

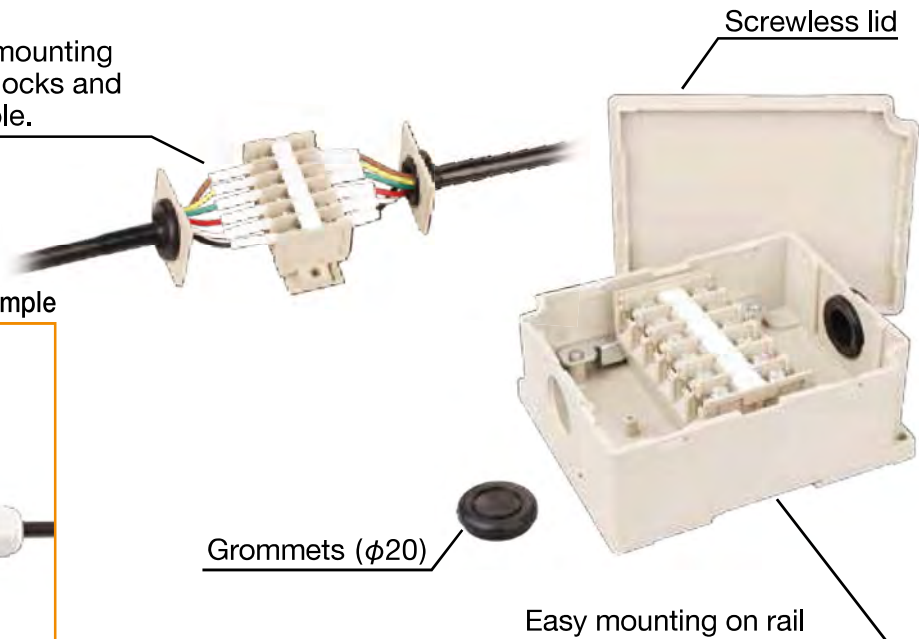
# BOXTB Series



## Removable partitions and terminal block

Wiring can be done before mounting inside the box as terminal blocks and partition plates are removable.

### ◆ Cable Gland mounting example



### Specifications

|                       |   |
|-----------------------|---|
| Rated voltage         | AC,DC 600V  |
| Rated current         | 20A (BOXTB-6AT20: 40A)  |
| Insulation resistance | 200MΩ or more (DC500V)  |
| Withstand voltage     | AC 2500V / min  |
| Applicable wire       | 2.0mm <sup>2</sup> / MAX<br>(BOXTB-6AT20: 5.5mm <sup>2</sup> / MAX) |
| Tightening torque     | Terminal Screw  |
|                       | Lid   |
| Protection Rating     | -   |
| Ambient temperature   | -25°C ~ +100°C<br>(No freezing and condensations)                   |
| Relative humidity     | 45% ~ 85%   |

### Materials

|                          |   |
|--------------------------|---|
| BOX main body            | PBT (UL94V-0)   |
| Lid                      | PBT (UL94V-0)   |
| Gasket                   | -   |
| Lid fixing screw         | -   |
| Coil spring              | -   |
| Nut                      | -   |
| Hinge                    | -   |
| Terminal block main body | PBT (UL94V-0)   |
| Terminal Screw           | SWCH (Zn+trivalent chromate-plating)<br>M3.5x8L M4x7.5L |
| Conductive plate         | Brass (Ni plating)                                      |
| Grommet                  | EPDM  |

### Chemical resistance

| Liquid solution      |   | Liquid solution         |   |
|----------------------|---|-------------------------|---|
| Water                | ◎ | Ethylene glycol         | ◎ |
| Mineral oil          | ◎ | Ester                   | △ |
| Heating oil          | ○ | Halogenated hydrocarbon | △ |
| Gasoline             | △ | Phenol                  | × |
| Anti-corrosion oil   | ◎ | Cresol                  | × |
| Vegetal oil          | ◎ | Liquid ammonia          | × |
| Acetone              | △ | Oxygenated water        | ○ |
| Benzene              | △ | Weak acid               | ◎ |
| Carbon tetrachloride | △ | Strong acid             | △ |
| Alcohol              | ◎ | Weak alkali             | △ |
| Acetic Ether         | △ | Strong alkali           | × |

◎···High resistance, and non-degrade

○···little change the weight, and usable according to condition

△···change the weight and dimension, but usable for a short time

×···It is difficult to use because of swelling and melting

# BOXTB-4AT

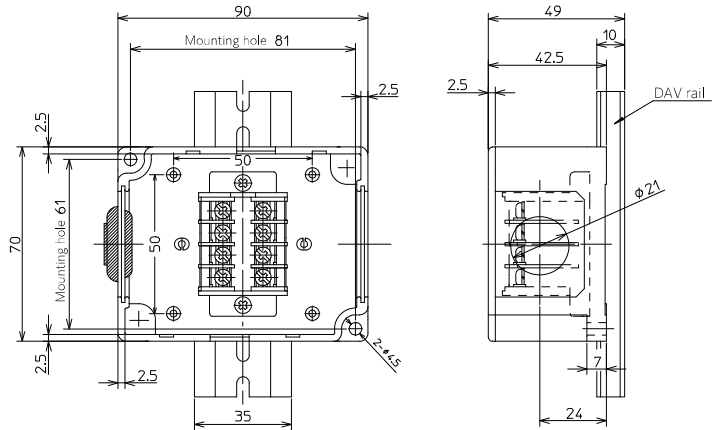
600V / 20A / 2mm<sup>2</sup> [Screw size M3.5] / 4poles



Weight: 147g  
Sales lot: 1pc

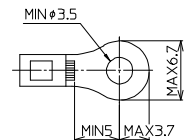
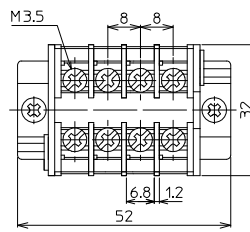
■ Applicable Short bar  
BB8A-2, 4 (see P.36)

■ Dimension



◆ Terminal block : ATK-10G-4P  
\*Chemical / Oil / Heat resistance

■ Applicable crimp terminal



# BOXTB-6AT

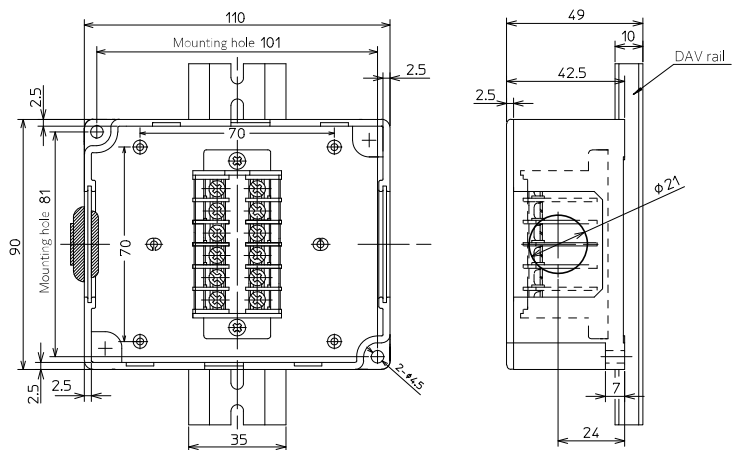
600V / 20A / 2mm<sup>2</sup> [Screw size M3.5] / 6poles



Weight: 203g  
Sales lot: 1pc

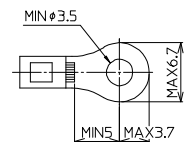
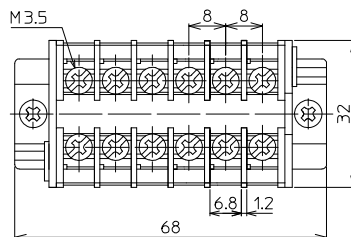
■ Applicable Short bar  
BB8A-2, 4, 6 (see P.36)

■ Dimension



◆ Terminal block : ATK-10G-6P  
\*Chemical / Oil / Heat resistance

■ Applicable crimp terminal



# BOXTB-8AT10

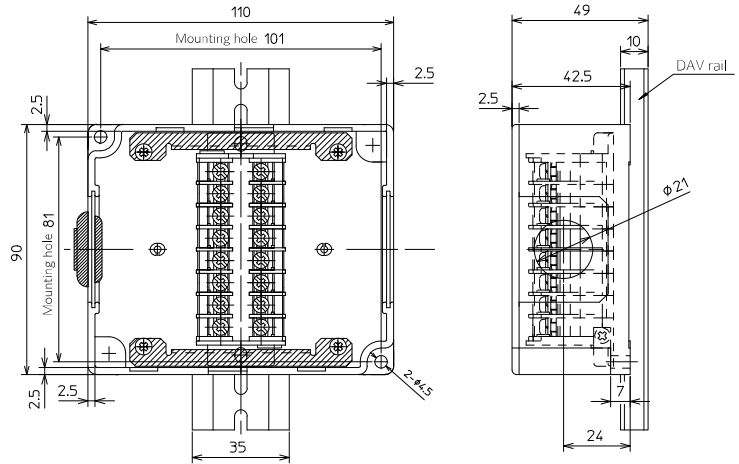
600V / 20A / 2mm<sup>2</sup> [Screw size M3.5] / 8poles



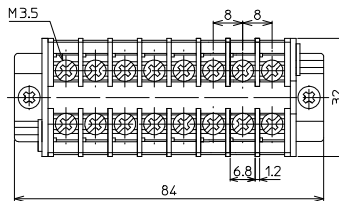
Weight: 234g  
Sales lot: 1pc

■ Applicable Short bar  
BB8A-2, 4, 6, 8 (see P.36)

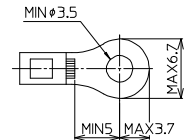
■ Dimension



◆ Terminal block : ATK-10G-8P  
\*Chemical / Oil / Heat resistance



■ Applicable crimp terminal



# BOXTB-6AT20

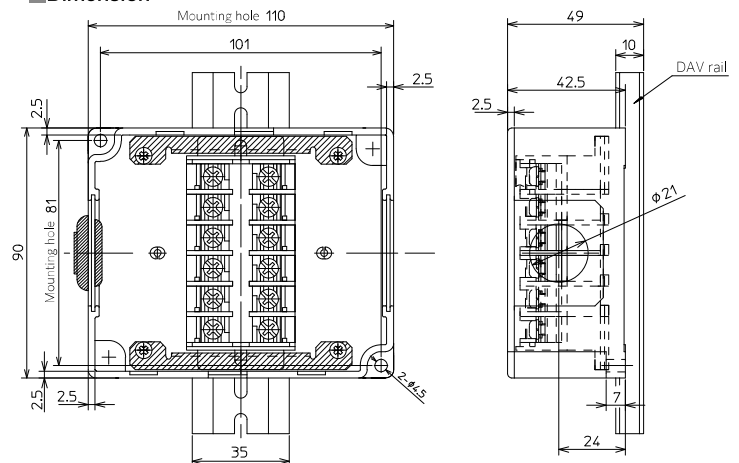
600V / 40A / 5.5mm<sup>2</sup> [Screw size M4] / 6poles



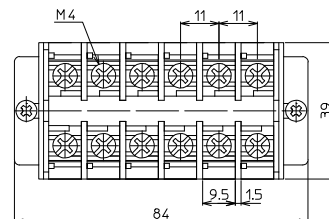
Weight: 266g  
Sales lot: 1pc

■ Applicable Short bar  
BB11-2, 4 (see P.41)

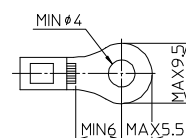
■ Dimension



◆ Terminal block : ATK-20G-6P  
\*Chemical / Oil / Heat resistance



■ Applicable crimp terminal



# Accessories

No-hole plate

## SP-2



Sales lots: 10pc  
Weight: Approx. 5g

Short bar

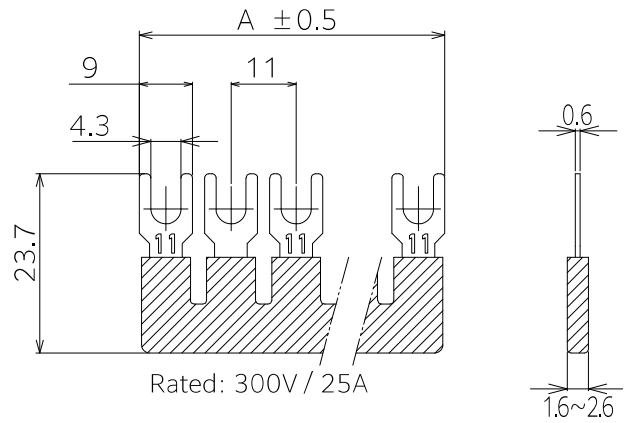
## BB11-2



## BB11-4









■Dimension








| No. of poles | Part No. | A      | Weight | Sales lot |
|--------------|----------|--------|--------|-----------|
| 2            | BB11-2   | 14.5mm | 1.9g   | 10pcs     |
| 4            | BB11-4   | 30.5mm | 4.0g   | 10pcs     |

Material : Copper alloy (Ni plating) , PVC

|   | Type of Terminal Block  | Part No.   | Rated                                   | Mounting methods |                   |
|---|---|--|---|------------------|-------------------|
|   |   |  |   | Direct           | IEC/DIN 35mm rail |
| <b>BOXTS IP67</b><br><br><b>P.6</b>    |    | BOXTS-3<br>BOXTS-3A<br>BOXTS-4<br>BOXTS-4A<br>BOXTS-6<br>BOXTS-6A<br><div style="border: 1px solid black; padding: 5px; display: inline-block;">             BOXTS-N<br/>             BOXTS-NA<br/>             BOXTS-N4<br/>             BOXTS-N4A<br/>             BOXTS-N6<br/>             BOXTS-N6A           </div>  | AC,DC 250V<br>15A(1.5mm <sup>2</sup> )  | ●                | ●                 |
| <b>BOXTC IP67</b><br><br><b>P.12</b>  |   | BOXTC-4<br>BOXTC-4A<br>BOXTC-6<br>BOXTC-6A   | AC,DC 250V<br>15A(1.25mm <sup>2</sup> ) | ●                | —                 |
| <b>BOXTH IP67</b><br><br><b>P.14</b> |  | <div style="border: 1px solid black; padding: 5px; display: inline-block;">             BOXTH-1LB    BOXTH-1LC<br/>             BOXTH-1HB    BOXTH-1HC<br/>             BOXTH-2LB    BOXTH-2LC<br/>             BOXTH-2HB    BOXTH-2HC<br/>             BOXTH-3LB    BOXTH-3LC<br/>             BOXTH-3HB    BOXTH-3HC           </div><br>BOXTH-1LB-A<br>BOXTH-2LB-A<br>BOXTH-3LB-A | AC,DC 600V<br>15A(2.0mm <sup>2</sup> )  | ●                | ●                 |

: Only Box

|  | Type of Terminal Block   | Part No.   | Rated  | Mounting methods |                   |
|--|--|--|--|------------------|-------------------|
|  |  |  |  | Direct           | IEC/DIN 35mm rail |
| <h1>BOXTM IP67</h1>  <p><b>P.24</b></p> | <br><br> | <b>Direct mounting type</b><br>*BOXTM-401 BOXTM-801<br>BOXTM-802 BOXTM-1001<br>BOXTM-1002 BOXTM-1003<br>BOXTM-2001 BOXTM-2002<br><div style="border: 1px solid black; padding: 2px;">BOXTM-2000 BOXTM-2003</div>   | *BOXTM-401<br>AC,DC 600V<br>20A(2.0mm <sup>2</sup> )<br><br><br>AC,DC 600V<br>15A(2.0mm <sup>2</sup> ) | ●                | ●                 |
|  |  | <b>IEC/DIN 35mm rail mounting type</b><br><div style="border: 1px solid black; padding: 2px;">             BOXTM-60L BOXTM-61L<br/>             BOXTM-60H BOXTM-61H<br/>             BOXTM-110L BOXTM-111L<br/>             BOXTM-110H BOXTM-111H<br/>             BOXTM-220L BOXTM-221L<br/>             BOXTM-220H BOXTM-221H           </div> |  |                  |                   |
| <h1>BOXTB</h1>  <p><b>P.38</b></p>    |   | BOXTB-4AT<br>BOXTB-6AT<br>BOXTB-8AT10<br>*BOXTB-6AT20  | AC,DC 600V<br>20A(2.0mm <sup>2</sup> )<br><br>*BOXTB-6AT20<br>AC,DC 600V<br>40A(5.5mm <sup>2</sup> )   | ●                | ●                 |

: Only Box

# Safe Use of TOGI BOX terminals

With the product handling, safety information, and all the precautions before mounting, using, servicing, or inspecting the products.

**[WARNING]**... A warning notice indicates that neglecting the suggested procedure or practice could be fatal or result in serious personal injury.

**[CAUTION]**... A caution notice indicates that neglecting the suggested procedure or practice could result in moderate or slight personal injury and/or property damage.

## 《BOX terminals》

### WARNING

- Do not touch the terminals while the power supply voltage is being applied. Electrical shock may occur.
- When carrying out work, always ensure that the external power supply is cut off in all phases. Electrical shock may occur.
- Do not exceed the ratings. Doing so may cause damage or burn out.

### CAUTION

- Do not install or store the product under abnormal conditions such as condensation, corrosive gases, vibrations or shocks outside of the general specification range. Doing so may cause burnout, damage or product deterioration.
- When using the product which has been stored for a long time, check the appearance and the condition of the packing and do not use if deformation, cracks, chips or dents are found. Doing so may cause electric shock due to water leakage.
- The duration of guarantee is limited to one year after purchase. If you use products more than one year, please use at your own risk.
- Terminal screws (Mounting screws) must be re-tightened regularly by following the specified torque. Using the product with loosen screws may cause burnout or short-circuit. Over-tightening of the screws may cause damage.
- Do not use damaged or deformed products, as may cause poor contact, burnout, short-circuit or electric shock.
- Select conductors and wire sizes suitable for the applied voltage and current. Using unsuitable conductors may cause burnout.
- Prevent foreign objects such as iron powder and wire scraps from entering the box and terminal block. Doing so may cause poor contact, burnout, short-circuit or damage.
- When tightening the lid, make sure that there is no dust on the packing. Otherwise, may result in electric shock due to water leakage.
- Follow the each product-specific precautions for mounting and demounting the product. Otherwise, product can be damaged.
- When using the product, ensure that an adequate insulation distance is maintained between adjacent poles and the surrounding area. Otherwise, may result in electric shock, burnout or short-circuit.
- Do not touch the conductive parts of the product directly. Doing so may cause an electric shock.
- Do not apply excessive force, such as dropping the product. Doing so may cause damage.
- Do not modify or disassemble the product. Doing so may cause damage.
- Installation, wiring, maintenance and inspection must be done by qualified personnel with specialist knowledge.