# TQB Series
# Product Line-up/ Common Specifications/ Materials

## High-capacity Assembled Terminal block

### Product Line-up

■TQB series (Branch terminal block)

The TQB series is a high-capacity terminal block for branch connections.
Compared to conventional branch wiring using copper busbars, it reduces labor time by about one-sixth and installation space by approximately 15%.
When multiple poles are combined, the absence of side bases provides excellent space efficiency.
All models are rated considering the use of heat-resistant wires.

| Abstract | Ratings Dielectric strength voltage | Ratings Note | | Terminal screw | | pitch | Standard Poles | Base Product Name |
|---|---|---|---|---|---|---|---|---|
| | | Primary Side | Secondary Side | Primary Side | Secondary Side | | | |
| ・Allows multiple branch connections in a compact space.<br>・Reduces labor time for branch wiring.<br>・Rated current is set considering the use of heat-resistant wires. | 600V | 22mm² [90A] | 5.5mm²×10 [40A]<br>Sum：Max. 90A | M6×2 pos. | M4×5 pos. | 50mm | 1～4P | TQB60D |
| | | 60mm² [175A] | Upper Tier：8mm²×6 [50A]<br>Lower Tier：14mm²×8 [80A]<br>Sum：Max. 175A | M8×2 pos.<br>(Stud Type) | M5×7 pos. | 60mm | | TQB100D |
| | | 100mm² [250A]<br>150mm² [310A] | 22mm²×8 [90A]<br>14mm²×6 [80A]<br>Sum：Max. 310A | M10×2 pos.<br>(Stud Type) | M6×4 pos.<br>M5×3 pos. | 77.5mm | | TQB200D |
| | | 200mm² [440A] | 100mm²×4 [240A]<br>60mm²×2 [175A]<br>22mm²×4 [90A]<br>Sum：Max. 440A | M12×2 pos.<br>(Stud Type) | M10×2 pos.<br>M8×1 pos.<br>M6×2 pos.<br>M4×1 pos.<br>(For Voltage Meter) | 112mm | | TQB400D |

Note: Ratings are recommended values with usage in compliance to JIS standards.

### Common Specifications

| | |
|---|---|
| Operational Ambience Temperature Range | −25～+55℃ (without Freezing nor Dew condensation) |
| Relative Humidity | 45～85%RH |
| Temperature rise | Max. 45℃ of temperature rise at conducting metals |
| Insulating Resistance | Between each live part and between each live part and the mounting metal plate: Min. 100 MΩ |
| Commercial Frequency Withstanding Voltage | 2500V 1 Min. |
| Impulse Withstanding Voltage | 6000V |
| Conformed Standards | JIS C8201-7-1 Note1, UL1059, EN/IEC60947-7-1, NECA C2811 (JIS C2811) Note2 |

Note 1: As of May 2010, JIS C2811 has been replaced by JIS C8201-7-1.
Note 2: NECA C2811 is a standard conforming to the contents of JIS C2811.

### Materials

| Name | Materials | Flame retardance grade |
|---|---|---|
| Terminal Base | Modified PPO | UL94V-0 |
| Terminal screws | Steel (Zinc plated Chromate Treatment) | — |
| Conducting Plate | Brass (Nickel plating) Note | — |
| Seal for legends | Polypropylene | — |
| Safety cover | Polycarbonate | UL94V-0 |
| General-use cover | Polycarbonate | UL94V-2 |

Note TQB400D is Copper (Nickel plating).

### Current-carrying Current for Heat-resistant Wires

| Basic type name | With standard wire | With heat-resistant wire |
|---|---|---|
| TQB60D | 90A | 120A |
| TQB100D | 175A | 250A |

| Basic type name | With standard wire | With heat-resistant wire |
|---|---|---|
| TQB200D | 310A | 350A |
| TQB400D | 440A | 500A |

### Ratings for Overseas Certification

■The Ratings used as comforming products to UL.

File No.:E114903

| Type | UL Standard (UL1059) | | | | | |
|---|---|---|---|---|---|---|
| | Product Name | Ratings Voltage (V) | Ratings Current (A) | Applicable wires Note1 | FW Note2 | Tightening torque |
| For Branching | TQB60D | 600 | 85 | Primary Side: AWG10～4 | 2 | M6：4N・m |
| | | | | Secondary Side: AWG16～10 | | M4：1.4N・m |
| | TQB100D | 600 | 130 | Primary Side: AWG8～1 | 2 | M8：8N・m |
| | | | | Secondary Side: AWG12～6 | | M5：2.2N・m |
| | TQB200D | 600 | 230 | Primary Side: AWG1/0～4/0 | 2 | M10：15N・m |
| | | | | Secondary Side: M6：AWG10～4 | | M6：4N・m |
| | | | | Secondary Side: M5：AWG12～6 | | M5：2.2N・m |
| | TQB400D | 600 | 335 | Primary Side: 350～400 MCM | 2 | M12：25N・m |
| | | | | Secondary Side: M10：AWG1/0～4/0 | | M10：15N・m |
| | | | | Secondary Side: M8：AWG4～1 | | M8：8N・m |
| | | | | Secondary Side: M6：AWG10～4 | | M6：4N・m |
| | | | | Secondary Side: M4：AWG14～10 | | M4：1.4N・m |

Note1: Please use only crimp terminals with UL conformance.
Note2: FW1: Wirings at factory, FW2:Wirings at factory and in-field