The 3120 switch serves for switching devices and machinery on or off. It is available in a range of design versions and meets the requirements of the relevant standard IEC/EN 61058 for switches for appliances. Type 3120 is also available as a circuit breaker for equipment protection in accordance with IEC/EN 60934 (see data sheet thermal circuit breaker 3120-F).

**Product characteristics:**
- rocker or push button actuation
- single pole and double pole versions
- convenient snap-in mounting
- international approvals

**Optional:**
- illumination
- water splash protection
- push-in terminals

**Upon request:**
Switch with undervoltage release module:
This version protects the user against bodily harm as an inadvertent start-up of machinery after a power failure is reliably excluded.

**Technical data**

<table>
<thead>
<tr>
<th>Voltage ratings</th>
<th>AC 240 V, DC 50 V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interrupting capacity:</td>
<td></td>
</tr>
<tr>
<td>AC 240 V: 16 (4) A</td>
<td>25,000 switching cycles</td>
</tr>
<tr>
<td>DC 50 V: 16 A</td>
<td>50,000 switching cycles</td>
</tr>
<tr>
<td>Ambient temperature</td>
<td>0...55 °C</td>
</tr>
<tr>
<td>Insulation coordination (IEC 60664)</td>
<td>2.5 kV /2 reinforced insulation at operating area</td>
</tr>
</tbody>
</table>

**Dielectric strength**

- Operating area
  - Pole to pole (2-pole) test voltage AC 3,000 V
  - test voltage AC 1,500 V
- Insulation resistance > 100 MΩ (DC 500 V)

**Degree of protection (IEC 60529)**

- Operating area IP40 with water splash cover IP54 or IP66
- Terminal area IP00 with water splash cover IP64

**Environmental tests (IEC 60068)**

- Vibration 8 g (57-500 Hz), ± 0.61 mm (10-57 Hz)
- Shock 30 g (11 ma)
- Corrosion 96 hours at 5 % salt mist
- Humidity 240 hrs in 95 % RH
- Mass approx. 33 g (2-pole)
  - approx. 27 g (1-pole)
  - approx. 42 g (2-pole with PT terminals)

All information and data given on our products are accurate and reliable to the best of our knowledge, but E-T-A does not accept any responsibility for the use in applications which are not in accordance with the present specification. E-T-A reserves the right to change specifications at any time in the interest of improved design, performance and cost-effectiveness. Dimensions are subject to change without notice. Please enquire for the latest dimensional drawing with tolerances if required. All dimensions, data, pictures and descriptions are for information only and are not binding. Amendments, errors and omissions excepted. Ordering codes of the products may differ from their marking.
### Order numbering code

<table>
<thead>
<tr>
<th>Type No.</th>
<th>3120 switch with rocker actuation</th>
</tr>
</thead>
</table>
| Mounting | F3 snap-in, mounting cut-out 50.5 x 21.5 mm  
           | F5 snap-in, mounting cut-out 44.5 x 22 mm |
| Number of poles | 0 2-pole  
                    | 6 3-pole |
| Style | 1 standard  
       | 2 with actuator guard  
       | 4 with water splash protection (IP54) |
| Terminal design | PT push-in terminals  
                     | N7 blade terminals 6.3 x 8  
                     | G7 as N7, terminals 11 and 21 with additional flat head screws M3.5 |
| Version | Q1 switch only |
| Actuator style | W rocker |
| Rocker colour/illumination | 01. black opaque without illumination  
                              | 02. white opaque without illumination  
                              | 14. red translucent with LED illumination  
                              | 19. green translucent with LED illumination |
| Marking | Q: 0 and 1 moulded in |
| Illumination voltage range | (= operating voltage)  
                             | 1 DC 12 V  
                             | 2 DC 24 V  
                             | 3 AC 115 V  
                             | 4 AC 230 V |
| Current rating | 16 A |

**Order example:** 3120 - F 5 0 4 - N7 Q1 - W01Q - 16 A

---

### Order numbering code

<table>
<thead>
<tr>
<th>Type No.</th>
<th>3120 switch with push button actuation</th>
</tr>
</thead>
</table>
| Mounting | F2 flange mounting, mounting cut-out 50.5 x 26 mm, suitable for water splash cover X221 619 01 (IP66)  
           | F3 snap-in, mounting cut-out 50.5 x 21.5 mm |
| Number of poles | 0 2-pole  
                    | 6 1-pole |
| Style | F frame with 2 push buttons |
| Terminal design | PT push-in terminals  
                     | N7 blade terminals 6.3 x 8  
                     | G7 as N7, terminals 11 and 21 with additional flat head screws M3.5 |
| Version | Q1 switch only |
| Actuator style | S two push buttons |
| Colour of push button/illumination | GRX green/red without illumination  
                                      | GRXG green translucent with LED illumination/red opaque without illumination |
| Illumination voltage range | (= operating voltage)  
                             | 1 DC 12 V  
                             | 2 DC 24 V  
                             | 3 AC 115 V  
                             | 4 AC 230 V |
| Current rating | 16 A |

**Order example:** 3120 - F 2 0 F - N7 Q1 - SGRX - 16 A
Dimensions

3120-F2.F-... suitable for water splash cover X221 619 01 (IP66)
- water splash cover (see accessories)
- retaining clip
- panel
- cover
- PT screw type K40 ø 4 mm
- blade terminal 6.3 x 0.8
- flat head screw M3.5x6
- tightening torque max. 0.8 Nm

3120-F2.F-PT... suitable for water splash cover X221 619 01 (IP66)
- hole for screw ø 4 mm e.g.: EJOT PT screw K40
- blade terminal 6.3 x 0.8
- flat head screw M3.5x6
- tightening torque max. 0.8 Nm

3120-F3.1 standard
- When installing the circuit breaker apply pressure on the bezel only
- blade terminal 6.3 x 0.8
- flat head screw M3.5x6
- tightening torque max. 0.8 Nm

3120-F3.1-PT standard
- LINE 11
- blade terminal 6.3 x 0.8
- flat head screw M3.5x6
- tightening torque max. 0.8 Nm

3120-F 3.3 with actuator guard
- blade terminal 6.3 x 0.8
- flat head screw M3.5x6
- tightening torque max. 0.8 Nm

3120-F 3.4 with water splash protection (IP54)
- blade terminal 6.3 x 0.8
- flat head screw M3.5x6
- tightening torque max. 0.8 Nm
### Dimensions

**3120-F 5.1**
- **Standard**

**3120-F5.1-PT**
- **Standard**

**3120-F5.3**
- **With actuator guard**

**3120-F5.4**
- **With water splash protection (IP54)**

- Blade terminal 6.3 x 0.8
- Flat head screw M3.5x6
- Tightening torque max. 0.8 Nm

OFF position

- Width 48
- Height 41
- Depth 25
### Cut-out dimensions

<table>
<thead>
<tr>
<th>Cut-out</th>
<th>Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>-F3</td>
<td><img src="image1.png" alt="Diagram" /></td>
</tr>
<tr>
<td>-F5</td>
<td><img src="image2.png" alt="Diagram" /></td>
</tr>
</tbody>
</table>

- **3120-F2...**
  - t: metal min. 2
  - plastic min. 3

- Edges of working parts: ISO13715

### Installation drawing

#### 3120 with blade terminals

- When installing the circuit breaker apply pressure on bezel only.

#### 3120 with push-in terminals

- When installing the circuit breaker apply pressure on bezel only.

### Terminal types

<table>
<thead>
<tr>
<th>Type</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-pole</td>
<td>3120-F61-PT</td>
</tr>
<tr>
<td>2-pole</td>
<td>3120-F51-PT</td>
</tr>
</tbody>
</table>

### Cable cross sections PT terminals

<table>
<thead>
<tr>
<th>Cable Type</th>
<th>Cross Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rigid</td>
<td>1…4 mm²</td>
</tr>
<tr>
<td>Flexible</td>
<td>0.5…2.5 mm²</td>
</tr>
</tbody>
</table>

- Stripping length: 10 mm
**Accessories**

**Insulated cover**
Y 303 068 01

**Terminal adapter**
Y 303 862 01

**Rear terminal shroud black (IP64)**
Y 304 275 01

**Water splash cover, transparent (IP66)**
for style -F2...
X 221 619 01

**Mounting of**
X221 619 01
**Accessories**

Plug-in connector (for connection types N7 and G7)

Y 31214001

Connecting cables can be pre-wired. Two retaining clips ensure a tight fit.

Benefits:
- Reduced installation time and costs for final assembly
- Quick replacement of devices

Note:
- Delivery without receptacles.
- Dimensions of receptacles (width 6.3 mm) are in accordance with DIN 46340 part 3, shape A.
- Examples of suitable receptacles: Stocko RSB 7916 F6.3-1 / Klaucke type 2730 / Vogt type 3832d.67 / TE FASTON Terminals 250 Series / Delphi Packard 58 Series

Plug-in connector mounted on circuit breaker: