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

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

Common Specifications

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

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).

Note 1: As of May 2010, JIS C2811 has been replaced by JIS C8201-7-1.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.

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	UL Standard (UL1059)			
	Product Name	Ratings Voltage (V)	Ratings Current (A)	Applicable wires ^{Note1}	FW ^{Note2}	Tightening torque	
For	TQB60D	600	85	Primary Side: AWG10~4	2	M6 : 4N∙m	
Branching				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	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	1	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