

XT Automatic transfer switch



General description and technical features

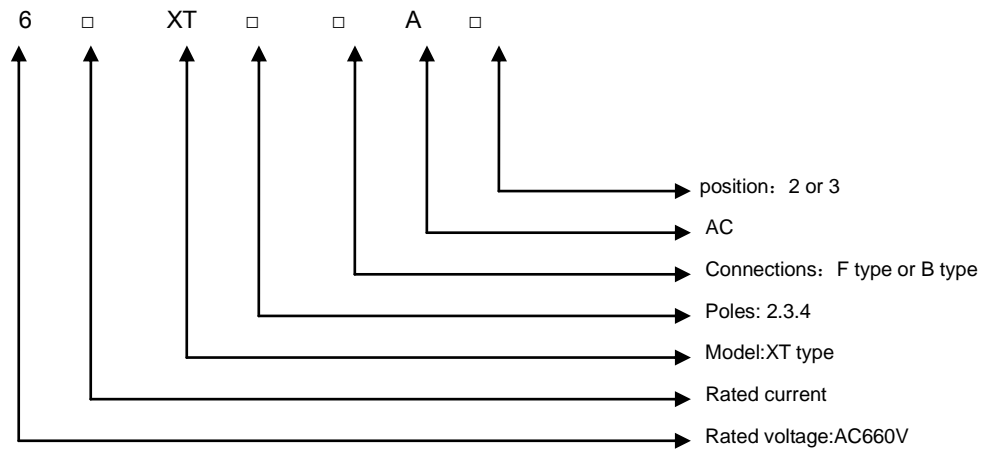
- (1) XT series automatic transfer switch is developed by our company one base of adopting international advanced ATS technology.
- (2) Withstand 10le current and above, contacts part with high pressure are difficultly detached and weld. It is special important for fire system.
- (3) Clearance between open contacts: clearance and creepage distance of PC's ATS is 180% of breaker's.
- (4) Transfer faster: apply of quickly making breaking technique, the on-off action of contact part is unrelated to operation .It can reduce influence between arc and contact and then improve ATS life expectancy the effectiveness of technique is more apparently developed when the load is motors or transformer. Transfer time is within 200ms,only 1/10 of CB's.
- (5) Long contact expectancy: mechanical 50000 times, electrical 10000 times.
- (6) AC&DC: adopt for rectifier current to control electrical power.
- (7) Excellent anti-arc capability: multi-pieces anti-arc contact, quickly shut off at the first time, and then remove dissociation gas, even below 120°dropout phase. It doesn't make short circuit through second arc.
- (8) Apply of contact system,lower arcing time.

Operating environment and model implication

- (1) Execution standard
 - ① IEC standard: IEC60947-6-1: 2005
 - ② National standard : GB/T 14048.11-2008
- (2) Working conditions
 - ① Altitude: ≤2000m;

- ② Temperature: -5℃~+40℃ (average≤35℃);
- ③ Relative humidity: ≤90%;
- ④ Pollution grade: 3;
- ⑤ AC 50Hz/60 Hz, Ue: AC660V, DC 125V;
- ⑥ Avoiding from concussion and vibration;

(3) Model implication



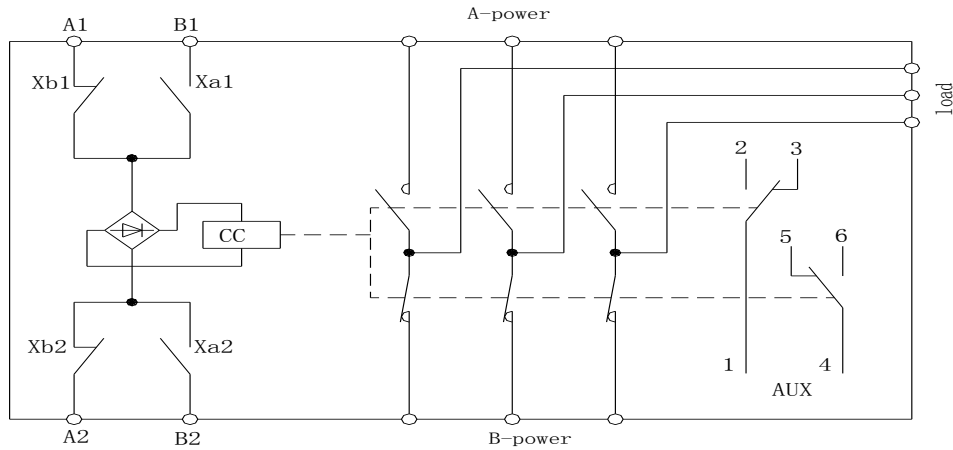
Technical parameters

Type	61XT2	62XT2	64XT2	61XT3	62XT3	64XT3
Rated voltage	AC660V DC125V					
Rated current	40A, 63A, 80A, 100A	125A,160A, 200A	225A,250A, 300A,320A, 350A,400A	40A, 63A, 80A, 100A	125A,160A, 200A	225A,250A, 300A,320A, 350A,400A
position	2 position			3 position		
Connections	Front type or Back type					
Poles	2P 3P 4P	2P 3P 4P	2P 3P 4P	2P 3P 4P	2P 3P 4P	2P 3P 4P
(kg) Weight	4.5 6 8	6 8 10	11 14 18	45 6 7.5	6 8 10	11 14 17
Current	DC110V	3 3 4	3 4 5	7 7 8	4 4 5	5 5 7.2
	AC110V	3 3 4	3 4 5	7 7 8	4 4 5	5 5 7.2

t	(A)																		
	AC220																		
	V	1.5	1.5	2	1.5	2	2.5	3.5	3.5	4	2	2	2.5	2.5	2.5	3.6	3.2	3.2	4
	(A)																		
S coil current	/										DC110V=1A AC110V=1A AC220V=0.5A								
T coil current	/										DC110V=1A AC110V=1A AC220V=0.5A								
condition short-circuit current	12.5kA			25kA			30kA			12.5kA			25kA			30kA			
Life expectancy	Electrical: 10000times, Mechanical: 50000times																		
Operating time	<p style="color: red;">contact transfer times≤60ms</p> <p style="color: red;">operating transfer times≤75ms</p> <p style="color: red;">return transfer times≤90ms</p> <p style="color: red;">Off-time(including delay) ≤70ms+delay</p>																		
Standard part	Auxiliary switch 2C, cover of main line terminal , cover of operation terminal. handle																		

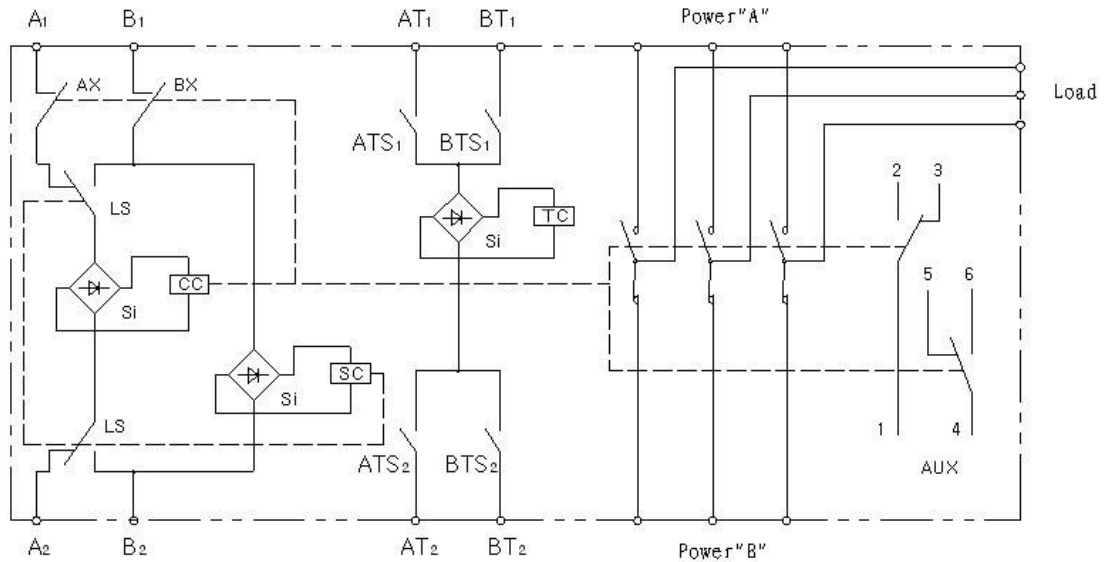
The principle drawing of electric

(1) XT2 型 XT2 type



Xa1-Xa2	行程开关	Limiting switch
Xb1-Xb2	行程开关	Limiting switch
CC	投入线圈	Inputing coil
Si	整流器	Rectifier
A1-A2	A 侧电源控制回路投入端子	Controlling terminal of power "A"
B1-B2	A 侧电源控制回路投入端子	Controlling terminal of power "B"
AUX	辅助开关	Auxiliary switch

(2) XT3 type



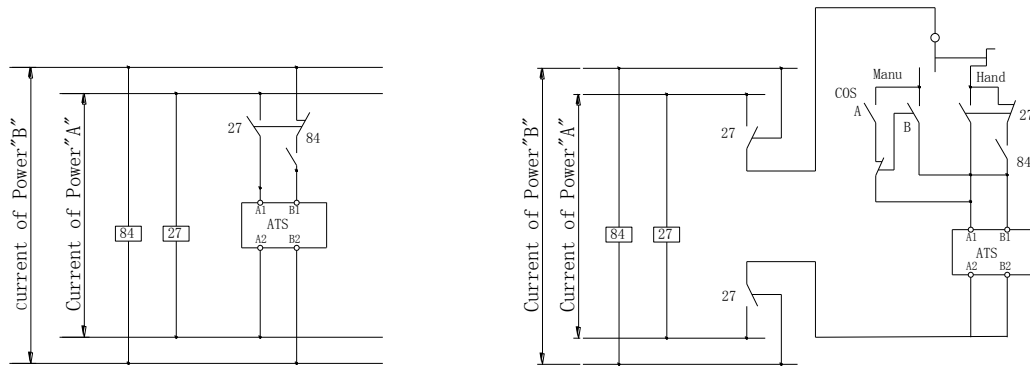
CC	投入线圈 Inputting coil	TC	分闸线圈 Trip coil
Si	整流器 Rectifier	AUX	辅助开关 Auxiliary switch
LS	选择开关 Select switch	A1-A2	A 侧电源控制回路投入端子 Controlling terminal of power "A"
ATS1,AT S2 BTS1,BT S2	分闸控制开关 Trip control switch	B1-B2	A 侧电源控制回路投入端子 Controlling terminal of power "B"
AX,BX	控制开关 Control switch	AT1-AT2	A 侧电源分闸接线端子 Tripping terminal of power "A"
SC	选择线圈 Selective coil	BT1-BT2	A 侧电源分闸接线端子 Tripping terminal of power "B"

The principle drawing of outside controlling

(1) XT2 type

Only for electrical operation

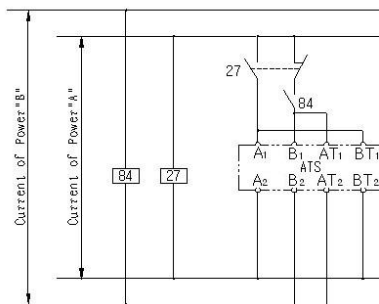
For electrical and manual operation



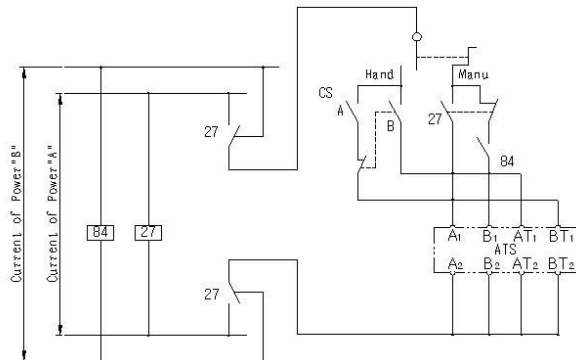
27. 84:继电器 (Relay)

(2) XT3 type

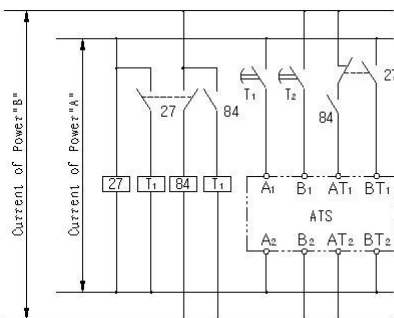
Only for electrical operation



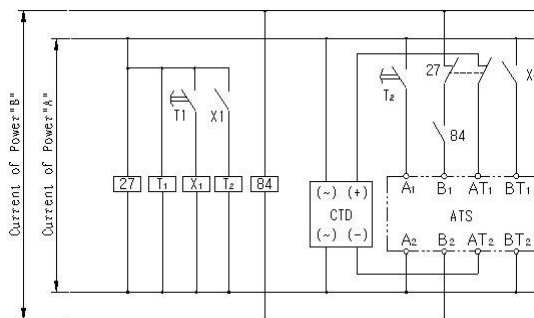
For electrical and manual operation



In cooperation with timer



In cooperation with CTD



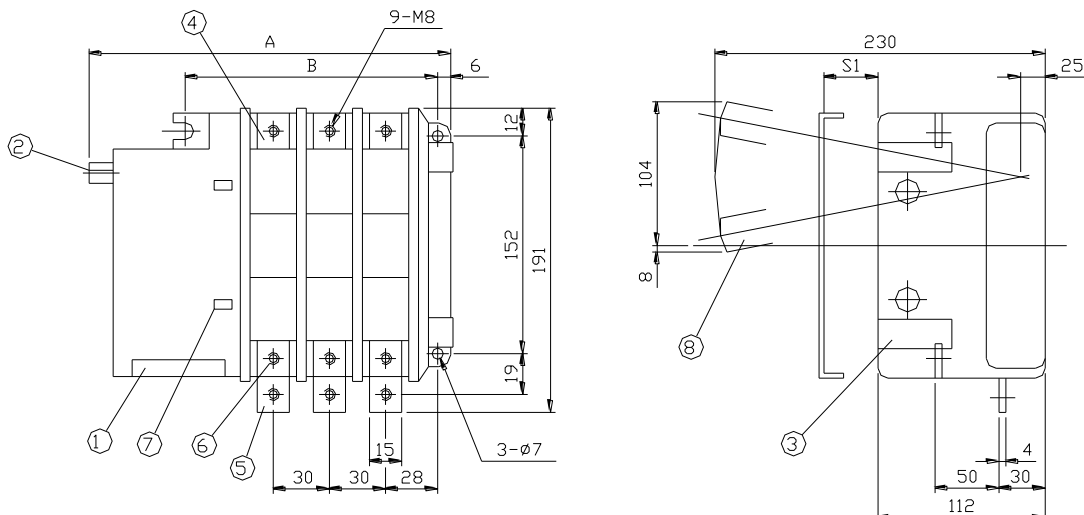
27, 84	继电器 Relay
T1, T2	时间继电器 timer
X1	控制继电器 control relay
CTD	电容分闸装置 capacitance trip device
Current of power "A"	A 侧操作电源
Current of power "B"	B 侧操作电源

Functional specification of the ATS

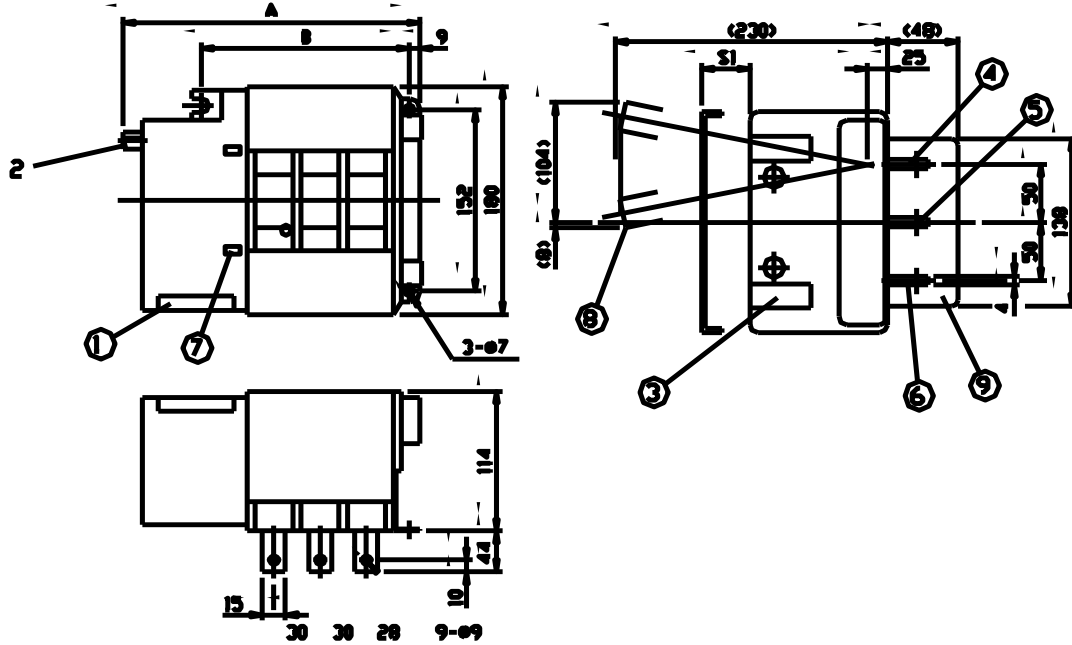
- (1) Auto input and auto reset
 If normal sources is available, Controller demand normal sources working and emergency sources stopping, in the other hand, if normal sources isn't available, Controller demand emergency sources working and demand normal stopping. If normal sources recover, normal sources automatically restart working again.
- (2) Auto input but can't reset automatically
 If normal sources isn't available, Controller demand emergency sources working and emergency sources stopping, in the other hand, if normal sources isn't available, Controller demand emergency sources working and demand normal stopping. If normal sources recover, normal sources can't restart working automatically.
- (3) If fire centre sends a cut-off demand, no matter which situation ATS in, ATS will turn off all sources (normal emergency sources) and switch will be in "OFF" position.
- (4) Signal return back
 Read working status of ATS from contact part of ATS.
- (5) Utility-Utility
 Adopt sources between two utilities' sources
- (6) Utility-Generator
 Adopt sources between utility and generator.
- (7) Two sources standby for each other
 If normal sources is available, Controller demand normal sources working and emergency sources stopping, in the other hand, if normal sources isn't available, Controller demand emergency sources working and demand normal stopping. If normal sources recover, normal sources automatically restart working again.

Map of product sizes

61XT series (front type)



61XT 系列(板后型) 61XT series (back type)



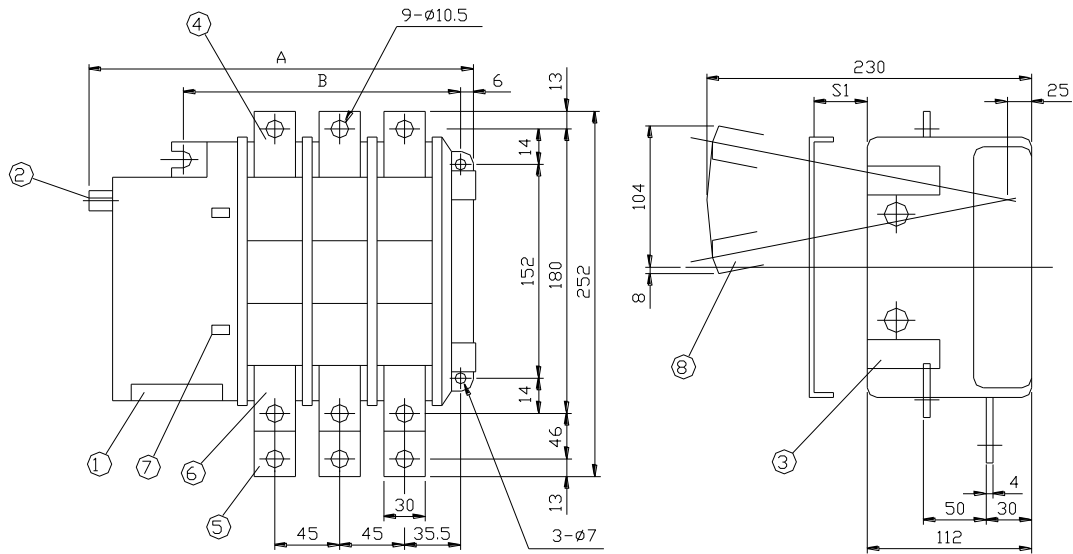
Arc distant:

S1 尺寸: 30mm (220V)
 60mm (660V)

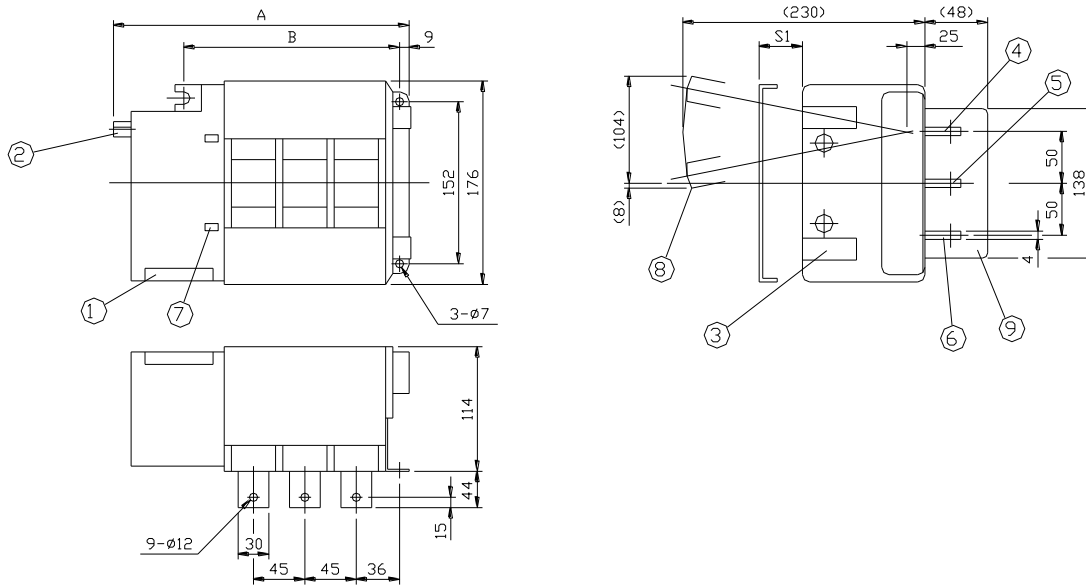
	A (mm)	B (mm)
2P	204	103
3P	234	133
4P	264	163

- ①Control circuit terminal ②Handle axis ③AUX switch ④Busbar of power "A"
 ⑤Busbar of loads ⑥Busbar of power "B" ⑦"ON/OFF" indication ⑧Handle

62XT series (front type)



62XT series (back type)



Arc distant:

S1 Size: 30mm (220V)

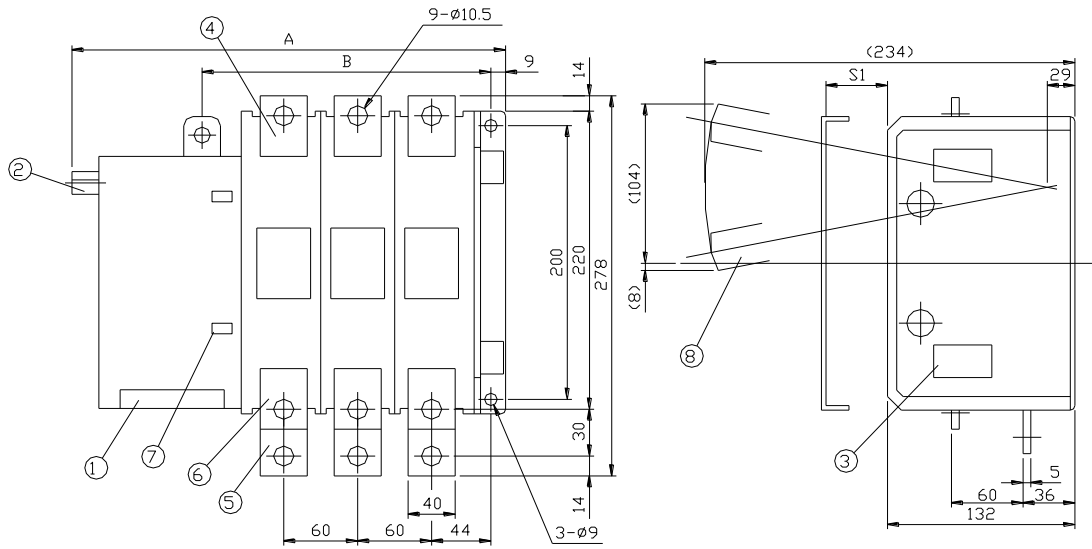
60mm (660V)

	A (mm)	B (mm)
2P	234	133
3P	279	178
4P	324	223

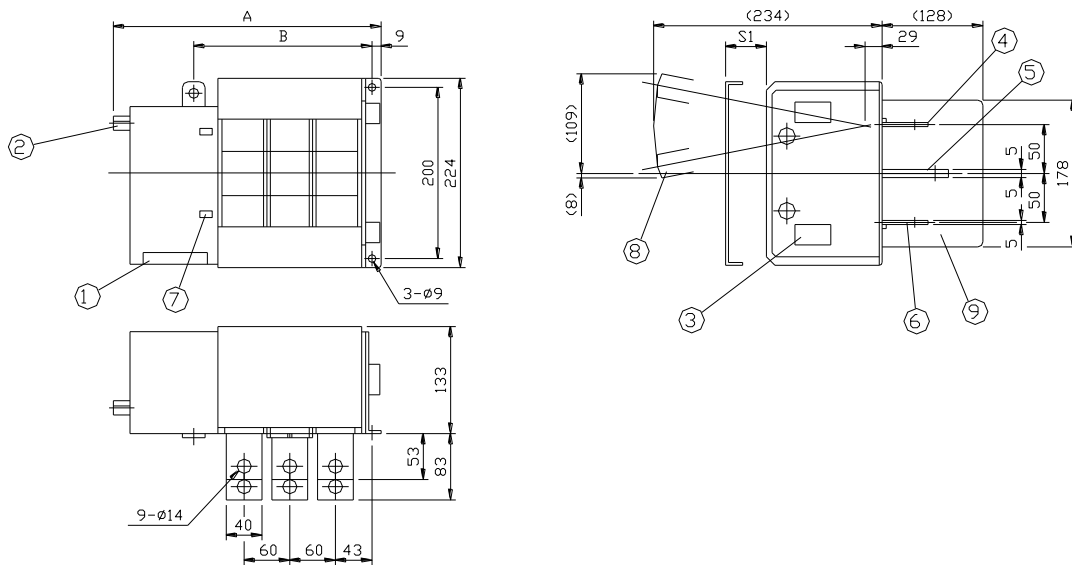
①Control circuit terminal ②Handle axis ③AUX switch ④Busbar of power "A"

⑤Busbar of loads ⑥Busbar of power "B" ⑦"ON/OFF" indication ⑧Handle

64XT series (front type)



64XT series (back type)



飞弧距离:

Arc distant:

S1 尺寸: 30mm (220V)

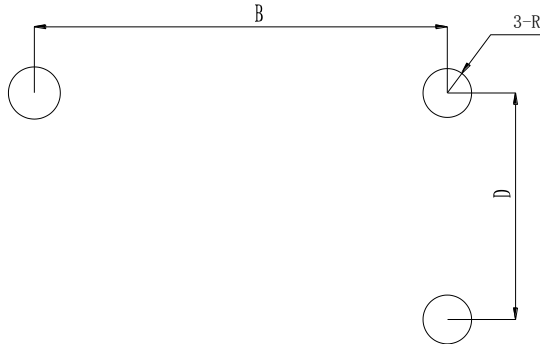
60mm (660V)

	A (mm)	B (mm)
2P	280	164
3P	340	224
4P	400	284

①Control circuit terminal ②Handle axis ③AUX switch ④Busbar of power "A"

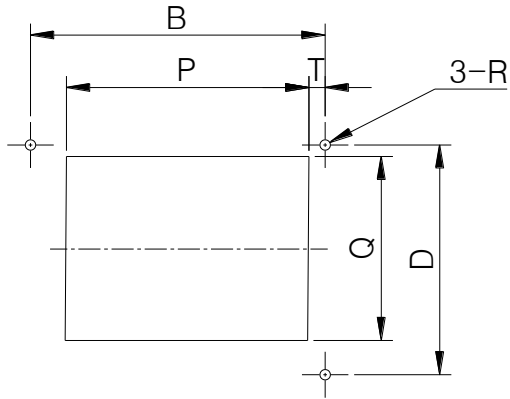
⑤Busbar of loads ⑥Busbar of power "B" ⑦"ON/OFF" indication ⑧Handle

61XT-64XT Installation dimension (front type)



Type	61XT	62XT	64XT
B	2P	103	164
	3P	133	224
	4P	163	284
D	152	152	200
R	M5		M8

61XT-64XT Installation dimension (back type)



Type	61XT	62XT	64XT
B	2P	103	164
	3P	133	224
	2P	163	284
D	152	152	200
P	2P	85	135
	3P	115	195
	4P	145	255
Q	140		180
T	7.5		9
R	M5		M8