

Instruction Manual

No. TS10012E

SHIMADA ELECTRIC CO., LTD.

Type) SXTB-04, 06

EExdICT6 With Terminal Block

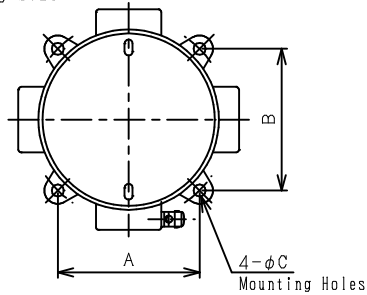
Caution

EExdIC Without Terminal Block

- 1) This product can be used in zones 1 and 2.
- 2) Operate in an ambient temperature range of -20°C to 40°C.
- 3) Handle with the power off and under the supervision of a responsible person.
- 4) Do not rebuild or repair the product, as explosion protection cannot be secured.
- 5) Do not, under any circumstances, remove the cover when there is an electrical current flowing.
- 6) Do not scratch the internal wiring or external conductors.
- 7) Be sure to ground the product.
- 8) Do not use at levels higher than the rated voltage and current.
- 9) When opening and closing the cover, use the wrench provided with the product.
- 10) Do not injure screw.

Methods for Installation and Cable Lead-In

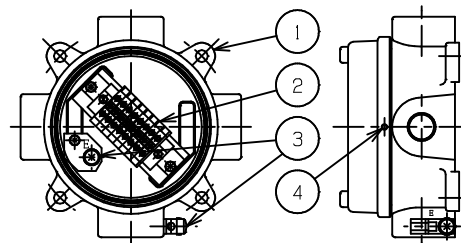
1. Mounting Size



Type	A	B	C
SXTB-04	81	81	6
SXTB-06	106	106	9

2. Methods for cable and electric wire lead-in.

- 1) Remove the turning to opposite direction of clockwise rotation after loosening the H.S.S screw (M3) which is installed to cover.
- 2) Pulling cable and electric wire to junction box after installed cable gland.
- 3) Connect the grounding wire to earth terminal.
Connect cable wire and electric wire to terminals.
Don't contact to the conductor of adjoining terminals.
- 4) Install the cover turning to clockwise rotation.
Finally, fix the H.S.S. screw (M3) which is installed to cover.
(The diagram below depicts SXTB-06)



1. Body
2. Terminal
3. Earth terminal
4. H.S.S. screw

Instruction Manual

No. TS10010E

SHIMADA ELECTRIC CO., LTD.

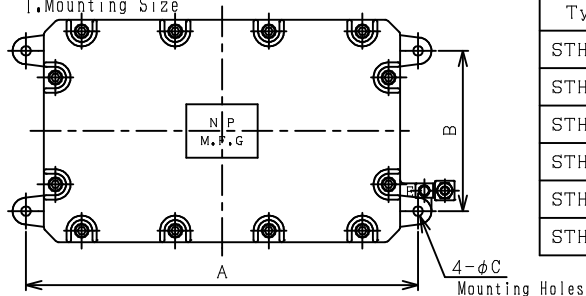
Type) STH-1, 3, 5, 6, 7S, 7 EExdIBT6 With Terminal Block

Caution EExdIB Without Terminal Block

- 1) This product can be used in zones 1 and 2.
- 2) Operate in an ambient temperature range of -20°C to 40°C.
- 3) Handle with the power off and under the supervision of a responsible person.
- 4) Do not rebuild or repair the product, as explosion protection cannot be secured.
- 5) Do not, under any circumstances, remove the cover when there is an electrical current flowing.
- 6) Do not scratch the internal wiring or external conductors.
- 7) Be sure to ground the product.
- 8) Do not use at levels higher than the rated voltage and current.
- 9) When opening and closing the cover, use the wrench provided with the product.
- 10) Do not injure flange surface.

Methods for Installation and Cable Lead-In

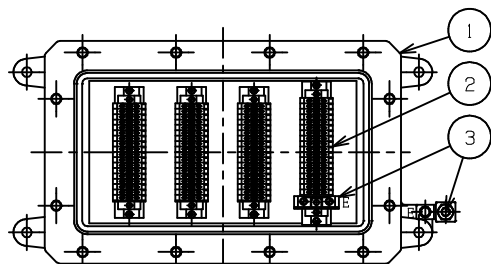
1. Mounting Size



Type	A	B	C
STH-1	230	115	9
STH-3	330	160	9
STH-5	440	180	11
STH-6	440	220	11
STH-7S	580	220	13
STH-7	580	220	13

2. Methods for cable and electric wire lead-in.

- 1) Remove the socket head cap screws (SW, PW) from the cover and remove the cover.
- 2) Pulling cable and electric wire to junction box after installed cable gland.
- 3) Connect the grounding wire to earth terminal.
Connect cable wire and electric wire to terminals.
Don't contact to the conductor of adjoining terminals.
- 4) Once the cable and electric wire have been connected, replace the cover, and tighten the socket head cap screws evenly. (The diagram below depicts STH-5)



Torque Tightening for Hexagon Head Bolts.

Type	Size of screw	Torque Tightening (N·m)
STH-1, 3	M8	10.4
STH-5, 6	M10	20.6
STH-7S, 7	M12	36

1. Body
2. Terminal block
3. Earth terminal

Instruction Manual

No. TS10013E

SHIMADA ELECTRIC CO., LTD.

Type) ASTH-10, 20, 30, 60, 70, 90

Exe II T6 With Terminal Block

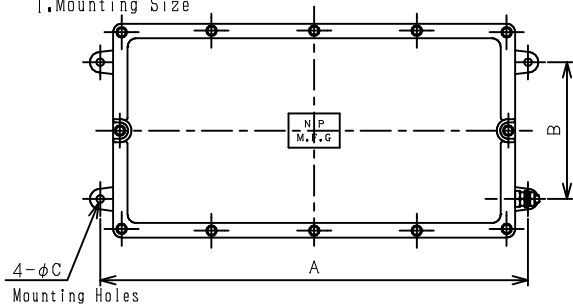
Caution

Exe II Without Terminal Block

- 1) This product can be used in zones 1 and 2.
- 2) Operate in an ambient temperature range of -20°C to 40°C.
- 3) Handle with the power off and under the supervision of a responsible person.
- 4) Do not rebuild or repair the product, as explosion protection cannot be secured.
- 5) Do not, under any circumstances, remove the cover when there is an electrical current flowing.
- 6) Do not scratch the internal wiring or external conductors.
- 7) Be sure to ground the product.
- 8) Do not use at levels higher than the rated voltage and current.
- 9) When opening and closing the cover, use the wrench provided with the product.
- 10) Do not injure flange surface.

Methods for Installation and Cable Lead-In

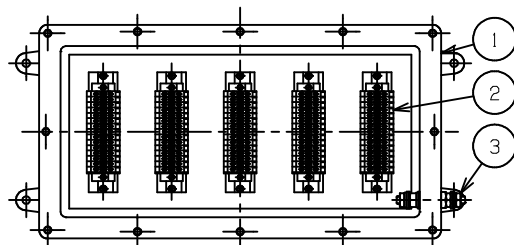
1. Mounting Size



型式	A	B	C
ASTH-10	270	120	9
ASTH-20	320	160	9
ASTH-30	390	160	9
ASTH-60	500	160	9
ASTH-70	400	265	9
ASTH-90	460	320	18

2. Methods for cable and electric wire lead-in.

- 1) Remove the socket head cap screws (SW, PW) from the cover and remove the cover.
- 2) Pulling cable and electric wire to junction box after installed cable gland.
- 3) Connect the grounding wire to earth terminal.
Connect cable wire and electric wire to terminals.
Don't contact to the conductor of adjoining terminals.
- 4) Once the cable and electric wire have been connected, replace the cover, and tighten the socket head cap screws evenly. (The diagram below depicts ASTH-60)



Torque Tightening for Hexagon Head Bolts.

Type	Size of screw	Torque Tightening (N·m)
ASTH-10, 20, 30, 60, 70	M6	10.4
ASTH-90	M10	20.6

1. Body
2. Terminal block
3. Earth terminal

Type) SXTB-1, 2, 2(C), 3, 3(C), 4, 4(C), 5, 5(C) EExeIT6 With Terminal Block

Caution

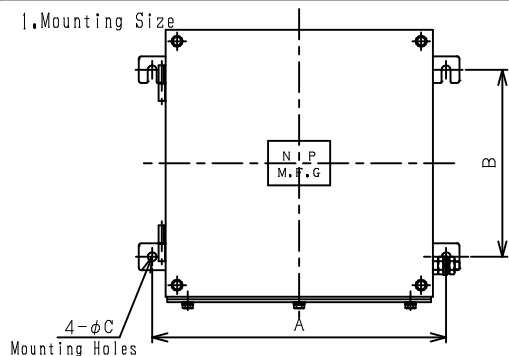
EExeII Without Terminal Block

EExiaICT6 With Terminal Block

- 1) This product can be used in zones 1 and 2.
- 2) Operate in an ambient temperature range of -20°C to 40°C.
- 3) Handle with the power off and under the supervision of a responsible person.
- 4) Do not rebuild or repair the product, as explosion protection cannot be secured.
- 5) Do not, under any circumstances, remove the cover when there is an electrical current flowing.
- 6) Do not scratch the internal wiring or external conductors.
- 7) Be sure to ground the product.
- 8) Do not use at levels higher than the rated voltage and current.
- 9) When opening and closing the cover, use the wrench provided with the product.

Methods for Installation and Cable Lead-in

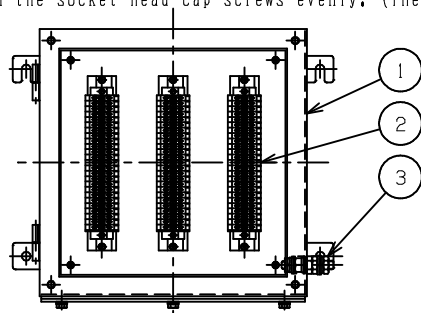
1. Mounting Size



Type	A	B	C
SXTB-1	160	---	10
SXTB-2	230	130	10
SXTB-2 (C)	230	130	10
SXTB-3	330	210	10
SXTB-3 (C)	330	210	10
SXTB-4	450	300	14
SXTB-4 (C)	450	300	14
SXTB-5	550	350	14
SXTB-5 (C)	550	350	14

2. Methods for cable and electric wire lead-in.

- 1) Remove the socket head cap screws (SW, PW) from the cover and remove the cover.
- 2) Pulling cable and electric wire to junction box after installed cable gland.
- 3) Connect the grounding wire to earth terminal.
Connect cable wire and electric wire to terminals.
Don't contact to the conductor of adjoining terminals.
- 4) Once the cable and electric wire have been connected, replace the cover, and tighten the socket head cap screws evenly. (The diagram below depicts SXTB-3(C))

**Torque Tightening for Hexagon Head Bolts.**

Type	Size of screw	Torque Tightening (N·m)
SXTB-1 SXTB-2, 2 (C) SXTB-3, 3 (C) SXTB-4, 4 (C) SXTB-5, 5 (C)	M6	10.4

1. Body
2. Terminal
3. Ground terminal

OPERATING INSTRUCTIONS
SXTB-□□ SERIES JUNCTION BOX/ENCLOSURE (1/2)

JUNCTION BOX

CERTIFICATION : LCIE 12ATEX3075X (ATEX)
 : IECEX LCIE 12.0028X (IECEX)
 Ex PROTECTION TYPE : Ⓢ I2GD ExeIIC T6 or T5 Gb/ExtbIIC T85°C or T100°C Db (ATEX)
 : ExeIIC T6 or T5 Gb/ExtbIIC T80°C or T95°C Db (IECEX)
 : IP66 (IEC60529)

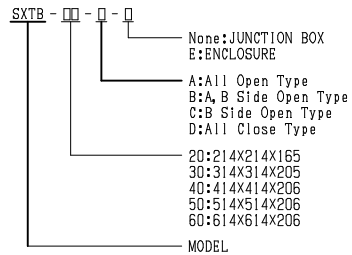
ENCLOSURE

CERTIFICATION : LCIE 12ATEX3073U (ATEX)
 : IECEX LCIE 12.0022U (IECEX)
 Ex PROTECTION TYPE : Ⓢ I2GD ExeIIC Gb/ExtbIIC Db (ATEX)
 : ExeIIC Gb/ExtbIIC Db (IECEX)
 : IP66 (IEC60529)

SPECIFICATION

Material :Stainless Steel (SUS304/SUS316/SUS316L)
 Painting Color :Plain
 Ambient Temperature:-20°C~+40°C (T6, 80°C) Chloroprene Rubber
 : -20°C~+55°C (T5, 95°C) Chloroprene Rubber
 : -50°C~+40°C (T6, 80°C) Silicon Rubber
 : -50°C~+55°C (T5, 95°C) Silicon Rubber
 Relative Humidity :45%~85%RH
 Altitude :1000m or less

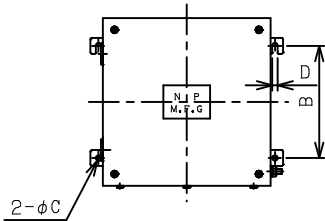
MODEL DESCRIPTION



Caution

- 1) This product can be used in zones 1, 2 and Zone 21, 22.
- 2) Please refer to the specification in the ambient temperature range.
- 3) Handle with the power off and under the supervision of a responsible person.
- 4) Do not rebuild or repair the product, as explosion protection cannot be secured.
- 5) Do not, under any circumstances, remove the cover when there is an electrical current flowing.
- 6) Do not scratch the internal wiring or external conductors.
- 7) Be sure to ground the product.
- 8) Do not use at levels higher than the rated voltage and current.
- 9) When opening and closing the cover, use the wrench provided with the product.

Mounting size/Weight

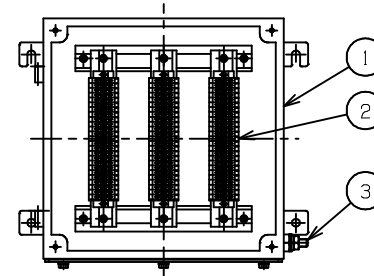


TYPE	A	B	C	D	Weight (kg)
SXTB-20-A~D	230	130	10	10	3.5
SXTB-30-A~D	330	180	10	10	6
SXTB-40-A~D	450	210	14	14	9.5
SXTB-50-A~D	550	260	14	14	16
SXTB-60-A~D	650	360	14	14	21.5

Methods for cable and electric wire lead-in

- 1) Remove the socket head cap screws (SW, PW) from the cover and remove the cover.
- 2) Pulling cable and electric wire to junction box after installed cable gland.
- 3) Connect the grounding wire to earth terminal.
 Connect cable wire and electric wire to terminals.
 Don't contact to the conductor of adjoining terminals.
- 4) Once the cable and electric wire have been connected, replace the cover, and tighten the socket head cap screws evenly.

OPERATING INSTRUCTIONS
SXTB-□□ SERIES JUNCTION BOX/ENCLOSURE (2/2)



Torque Tightening for Hexagon Head Bolts

TYPE	Size of screw	Torque Tightening (N·m)
SXTB-20-A~D SXTB-30-A~D SXTB-40-A~D SXTB-50-A~D SXTB-60-A~D	M6	10.4

1. Body
2. Terminal
3. Ground terminal

Terminal

SXTB-20-A~D

Rated Voltage	550V					
Rated Current	11A	16A	20A	38A	42A	90A
Number of terminal (Max)	30P	20P	15P	8P	5P	3P
Conformity Wiring	0.5~ 2.5sq	0.5~ 4sq	0.5~ 6sq	2.5~ 10sq	4~ 16sq	16~ 50sq

SXTB-30-A~D

Rated Voltage	550V					
Rated Current	8A	10A	16A	20A	30A	60A
Number of terminal (Max)	55P	45P	30P	35P	10P	7P
Conformity Wiring	0.5~ 2.5sq	0.5~ 4sq	0.5~ 6sq	2.5~ 10sq	4~ 16sq	16~ 50sq

SXTB-40-A~D

Rated Voltage	550V					
Rated Current	5A	8A	12A	16A	20A	50A
Number of terminal (Max)	120P	105P	90P	72P	55P	24P
Conformity Wiring	0.5~ 2.5sq	0.5~ 4sq	0.5~ 6sq	2.5~ 10sq	4~ 16sq	16~ 50sq

SXTB-50-A~D

Rated Voltage	550V					
Rated Current	5A	7A	8A	13A	20A	40A
Number of terminal (Max)	180P	160P	140P	84P	40P	26P
Conformity Wiring	0.5~ 2.5sq	0.5~ 4sq	0.5~ 6sq	2.5~ 10sq	4~ 16sq	16~ 50sq

SXTB-60-A~D

Rated Voltage	550V					
Rated Current	5A	7A	8A	13A	20A	40A
Number of terminal (Max)	275P	250P	200P	136P	80P	50P
Conformity Wiring	0.5~ 2.5sq	0.5~ 4sq	0.5~ 6sq	2.5~ 10sq	4~ 16sq	16~ 50sq

Type) SXTB-75

EExeIT6 With Terminal Block

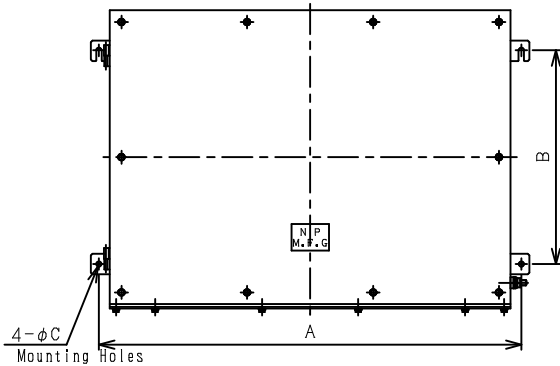
Caution

EExiaIT6 With Terminal Block

- 1) This product can be used in zones 1 and 2.
- 2) Operate in an ambient temperature range of -20°C to 40°C.
- 3) Handle with the power off and under the supervision of a responsible person.
- 4) Do not rebuild or repair the product, as explosion protection cannot be secured.
- 5) Do not, under any circumstances, remove the cover when there is an electrical current flowing.
- 6) Do not scratch the internal wiring or external conductors.
- 7) Be sure to ground the product.
- 8) Do not use at levels higher than the rated voltage and current.
- 9) When opening and closing the cover, use the wrench provided with the product.

Methods for Installation and Cable Lead-In

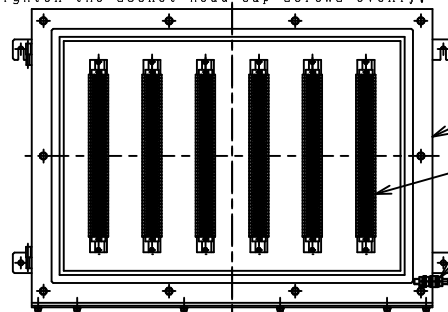
1. Mounting Size



Type	A	B	C
SXTB-75	790	400	14

2. Methods for cable and electric wire lead-in.

- 1) Remove the socket head cap screws (SW, PW) from the cover and remove the cover.
- 2) Pulling cable and electric wire to junction box after installed cable gland.
- 3) Connect the grounding wire to earth terminal.
Connect cable wire and electric wire to terminals.
Don't contact to the conductor of adjoining terminals.
- 4) Once the cable and electric wire have been connected, replace the cover, and tighten the socket head cap screws evenly.



Torque Tightening for Hexagon Head Bolts.

Type	Size of screw	Torque Tightening (N·m)
SXTB-75	M6	10.4

1. Body
2. Terminal
3. Ground terminal

OPERATING INSTRUCTIONS SXTB-□□□ SERIES JUNCTION BOX/ENCLOSURE (1/2)

JUNCTION BOX

CERTIFICATION : LCIE 13ATEX3002X (ATEX)
 ; IECEX LCIE 12.0035X (IECEX)
 Ex PROTECTION TYPE : I2GD Exe IIC T6 or T5 Gb/Ext b IIC T80C or T95C Db (ATEX)
 ; Exe IIC T6 or T5 Gb/Ext b IIC T80C or T95C Db (IECEX)
 ; IP66 (IEC60529)

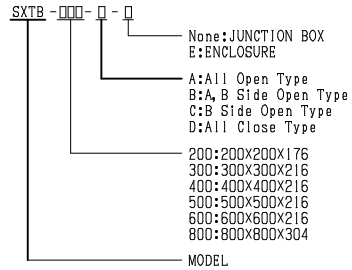
ENCLOSURE

CERTIFICATION : LCIE 13ATEX3001U (ATEX)
 ; IECEX LCIE 12.0034U (IECEX)
 Ex PROTECTION TYPE : I2GD Exe IIC Gb/Ext b IIC Db (ATEX)
 ; Exe IIC Gb/Ext b IIC Db (IECEX)
 ; IP66 (IEC60529)

SPECIFICATION

Material :Stainless Steel (SUS304/SUS316/SUS316L)
 Painting Color :Plain
 Ambient Temperature:-20C~+40C (T6, 80C) Chloroprene Rubber
 :-20C~+55C (T5, 95C) Chloroprene Rubber
 :-50C~+40C (T6, 80C) Silicon Rubber
 :-50C~+55C (T5, 95C) Silicon Rubber
 Relative Humidity :45%~85%RH
 Altitude :1000m or less

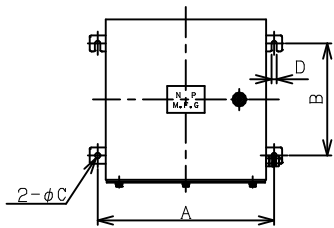
MODEL DESCRIPTION



Caution

- 1) This product can be used in zones 1, 2 and Zone 21, 22.
- 2) Please refer to the specification in the ambient temperature range.
- 3) Handle with the power off and under the supervision of a responsible person.
- 4) Do not rebuild or repair the product, as explosion protection cannot be secured.
- 5) Do not, under any circumstances, remove the cover when there is an electrical current flowing.
- 6) Do not scratch the internal wiring or external conductors.
- 7) Be sure to ground the product.
- 8) Do not use at levels higher than the rated voltage and current.
- 9) When opening and closing the cover, use the hexagon socket screw key provided with the provided with the product.

Mounting size/Weight

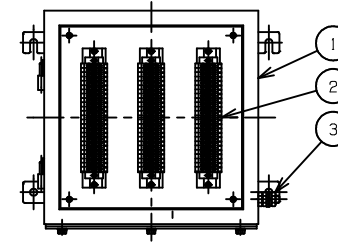


TYPE	A	B	C	D	Weight (kg)
SXTB-200-A~D	250	150	12	12	5.5
SXTB-300-A~D	350	250	12	12	9.5
SXTB-400-A~D	450	350	12	12	14
SXTB-500-A~D	550	450	12	12	18
SXTB-600-A~D	650	500	14	14	27.5
SXTB-800-A~D	850	750	14	14	52

Methods for cable and electric wire lead-in

- 1) Remove the special fastener from the cover and remove the cover.
- 2) Pulling cable and electric wire to junction box after installed cable gland.
- 3) Connect the grounding wire to earth terminal.
 Connect cable wire and electric wire to terminals.
 Don't contact to the conductor of adjoining terminals.
- 4) Once the cable and electric wire have been connected, replace the cover.

OPERATING INSTRUCTIONS SXTB-□□□ SERIES JUNCTION BOX/ENCLOSURE (2/2)



Remove the special fastener tool.

TYPE	Hexagon Socket Screw Key
SXTB-200-A~D SXTB-300-A~D SXTB-400-A~D SXTB-500-A~D SXTB-600-A~D SXTB-800-A~D	8

1. Body
2. Terminal
3. Ground terminal

Terminal

SXTB-200-A~D

Rated Voltage	550V					
Rated Current	11A	16A	20A	38A	42A	90A
Number of terminal (Max)	30P	20P	15P	8P	5P	3P
Conformity Wiring	0.5~ 2.5sq	0.5~ 4sq	0.5~ 6sq	2.5~ 10sq	4~ 16sq	16~ 50sq

SXTB-300-A~D

Rated Voltage	550V					
Rated Current	8A	10A	16A	20A	30A	60A
Number of terminal (Max)	55P	45P	30P	35P	10P	7P
Conformity Wiring	0.5~ 2.5sq	0.5~ 4sq	0.5~ 6sq	2.5~ 10sq	4~ 16sq	16~ 50sq

SXTB-400-A~D

Rated Voltage	550V					
Rated Current	5A	8A	12A	16A	20A	50A
Number of terminal (Max)	120P	105P	90P	72P	43P	18P
Conformity Wiring	0.5~ 2.5sq	0.5~ 4sq	0.5~ 6sq	2.5~ 10sq	4~ 16sq	16~ 50sq

SXTB-500-A~D

Rated Voltage	550V					
Rated Current	5A	7A	8A	13A	20A	40A
Number of terminal (Max)	180P	140P	140P	84P	40P	26P
Conformity Wiring	0.5~ 2.5sq	0.5~ 4sq	0.5~ 6sq	2.5~ 10sq	4~ 16sq	16~ 50sq

SXTB-600-A~D

Rated Voltage	550V					
Rated Current	5A	7A	8A	13A	20A	40A
Number of terminal (Max)	275P	250P	200P	136P	80P	50P
Conformity Wiring	0.5~ 2.5sq	0.5~ 4sq	0.5~ 6sq	2.5~ 10sq	4~ 16sq	16~ 50sq

SXTB-800-A~D

Rated Voltage	550V					
Rated Current	5A	7A	8A	13A	15A	40A
Number of terminal (Max)	400P	300P	300P	200P	160P	60P
Conformity Wiring	0.5~ 2.5sq	0.5~ 4sq	0.5~ 6sq	2.5~ 10sq	4~ 16sq	16~ 50sq