td>7.024</td>
<td>16.8</td>
<td>36</td>
<td>3350</td>
</tr>
<tr>
<td>48</td>
<td>7.048</td>
<td>33.6</td>
<td>72</td>
<td>12300</td>
</tr>
<tr>
<td>60</td>
<td>7.060</td>
<td>42</td>
<td>90</td>
<td>19700</td>
</tr>
</tbody>
</table>

1 - Max. permitted coil voltage.
2 - Min. pick-up voltage with coil at ambient temperature.
34 SERIES
Ultra-Slim PCB relays

Solid state relay

Technical data

<table>
<thead>
<tr>
<th>EMC specifications</th>
<th>Reference standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrostatic discharge</td>
<td>EN 61000-4-2</td>
</tr>
<tr>
<td>contact discharge</td>
<td>4 kV</td>
</tr>
<tr>
<td>air discharge</td>
<td>EN 61000-4-2</td>
</tr>
<tr>
<td>Fast transients on supply terminals</td>
<td>EN 61000-4-4</td>
</tr>
<tr>
<td>(burst 5/50 ns, 5 kHz)</td>
<td>2 kV</td>
</tr>
<tr>
<td>Voltage pulses on supply terminals</td>
<td>EN 61000-4-5</td>
</tr>
<tr>
<td>(surge 1.2/50 μs)</td>
<td>0.5 kV</td>
</tr>
<tr>
<td>Common mode</td>
<td>EN 61000-4-5</td>
</tr>
<tr>
<td>Differential mode</td>
<td>0.5 kV</td>
</tr>
</tbody>
</table>

Other data

| Power lost to the environment              | W                  |
| without output current                     | 0.17               |
| with rated current                         | 0.4                |

Input specification

Input data - DC types

<table>
<thead>
<tr>
<th>Nominal voltage</th>
<th>Input code</th>
<th>Operating range</th>
<th>Release voltage</th>
<th>Impedance</th>
<th>Control current</th>
</tr>
</thead>
<tbody>
<tr>
<td>U_N</td>
<td>V</td>
<td>min U_max</td>
<td>V</td>
<td>Ω</td>
<td>I at U_N mA</td>
</tr>
<tr>
<td>V</td>
<td>V</td>
<td>V</td>
<td>V</td>
<td>mA</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>7.005</td>
<td>3.5</td>
<td>12 (10*)</td>
<td>1</td>
<td>715 (416*)</td>
</tr>
<tr>
<td>12</td>
<td>7.012</td>
<td>8</td>
<td>17</td>
<td>4</td>
<td>1940</td>
</tr>
<tr>
<td>24</td>
<td>7.024</td>
<td>16</td>
<td>30</td>
<td>10</td>
<td>3200</td>
</tr>
<tr>
<td>60</td>
<td>7.060</td>
<td>35</td>
<td>72</td>
<td>20</td>
<td>21300</td>
</tr>
</tbody>
</table>

* AC Output version.

Output specification

L 34 - Output current v ambient temperature
SSR - 2 A DC & AC output types

L 34 - Output current v ambient temperature
SSR - 0.1 A DC output types

Outline drawings

Type 34.51

Type 34.81
Screw terminal socket 35 mm rail mounting (EN 60715)

Common features
- Space saving 6.2 mm wide
- Connections for 16-way jumper link
- Integral coil indication and protection circuit
- Secure retention and easy ejection by plastic clip
- Dual screw head (blade+cross) terminals

For technical data and supply versions, refer to the Master INTERFACE 39 Series – “Relay interface module”

Electromechanical Relay - EMR

<table>
<thead>
<tr>
<th>Supply voltage</th>
<th>Relay type</th>
<th>Master BASIC (39.11.....)</th>
<th>Master PLUS (39.31.....)</th>
<th>Master INPUT (39.41.....)</th>
<th>Master OUTPUT (39.21.....)</th>
<th>Master TIMER (39.81.....)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 V AC/DC</td>
<td>34.51.7.005.xx10</td>
<td>93.61.7.024</td>
<td>93.63.7.024</td>
<td>93.64.7.024</td>
<td>93.62.7.024</td>
<td>—</td>
</tr>
<tr>
<td>12 V AC/DC</td>
<td>34.51.7.012.xx10</td>
<td>93.61.7.024</td>
<td>93.63.7.024</td>
<td>93.64.7.024</td>
<td>93.62.7.024</td>
<td>93.68.0.024</td>
</tr>
<tr>
<td>24 V AC/DC</td>
<td>34.51.7.024.xx10</td>
<td>93.61.7.024</td>
<td>93.63.7.024</td>
<td>93.64.7.024</td>
<td>93.62.7.024</td>
<td>93.68.0.024</td>
</tr>
<tr>
<td>60 V AC/DC</td>
<td>34.51.7.060.xx10</td>
<td>—</td>
<td>93.63.7.060</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>(110…125)V AC/DC*</td>
<td>34.51.7.060.xx10</td>
<td>—</td>
<td>93.63.3.125</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>(220…240)V AC*</td>
<td>34.51.7.060.xx10</td>
<td>—</td>
<td>93.63.3.230</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>(110…125)V AC/DC*</td>
<td>34.51.7.060.xx10</td>
<td>93.61.0.125</td>
<td>93.63.0.125</td>
<td>93.64.0.125</td>
<td>93.62.0.125</td>
<td>—</td>
</tr>
<tr>
<td>(24…240)V AC/DC</td>
<td>34.51.7.060.xx10</td>
<td>—</td>
<td>93.63.0.240</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>(220…240)V AC</td>
<td>34.51.7.060.xx10</td>
<td>93.61.8.230</td>
<td>93.63.8.230</td>
<td>93.64.8.230</td>
<td>93.62.8.230</td>
<td>—</td>
</tr>
<tr>
<td>220 V DC</td>
<td>34.51.7.060.xx10</td>
<td>—</td>
<td>93.63.7.220</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

* Leakage current suppression

Solid State Relay - SSR

<table>
<thead>
<tr>
<th>Supply voltage</th>
<th>Relay type</th>
<th>Master BASIC (39.10.....)</th>
<th>Master PLUS (39.30.....)</th>
<th>Master INPUT (39.40.....)</th>
<th>Master OUTPUT (39.20.....)</th>
<th>Master TIMER (39.80.....)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 V AC/DC</td>
<td>34.81.7.012.xxxx</td>
<td>—</td>
<td>93.60.0.024</td>
<td>—</td>
<td>93.68.0.024</td>
<td>—</td>
</tr>
<tr>
<td>24 V AC/DC</td>
<td>34.81.7.024.xxxx</td>
<td>—</td>
<td>93.63.0.024</td>
<td>93.64.0.024</td>
<td>—</td>
<td>93.68.0.024</td>
</tr>
<tr>
<td>(110…125)V AC/DC*</td>
<td>34.81.7.060.xxxx</td>
<td>93.61.3.125</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>(220…240)V AC*</td>
<td>34.81.7.060.xxxx</td>
<td>93.63.3.230</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>(110…125)V AC/DC*</td>
<td>34.81.7.060.xxxx</td>
<td>93.61.0.125</td>
<td>93.63.0.125</td>
<td>93.64.0.125</td>
<td>93.62.0.125</td>
<td>—</td>
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<tr>
<td>(24…240)V AC/DC</td>
<td>34.81.7.060.xxxx</td>
<td>—</td>
<td>93.63.0.240</td>
<td>—</td>
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<tr>
<td>(220…240)V AC</td>
<td>34.81.7.060.xxxx</td>
<td>93.61.8.230</td>
<td>93.63.8.230</td>
<td>93.64.8.230</td>
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<td>—</td>
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<td>6 V DC</td>
<td>34.81.7.005.xxxx</td>
<td>—</td>
<td>93.61.7.024</td>
<td>93.63.7.024</td>
<td>93.64.7.024</td>
<td>93.62.7.024</td>
</tr>
<tr>
<td>12 V DC</td>
<td>34.81.7.012.xxxx</td>
<td>—</td>
<td>93.61.7.024</td>
<td>93.63.7.024</td>
<td>93.64.7.024</td>
<td>93.62.7.024</td>
</tr>
<tr>
<td>24 V DC</td>
<td>34.81.7.024.xxxx</td>
<td>—</td>
<td>93.61.7.024</td>
<td>93.63.7.024</td>
<td>93.64.7.024</td>
<td>93.62.7.024</td>
</tr>
<tr>
<td>60 V DC</td>
<td>34.81.7.060.xxxx</td>
<td>—</td>
<td>93.63.7.060</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>(110…125)V DC</td>
<td>34.81.7.060.xxxx</td>
<td>—</td>
<td>93.63.7.125</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>220 V DC</td>
<td>34.81.7.060.xxxx</td>
<td>—</td>
<td>93.63.7.220</td>
<td>—</td>
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<td>—</td>
</tr>
</tbody>
</table>

* Leakage current suppression

Accessories
- 16-way jumper link 093.16 (blue), 093.16.0 (black), 093.16.1 (red)
- Dual-purpose plastic separator 093.60
- Sheet of marker tags 060.72

Technical data
- Rated values 6 A - 250 V
- Dielectric strength 6 kV (1.2/50 μs) between coil and contacts
- Protection category IP 20
- Ambient temperature °C -40…+70
- Screw torque Nm 0.5
- Wire strip length mm 10
- Max wire size Solid wire and stranded wire
- Solid wire 1 x (0.2…2.5) / 2 x 1.5
- AWG 1 x (24…14) / 2 x 16
Push-In terminal socket 35 mm rail mounting (EN 60715)

Common features
- Space saving 6.2 mm wide
- Connections for 16-way jumper link
- Terminal doubler 093.62
- Integral coil indication and protection circuit
- Secure retention and easy ejection by plastic clip

For technical data and supply versions, refer to the Master INTERFACE 39 Series – “Relay interface module”

Electromechanical Relay - EMR

<table>
<thead>
<tr>
<th>Supply voltage</th>
<th>Relay type</th>
<th>Socket type (reference with the 39 Series)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 V AC/DC</td>
<td>34.51.7.005.xx10</td>
<td>MasterBASIC (39.01.....)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MasterPLUS (39.61.....)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MasterINPUT (39.71.....)</td>
</tr>
<tr>
<td>12 V AC/DC</td>
<td>34.51.7.012.xx10</td>
<td>MasterBASIC (39.01.....)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MasterPLUS (39.61.....)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MasterINPUT (39.71.....)</td>
</tr>
<tr>
<td>24 V AC/DC</td>
<td>34.51.7.024.xx10</td>
<td>MasterBASIC (39.01.....)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MasterPLUS (39.61.....)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MasterINPUT (39.71.....)</td>
</tr>
<tr>
<td>60 V AC/DC</td>
<td>34.51.7.060.xx10</td>
<td>MasterBASIC (39.01.....)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MasterPLUS (39.61.....)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MasterINPUT (39.71.....)</td>
</tr>
<tr>
<td>110…125 V AC/DC</td>
<td>34.51.7.060.xx10</td>
<td>MasterBASIC (39.01.....)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MasterPLUS (39.61.....)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MasterINPUT (39.71.....)</td>
</tr>
<tr>
<td>220…240 V AC</td>
<td>34.51.7.060.xx10</td>
<td>MasterBASIC (39.01.....)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MasterPLUS (39.61.....)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MasterINPUT (39.71.....)</td>
</tr>
</tbody>
</table>

* Leakage current suppression

Solid State Relay - SSR

<table>
<thead>
<tr>
<th>Supply voltage</th>
<th>Relay type</th>
<th>Socket type (reference with the 39 Series)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 V AC/DC</td>
<td>34.81.7.012.xxxx</td>
<td>MasterBASIC (39.00.....)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MasterPLUS (39.60.....)</td>
</tr>
<tr>
<td>24 V AC/DC</td>
<td>34.81.7.024.xxxx</td>
<td>MasterBASIC (39.00.....)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MasterPLUS (39.60.....)</td>
</tr>
<tr>
<td>110…125 V AC/DC</td>
<td>34.81.7.060.xxxx</td>
<td>MasterBASIC (39.00.....)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MasterPLUS (39.60.....)</td>
</tr>
<tr>
<td>220…240 V AC</td>
<td>34.81.7.060.xxxx</td>
<td>MasterBASIC (39.00.....)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MasterPLUS (39.60.....)</td>
</tr>
</tbody>
</table>

* Leakage current suppression

Accessories
- 16-way jumper link 093.16 (blue), 093.16.0 (black), 093.16.1 (red)
- Dual-purpose plastic separator 093.60
- Terminal doubler 093.62
- Sheet of marker tags 060.72

Technical data
- Rated values 6 A - 250 V
- Dielectric strength 6 kV (1.2/50 μs) between coil and contacts
- Protection category IP 20
- Ambient temperature °C −40…+70
- Wire strip length mm 8
- Max wire size Solid wire and stranded wire mm² 1 x(0.2…2.5)
  AWG 1 x(24…14)
## Approvals (according to type):

- E-mark
- CE
- UL
- RINA
- VDE
- FCC

## Screw less terminal socket

**35 mm rail mounting (EN 60715)**

**Common features**

- Space saving 6.2 mm wide
- Connections for 20-way jumper link
- Integral coil indication and protection circuit
- Secure retention and easy ejection by plastic clip

For technical data and supply versions, refer to the **38 Series** – “Relay interface module”

## Electromechanical Relay - EMR and Solid State Relay - SSR

<table>
<thead>
<tr>
<th>Supply voltage</th>
<th>Relay type (reference with the 38 Series)</th>
<th>Socket type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electromechanical relay - EMR (38.61....)</td>
<td>Solid State Relay - SSR (38.81....)</td>
<td></td>
</tr>
<tr>
<td>12 V AC/DC</td>
<td>34.51.7.012.xx10</td>
<td>—</td>
</tr>
<tr>
<td>24 V AC/DC</td>
<td>34.51.7.024.xx10</td>
<td>—</td>
</tr>
<tr>
<td>110…125 V AC/DC</td>
<td>34.51.7.060.xx10</td>
<td>34.81.7.060.xxxx</td>
</tr>
<tr>
<td>220…240 V AC/DC</td>
<td>34.51.7.060.xx10</td>
<td>34.81.7.060.xxxx</td>
</tr>
<tr>
<td>110…125 V AC/DC*</td>
<td>34.51.7.060.xx10</td>
<td>34.81.7.060.xxxx</td>
</tr>
<tr>
<td>(220…240 V AC*</td>
<td>34.51.7.060.xx10</td>
<td>34.81.7.060.xxxx</td>
</tr>
<tr>
<td>(220…240 V AC</td>
<td>34.51.7.060.xx10</td>
<td>34.81.7.060.xxxx</td>
</tr>
<tr>
<td>12 V DC</td>
<td>34.51.7.012.xx10</td>
<td>34.81.7.012.xxxx</td>
</tr>
<tr>
<td>24 V DC</td>
<td>34.51.7.024.xx10</td>
<td>34.81.7.024.xxxx</td>
</tr>
<tr>
<td>60 V DC</td>
<td>34.51.7.060.xx10</td>
<td>34.81.7.060.xxxx</td>
</tr>
<tr>
<td>12 V DC</td>
<td>34.51.7.012.xx10</td>
<td>34.81.7.012.xxxx</td>
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<tr>
<td>24 V DC</td>
<td>34.51.7.024.xx10</td>
<td>34.81.7.024.xxxx</td>
</tr>
<tr>
<td>60 V DC</td>
<td>34.51.7.060.xx10</td>
<td>34.81.7.060.xxxx</td>
</tr>
</tbody>
</table>

* Leakage current suppression

## Accessories

- 20-way jumper link 093.20
- Plastic separator 093.01
- Sheet of marker tags 093.64

## Technical data

| Rated values | 6 A - 250 V |
| Dielectric strength | 6 kV (1.2/50 μs) between coil and contacts |
| Protection category | IP 20 |
| Ambient temperature (U_N ≤ 60 V/> 60 V) | °C —40…+70/—40…+55 |
| Wire strip length | mm 10 |
| Max wire size | Solid wire and stranded wire |
| | mm² 1 x 2.5 / 2 x 1.5 |
| | AWG 1 x 14 / 2 x 16 |
### 93 SERIES
Sockets and accessories for 34 series relays

#### Approvals (according to type):

- EAC
- UL

#### PCB socket with retaining and release clip 93.11 (blue)
For relay type 34.51, 34.81

<table>
<thead>
<tr>
<th>Technical data</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated values</td>
<td>6 A - 250 V</td>
</tr>
<tr>
<td>Dielectric strength</td>
<td>≥ 6 kV (1.2/50 μs) between coil and contacts</td>
</tr>
<tr>
<td>Protection category</td>
<td>IP 20</td>
</tr>
<tr>
<td>Ambient temperature</td>
<td>°C -40…+70</td>
</tr>
</tbody>
</table>

**Retaining and release clip use:**

1. Insert the retaining clip into the socket.
2. Insert the retaining clip with the release clip into the socket.
3. Push the release clip to release the retaining clip.

---

**Diagram:**

1. Insertion of the retaining clip into the socket.
2. Insertion of the retaining clip with the release clip into the socket.
3. Release of the retaining clip by pushing the release clip.