Technical catalogue

Automatic Transfer Switches

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BA Series

Automatic Transfer Switches

The Automatic Transfer Switch (ATS) ensures continuous power by swiftly switching to a backup source during outages. Its fast response time makes it ideal for critical facilities like hospitals and data centers. Designed for safety and reliability, ATS units typically include voltage sensing, delay timers, and manual override. Their compact, modular design simplifies installation and integration. Modern models also offer energy-efficient operation and remote monitoring for better control.

Contents

General

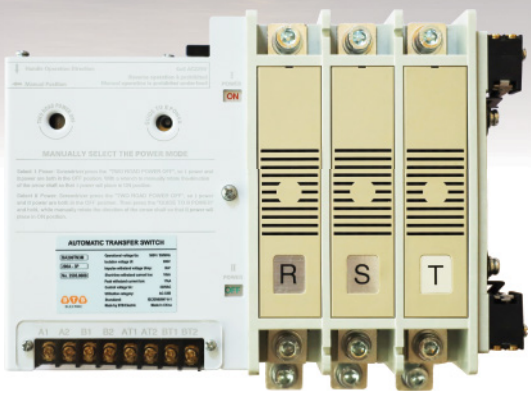
Applied standard

- IEC/EN 60947-6-1 Low-voltage switchgear and controlgear – Part 6-1: Multiple function equipment – Transfer switching equipment.
- IEC 60664-1 Insulation coordination for equipment within low-voltage systems – Part 1: Principles, requirements and tests.

Operating conditions

- Ambient Temperature: Automatic Transfer Switches are designed for operation in environments where the surrounding air temperature ranges from -5°C to +55°C, and can be stored in conditions with temperatures ranging from -25°C to +65°C.
- Relative humidity: up to 95%, non-condensing.
- Operating Altitude: ≤ 2,000 meters above sea level.
- Mounting Conditions: The installation must ensure perpendicularity and angularity of ≤ 15°.
- Pollution Degree: Level 3, suitable for environments with conductive pollution or dry non-conductive pollution that becomes conductive due to condensation.
- Installation Category: IV – Suitable for equipment installed at the origin of the installation, such as electricity meters or primary overcurrent protection devices.
- Utilization Category: AC-33iB (AC-33B for PC-type devices).

Ordering types



1	2	3	4	5
BA	100	TN	3	M

1. Manufacturer Code	
BA	Manufacturer Code for ATS

2. Rated current	
063	63A
100	100A
250	250A
400	400A
630	630A
800	800A
10H	1000A
12H	1250A
16H	1600A
20H	2000A

3. ATS type	
TN	Three-position switch without controller
TY	Three-position switch with controller
NN	Two-position switch without controller
NY	Two-position switch with controller
PC	Three-position switch with PC design
HY	Two-position automatic switch for residential use

4. Number of poles	
2	2 Poles
3	3 Poles
4	4 Poles

5. Control Voltage	
FD	DC 110V
F	AC 110V
M	AC 220V

NN type Automatic Transfer Switches

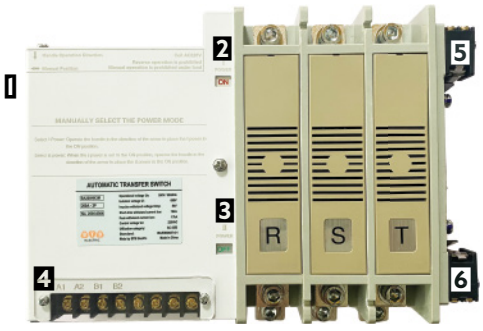
Application

NN type – Two-position switch without controller. This automatic transfer switch (ATS) operates in an ON–ON configuration and requires an external automatic controller. A key advantage of the two-position design is its ability to switch quickly between two power sources, with a simple mechanical structure that enhances safety and facilitates maintenance. The NN-type ATS is particularly suitable for residential areas, commercial centers, or factories with moderate power demands that require fast and convenient source switching.

Feature

- Compact & Lightweight Design: The compact and lightweight design minimizes mounting space and facilitates convenient installation.
- Protection Against the Remaining Power Source: A time delay for transfer is provided to ensure that the remaining power cannot be fed back into the main power source, thus protecting the load.
- Construction for Safety: For safe operation, a molded construction is used for breaking parts. Additionally, a latching indicator is provided to show the operational status.
- One Coil Instantaneous Excitation Mode: It is a power saving structure with an instantaneous excitation mode in one coil.
- The NN-series ATS, when combined with a smart controller, also features protection against overvoltage, undervoltage, overfrequency, and underfrequency.

Image and structure

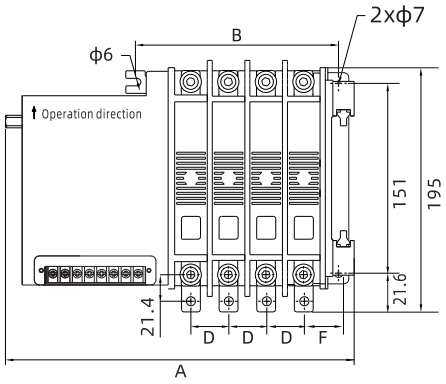


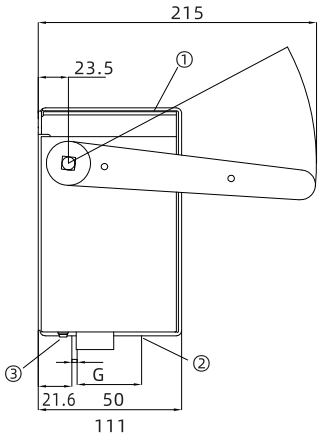
1. Manual operation position
2. A - Power Status indication
3. B - Power Status indication
4. Control interface terminal
5. A - Power Auxiliary Switch
6. B - Power Auxiliary Switch

Selection table

Model		BA063NN BA100NN	BA250NN	BA400NN BA630NN
Rated operational current, In		63 / 100A	250A	400 / 630A
Rated Operational Voltage, Ue		AC 500V; DC 125V		
Rated Insulation Voltage, Ui		690V		
Impulse Withstand Voltage, Uimp		8kV		
No. of Pole		2 / 3 / 4		
Powercable connection method		Front bus bar connection		
Controller		Not equipped with a controller		
Rated short-time withstand current, Icw		10kA		12kA
Rated short-circuit making capacity, Icm		17kA		30kA
Life time	Electric	35000 time		
	Mechanic	180000 time		
Switching frequency	Time / hour	60		
Switching sequence		ON ↔ ON (A ↔ B)		
Operating Time	Change-over Time	≤ 140ms		≤ 165ms
	Opening Time	≤ 55ms		≤ 65ms
	Contact Transfer Time	≤ 85ms		≤ 125ms
Operating Voltage & Current	DC 110/125V	12A		15A
	AC 100/115V	12A		15A
	AC 200/240V	6A		8A
Control voltage	Max	110% Rated operating voltage		
	Min	85% Rated operating voltage		
Accessaries		Manual handle		
Withstand Voltage for Main circuit		2500V/60s		
Withstand Voltage for Control circuit		1500V/60s		
Weight (kg)	2P	5.7	6.1	12
	3P	6.7	7.2	14.8
	4P	7.7	8.3	17.8
Dimensions (WxLxH)	2P	223x215x195mm	231x215x195mm	295x222x289mm
	3P	253x215x195mm	266x215x195mm	357x222x289mm
	4P	283x215x195mm	301x215x195mm	419x222x289mm

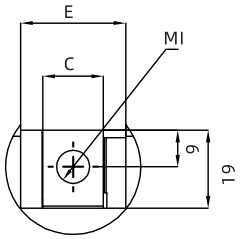
Dimensions



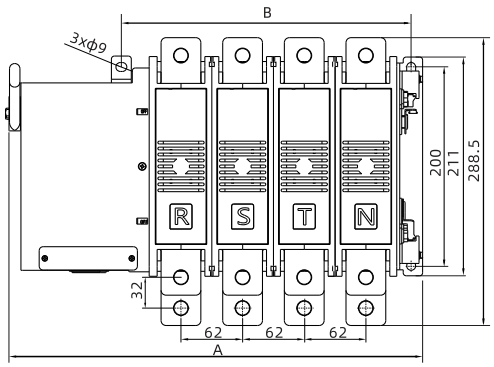


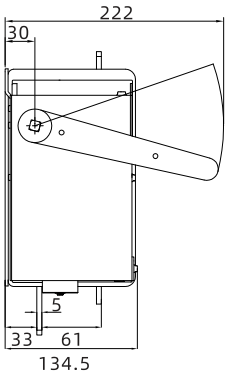
Note:

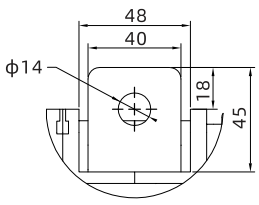
1. Common power input terminals are used by the input terminals
2. Standby power input terminals are used by the input terminals
3. Load power output terminals



Model	Size / Pole	A	B	C	D	E	F	G	I
BA063NN BA100NN	2P	223	100	15	30	26	27.5	4	M8
	3P	253	130						
	4P	283	160						
BA250NN	2P	231	111	20	35	31	30	4	
	3P	266	146						
	4P	301	181						

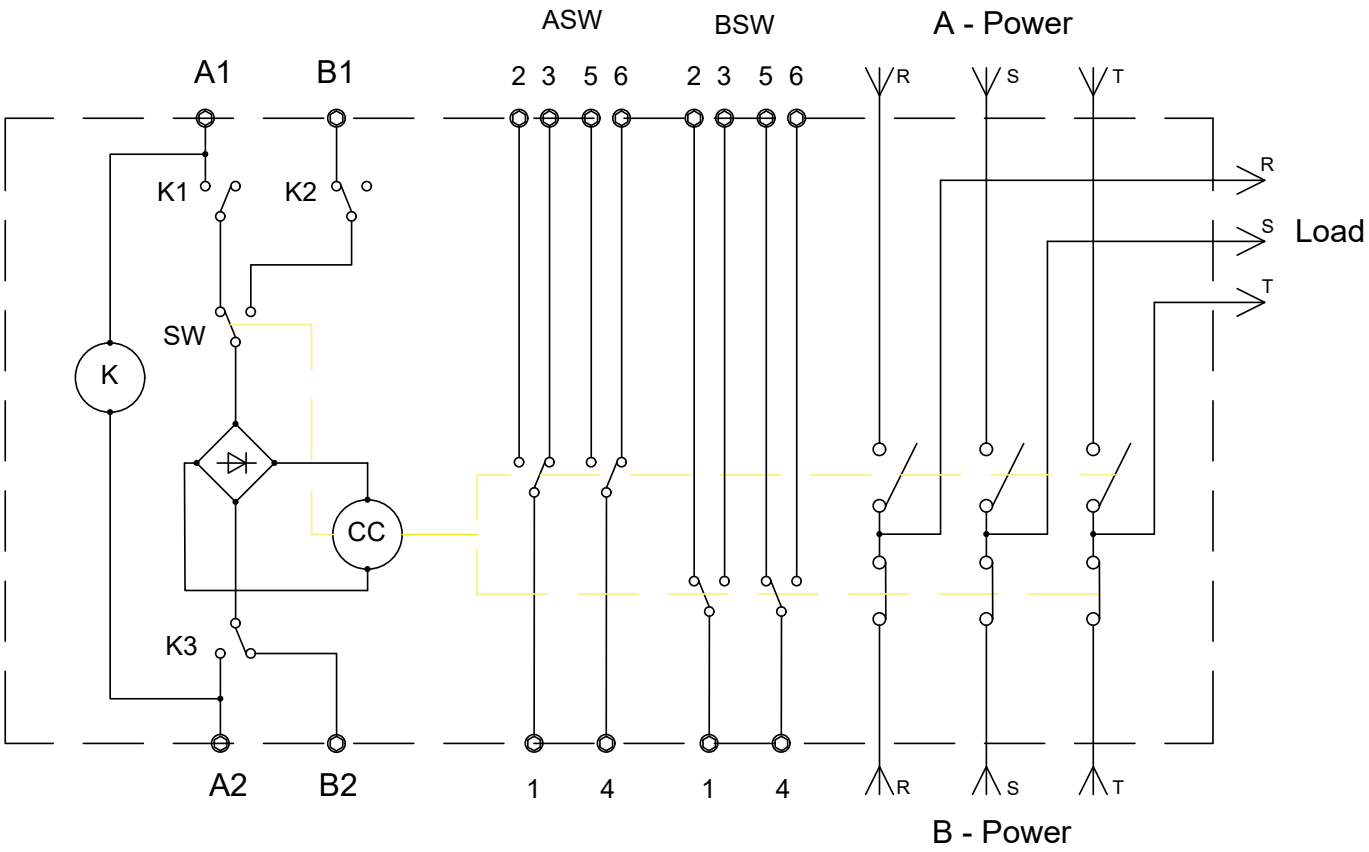






Model	Size / Pole	A	B
BA400NN BA630NN	2P	295	168
	3P	357	230
	4P	419	292

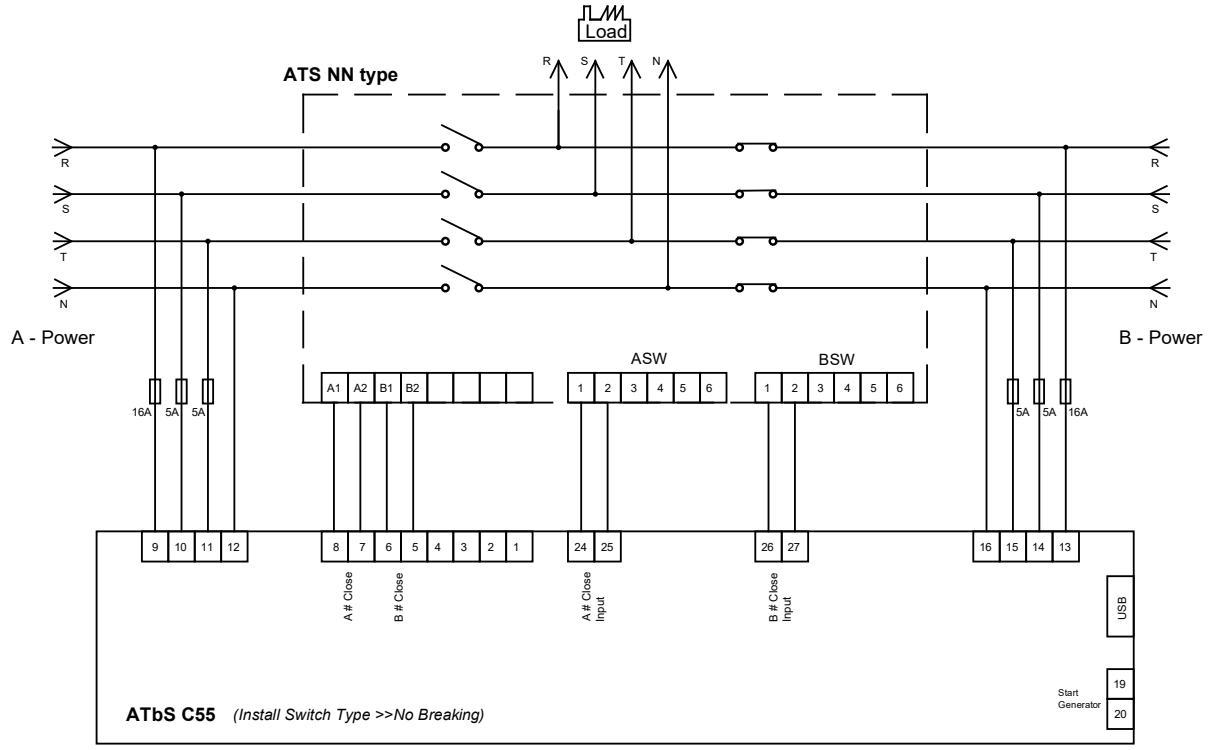
Internal diagram



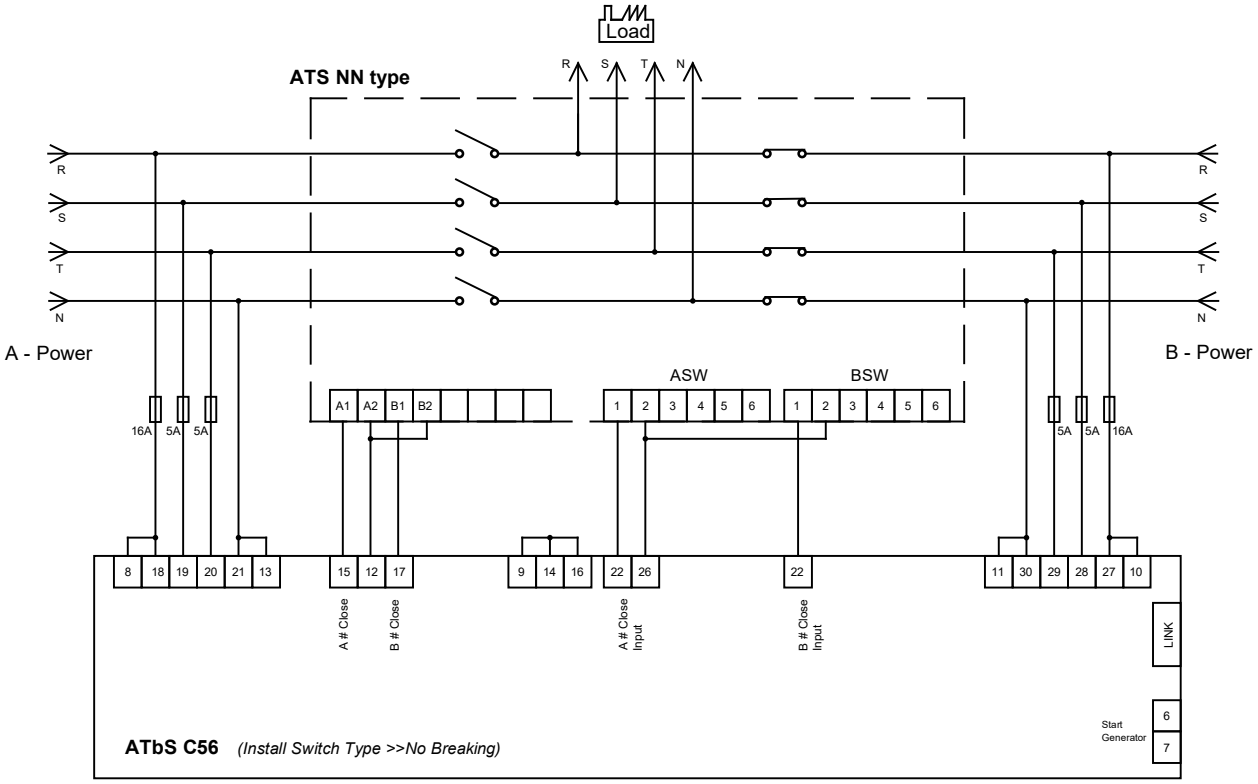
NN-TYPE Automatic Transfer Switches			
A1-A2	A - Power Supply Closing Terminal	CC	Closing Coil
B1-B2	B - Power Supply Closing Terminal	K	Selective Coil
ASW 1-2-3, 4-5-6	A - Power Auxiliary Switch	K1-K2-K3	Selective Switch
BSW 1-2-3, 4-5-6	B - Power Auxiliary Switch	SW	Control Switch

Typical connection diagram

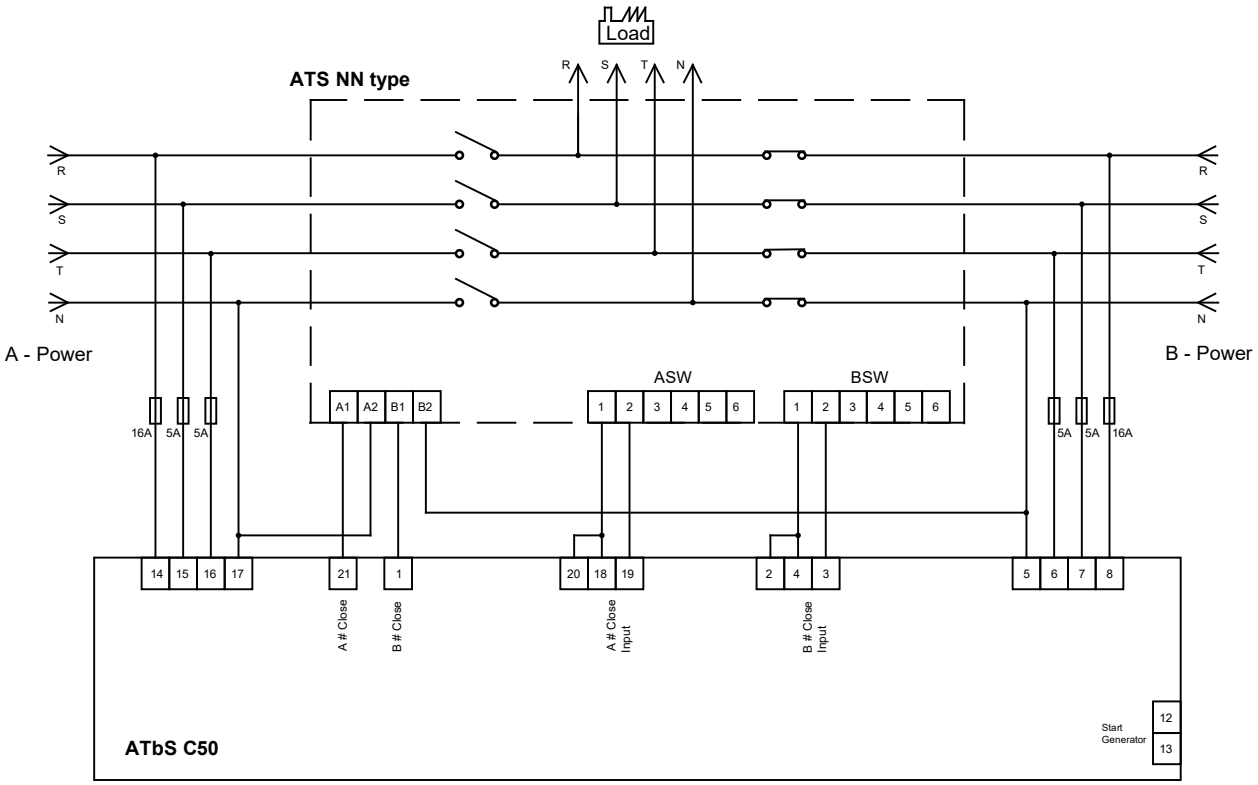
a. NN type with ATbS C55 controller



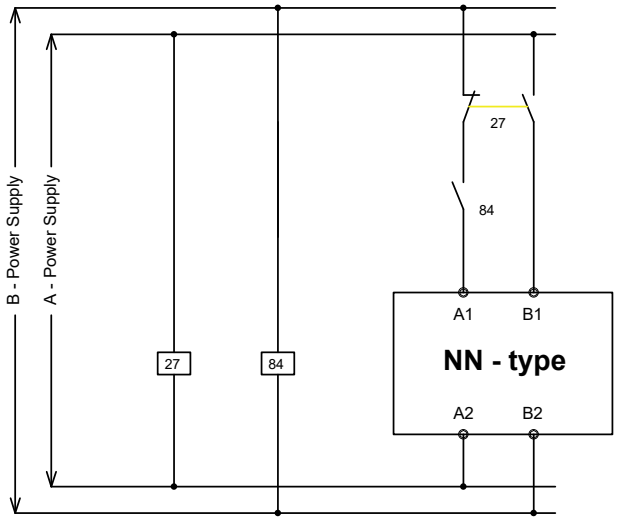
b. NN type with ATbS C56 controller

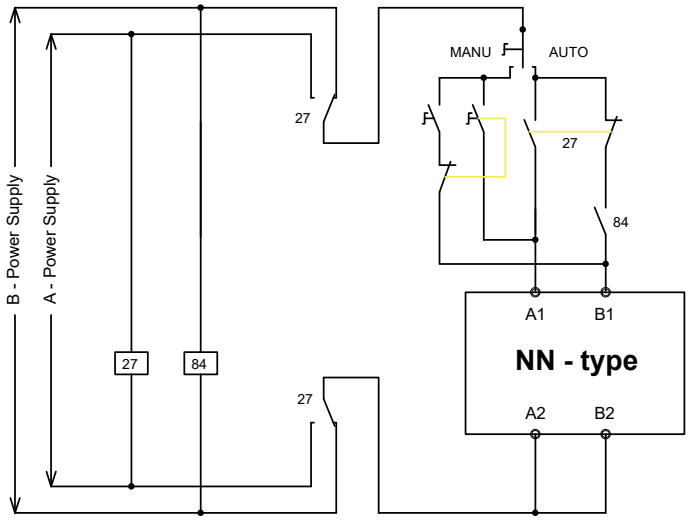


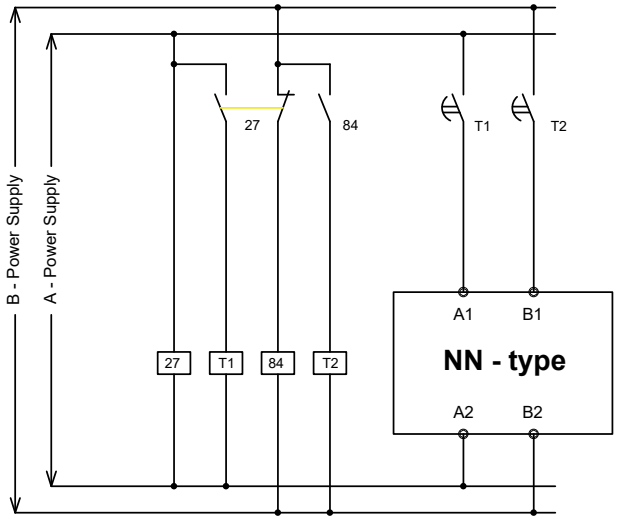
c. NN type with ATbS C50 controller



d. NN type controlled via intermediate relays







NY type Automatic Transfer Switches

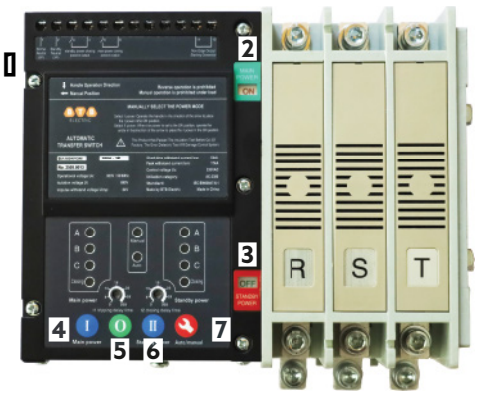
Application

NY type – Two-position switch with built-in controller. This automatic transfer switch (ATS) operates in an ON–ON configuration and comes equipped with an internal automatic controller. A key advantage of the two-position design is its ability to quickly switch between two power sources, with a simple mechanical structure that enhances safety and facilitates installation thanks to its integrated internal wiring diagram. The NY-type ATS is particularly suitable for residential areas, commercial centers, or factories with moderate power demands that require fast and convenient source switching.

Feature

- Compact & Lightweight Design: The compact and lightweight design minimizes mounting space and facilitates convenient installation.
- Protection Against the Remaining Power Source: A time delay for transfer is provided to ensure that the remaining power cannot be fed back into the main power source, thus protecting the load.
- Construction for Safety: For safe operation, a molded construction is used for breaking parts. Additionally, a latching indicator is provided to show the operational status.
- One Coil Instantaneous Excitation Mode: It is a power saving structure with an instantaneous excitation mode in one coil.
- When a fault occurs in the normal power source, this terminal will activate after a short delay to start the generator.
- The ATS is capable of RS485 communication connectivity.

Image and structure

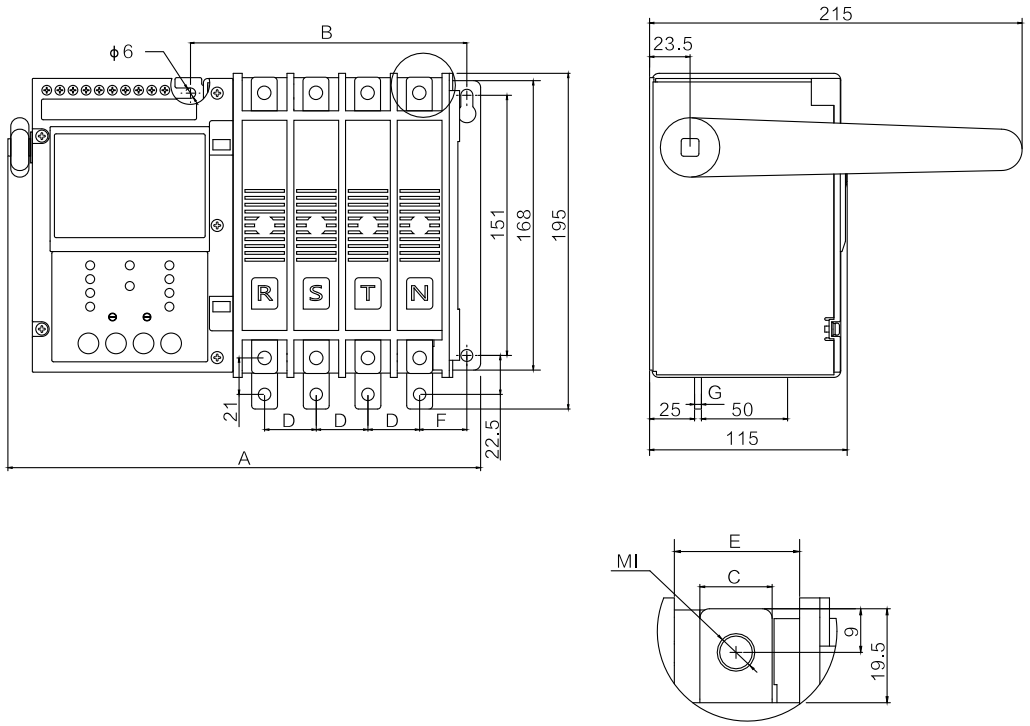


1. Manual operation position
2. A - Power Status indication
3. B - Power Status indication
4. Power ON Button A
5. Not function
6. Power ON Button B
7. Auto / Manual Button

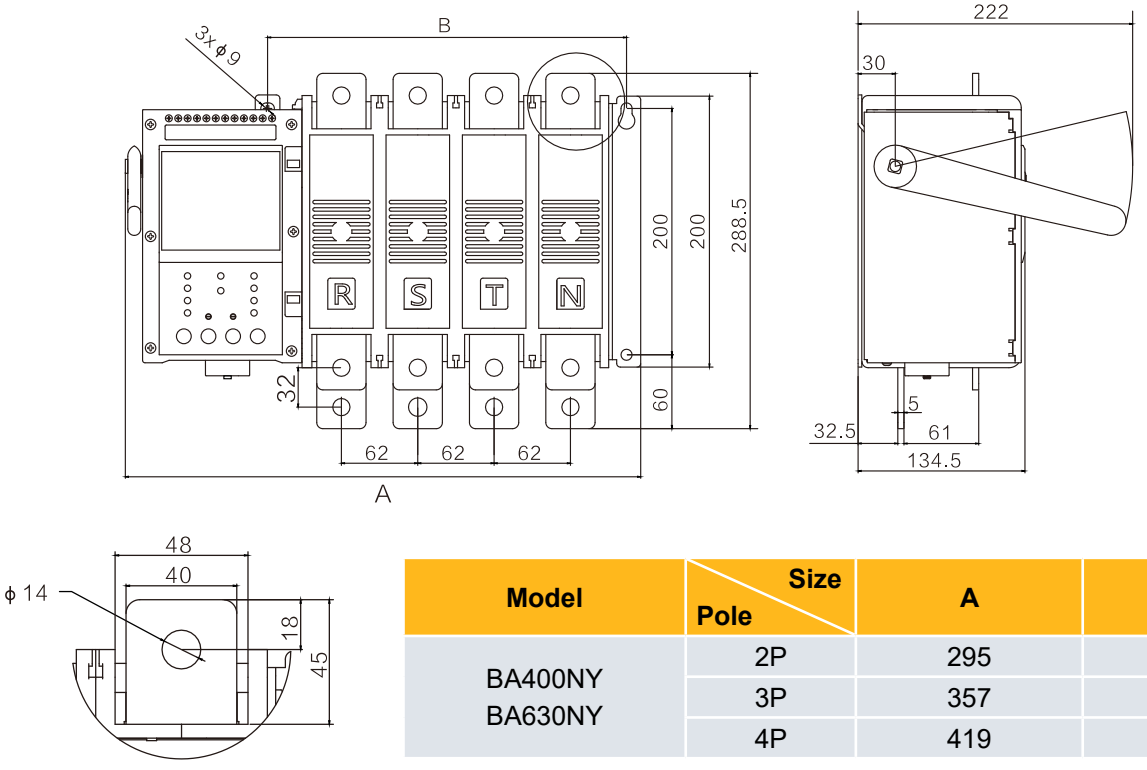
Selection table

Model		BA063NY BA100NY	BA250NY	BA400NY BA630NY
Rated operational current, In		63 / 100A	250A	400 / 630A
Rated Operational Voltage, Ue		AC 500V; DC 125V		
Rated Insulation Voltage, Ui		690V		
Impulse Withstand Voltage, Uimp		8kV		
No. of Pole		2 / 3 / 4		
Powercable connection method		Front bus bar connection		
Controller		Equipped with a built-in ATS controller		
Rated short-time withstand current, Icw		10kA		12kA
Rated short-circuit making capacity, Icm		17kA		30kA
Life time	Electric	35000 time		
	Mechanic	180000 time		
Switching frequency	Time / hour	60		
Switching sequence		ON ↔ ON (A ↔ B)		
Operating Time	Change-over Time	≤ 140ms		≤ 165ms
	Opening Time	≤ 55ms		≤ 65ms
	Contact Transfer Time	≤ 85ms		≤ 125ms
Operating Voltage & Current	DC 110/125V	12A		15A
	AC 100/115V	12A		15A
	AC 200/240V	6A		8A
Control voltage	Max	110% Rated operating voltage		
	Min	85% Rated operating voltage		
Accessaries		Manual handle		
Withstand Voltage for Main circuit		2500V/60s		
Withstand Voltage for Control circuit		1500V/60s		
Weight (kg)	2P	5.6	6.2	12
	3P	6.6	7.4	15
	4P	7.6	8.6	18
Dimensions (WxLxH)	2P	223x215x195mm	231x215x195mm	295x222x289mm
	3P	253x215x195mm	266x215x195mm	357x222x289mm
	4P	283x215x195mm	301x215x195mm	419x222x289mm

Dimensions

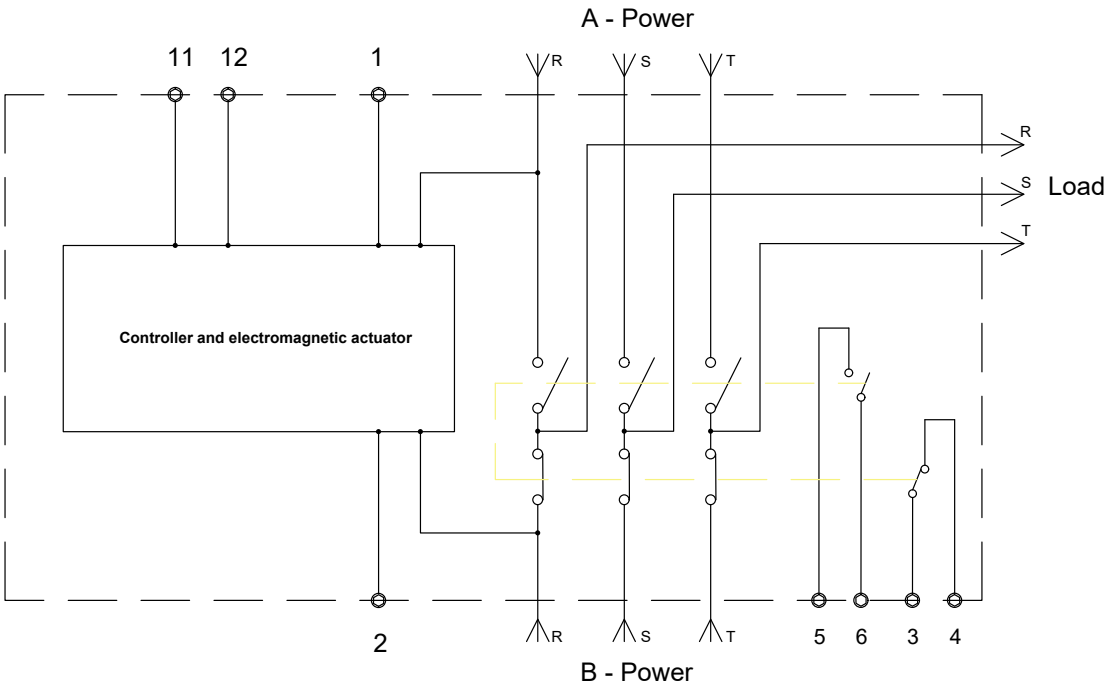


Model	Size / Pole	A	B	C	D	E	F	G	I
BA063NY BA100NY	2P	223	100	15	30	26	27.5	4	M8
	3P	253	130						
	4P	283	160						
BA250NY	2P	231	111	20	35	31	30	4	
	3P	266	146						
	4P	301	181						

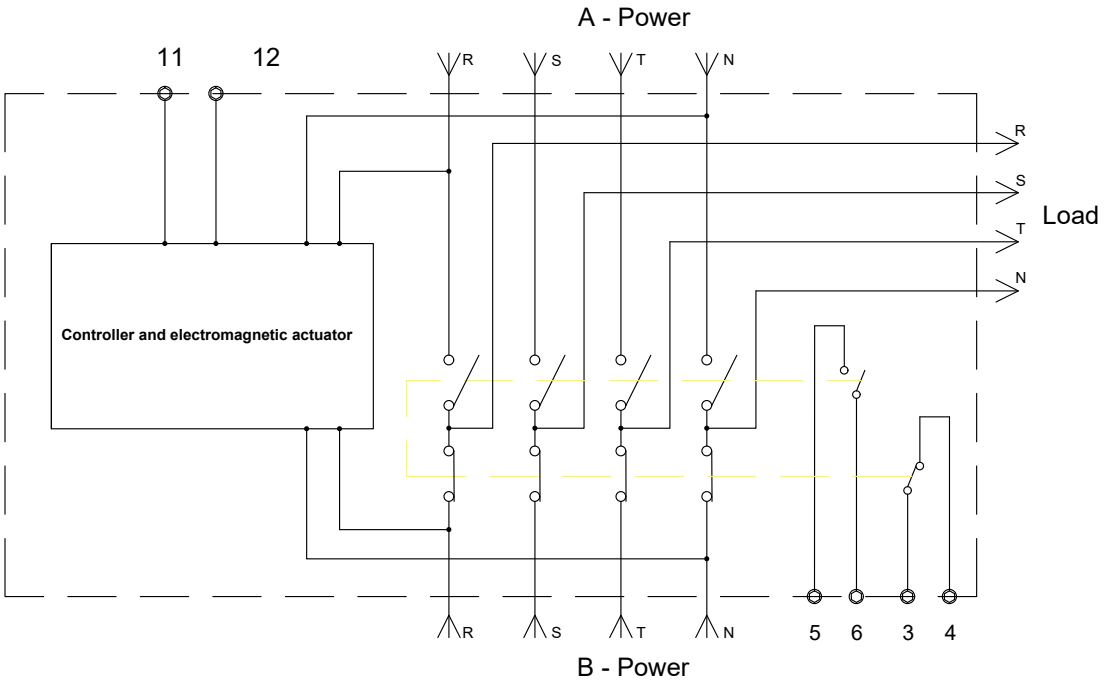


Model	Size / Pole	A	B
BA400NY BA630NY	2P	295	168
	3P	357	230
	4P	419	292

Internal wiring diagram and typical connection diagram



TY-TYPE (3P) Automatic Transfer Switches			
1	A - Power of N-pole (control)	5-6	A - Power Auxiliary Switch
2	B - Power of N-pole (control)	11-12	Start Generator
3-4	B - Power Auxiliary Switch		



TY-TYPE (4P) Automatic Transfer Switches			
1&2	Not in use	5-6	A - Power Auxiliary Switch
3-4	B - Power Auxiliary Switch	11-12	Start Generator

1: When the ATS is 3-phase, the earth wire of the normal power source must be connected to this terminal.

2: When the ATS is 3-phase, the earth wire of the standby power source must be connected to this terminal.

3-4: Standby close: When the standby power of ATS is in closing state, closing signal without power is output from this port.

5-6: Normal close: When the normal power of ATS is in closing state, closing signal without power is output from this port.

11-12: Start Generator: When a fault occurs in the normal power source, this terminal will activate after a short delay.

TN type Automatic Transfer Switches

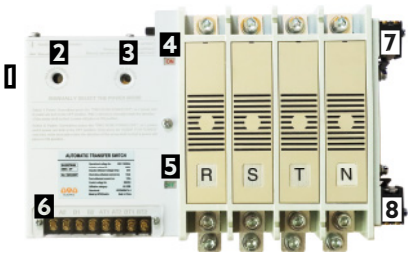
Application

TN type -Three-position switch without controller. This ATS operates in an ON–OFF–ON configuration and requires an external automatic controller. A key advantage of the three-position design is its ability to prevent simultaneous power supply from multiple sources, allowing for clear source status control, enhanced safety, and ease of maintenance. The TN-type ATS is particularly suitable for residential areas, commercial centers, or factories with modest power demands that require high safety during source switching.

Feature

- OFF Position Capability: The ATS controller remains in the “OFF” position when both power sources are unstable, and especially when a signal is received from the fire alarm panel. The ATS will only transfer once the power supply is stable or the fire alarm signal has been cleared. This is a major advantage of the 3-position ATS.
- Compact & Lightweight Design: The compact and lightweight design minimizes mounting space and facilitates convenient installation.
- Excellent Breaking Capacity: The device is designed with a sufficiently large chamber to extinguish the arc during transfer. The arc-extinguishing area is also designed for easy inspection and maintenance.
- Protection Against the Remaining Power Source: A time delay for transfer is provided to ensure that the remaining power cannot be fed back into the main power source, thus protecting the load.
- Construction for Safety: For safe operation, a molded construction is used for breaking parts. Additionally, a latching indicator is provided to show the operational status.
- The TN-series ATS, when combined with a smart controller, also features protection against overvoltage, undervoltage, overfrequency, and underfrequency. Additionally, it can lock the ATS in the OFF position upon receiving a fire alarm signal.

Image and structure

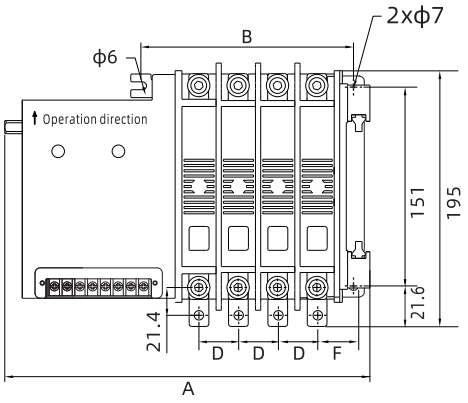


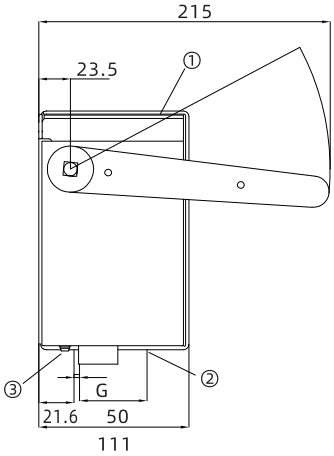
1. Manual operation position
2. Switch the ATS to OFF position
3. Select to close B - Power
4. A - Power Status indication
5. B - Power Status indication
6. Control interface terminal
7. A - Power Auxiliary Switch
8. B - Power Auxiliary Switch

Selection table

Model		BA063TN BA100TN	BA250TN	BA400TN BA630TN
Rated operational current, In		63 / 100A	250A	400 / 630A
Rated Operational Voltage, Ue		AC 500V; DC 125V		
Rated Insulation Voltage, Ui		690V		
Impulse Withstand Voltage, Uimp		8kV		
No. of Pole		2 / 3 / 4		
Powercable connection method		Front bus bar connection		
Controller		Not equipped with a controller		
Rated short-time withstand current, Icw		10kA		12kA
Rated short-circuit making capacity, Icm		17kA		30kA
Life time	Electric	5000 time		
	Mechanic	10000 time		
Switching frequency	Time / hour	60		
Switching sequence		ON ↔ OFF ↔ ON (A ↔ OFF ↔ B)		
Operating Time	Making ‘A’ Power	≤ 70ms		≤ 85ms
	Breaking "A" Power	≤ 25ms		≤ 30ms
	Making ‘B’ Power	≤ 85ms		≤ 100ms
	Breaking "B" Power	≤ 25ms		≤ 30ms
Operating Voltage & Current	DC 110/125V	6A		8A
	AC 100/115V	6A		8A
	AC 200/240V	4A		5A
	Trip Coil	3A		
Control voltage	Max	110% Rated operating voltage		
	Min	85% Rated operating voltage		
Accessaries		Manual handle		
Withstand Voltage for Main circuit		2500V/60s		
Withstand Voltage for Control circuit		1500V/60s		
Weight (kg)	2P	5.8	6.2	12
	3P	6.8	7.3	15
	4P	7.6	8.4	18
Dimensions (WxLxH)	2P	223x215x195mm	231x215x195mm	295x222x289mm
	3P	253x215x195mm	266x215x195mm	357x222x289mm
	4P	283x215x195mm	301x215x195mm	419x222x289mm

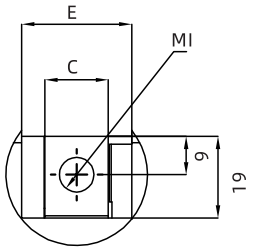
Dimensions



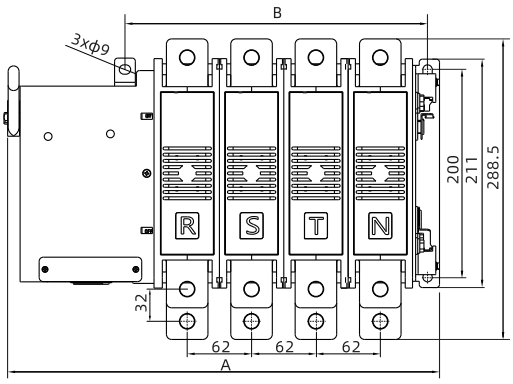


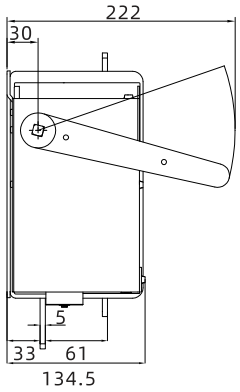
Note:

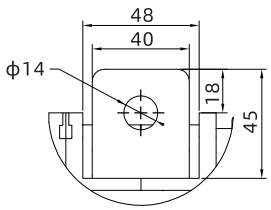
1. Common power input terminals are used by the input terminals
2. Standby power input terminals are used by the input terminals
3. Load power output terminals



Model	Size / Pole	A	B	C	D	E	F	G	I
BA063TN BA100TN	2P	223	100	15	30	26	27.5	4	M8
	3P	253	130						
	4P	283	160						
BA250TN	2P	231	111	20	35	31	30	4	
	3P	266	146						
	4P	301	181						

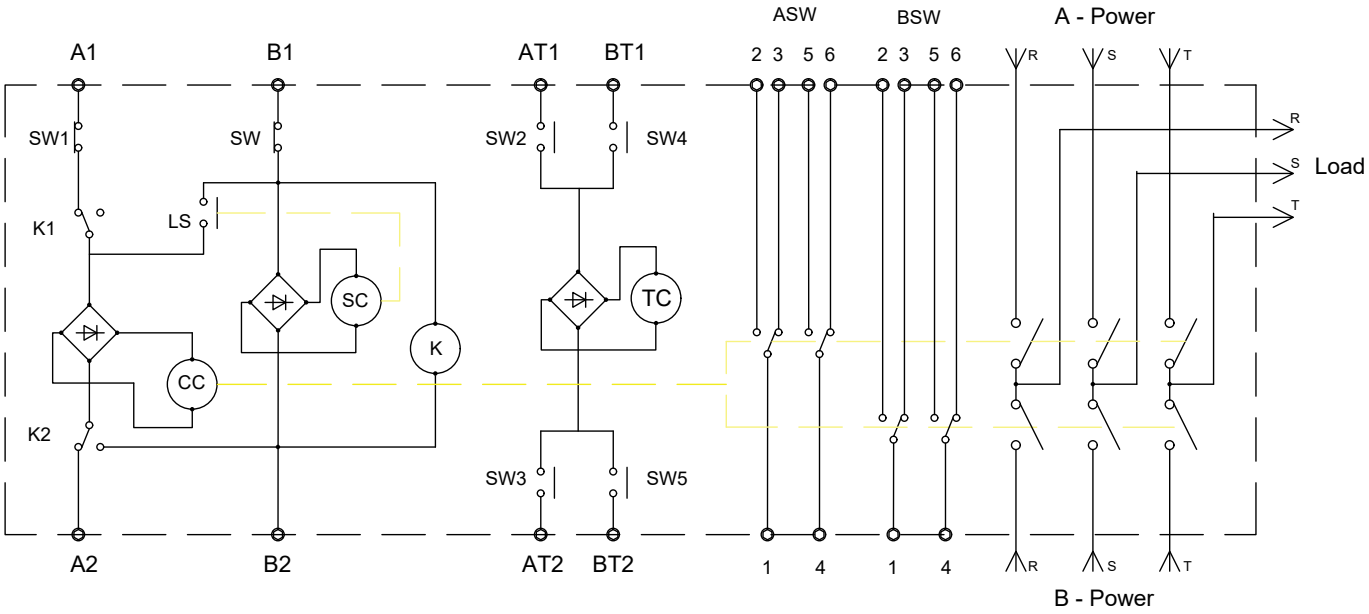






Model	Size / Pole	A	B
BA400TN BA630TN	2P	295	168
	3P	357	230
	4P	419	292

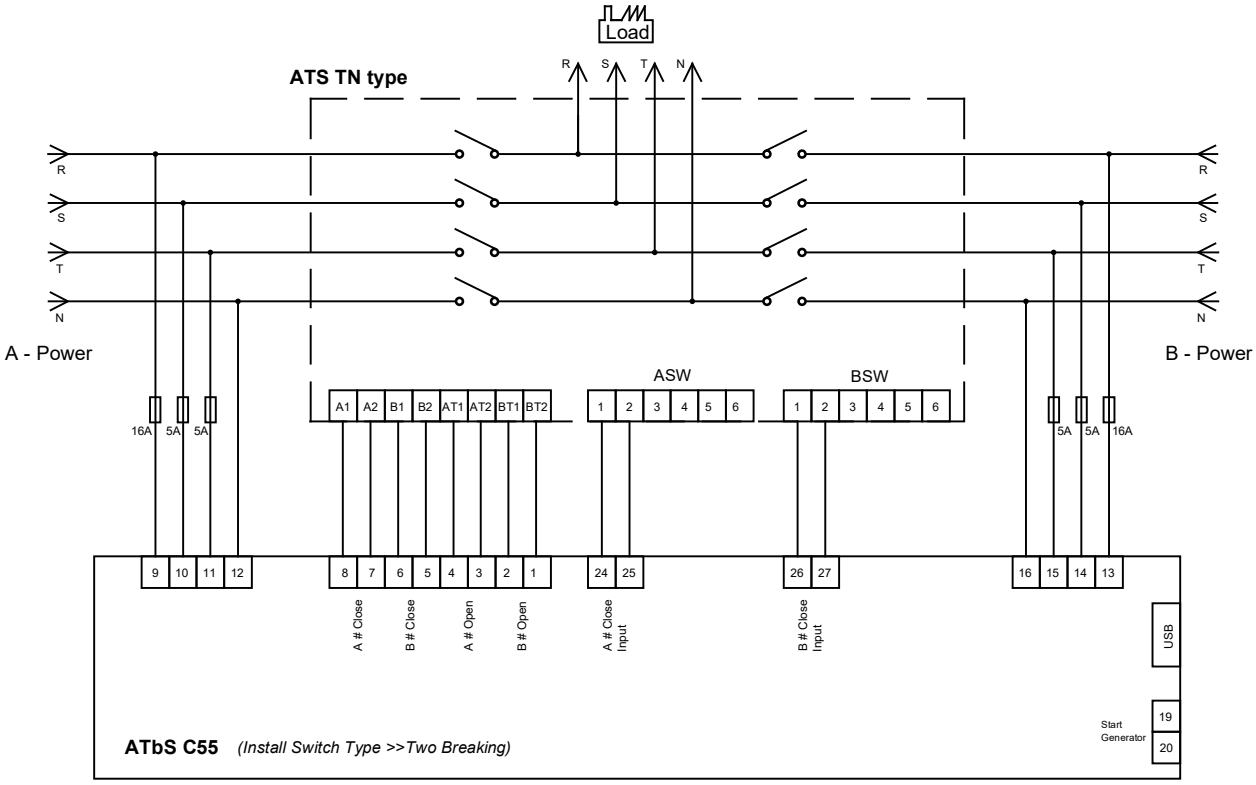
Internal diagram



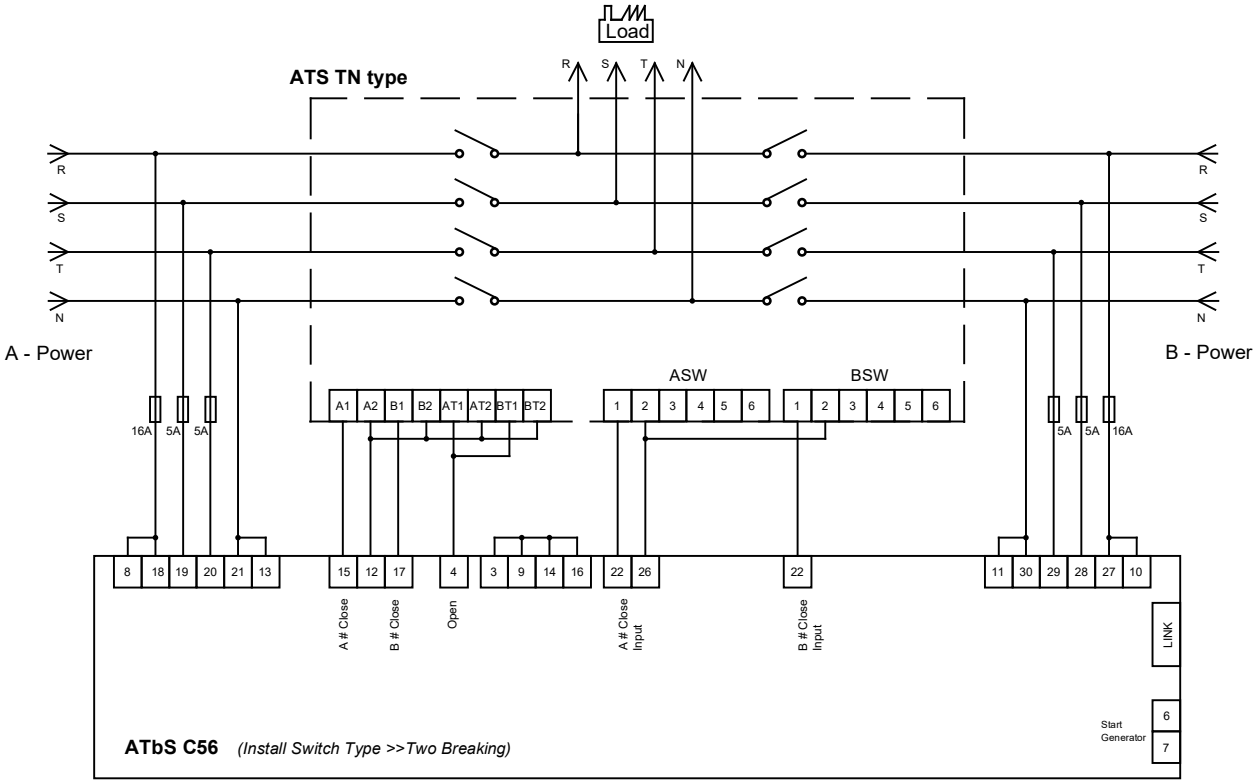
TN-TYPE Automatic Transfer Switches			
A1-A2	A - Power Supply Closing Terminal	CC	Closing Coil
B1-B2	B - Power Supply Closing Terminal	SC / K	Selective Coil
AT1-AT2	A - Power Trip Terminal	TC	Tripping Coil
BT1-BT2	B - Power Trip Terminal	SW-SW1	Control Switch
ASW 1-2-3, 4-5-6	A - Power Auxiliary Switch	LS	Selective Switch
BSW 1-2-3, 4-5-6	B - Power Auxiliary Switch	K1-K2	Selective Switch

Typical connection diagram

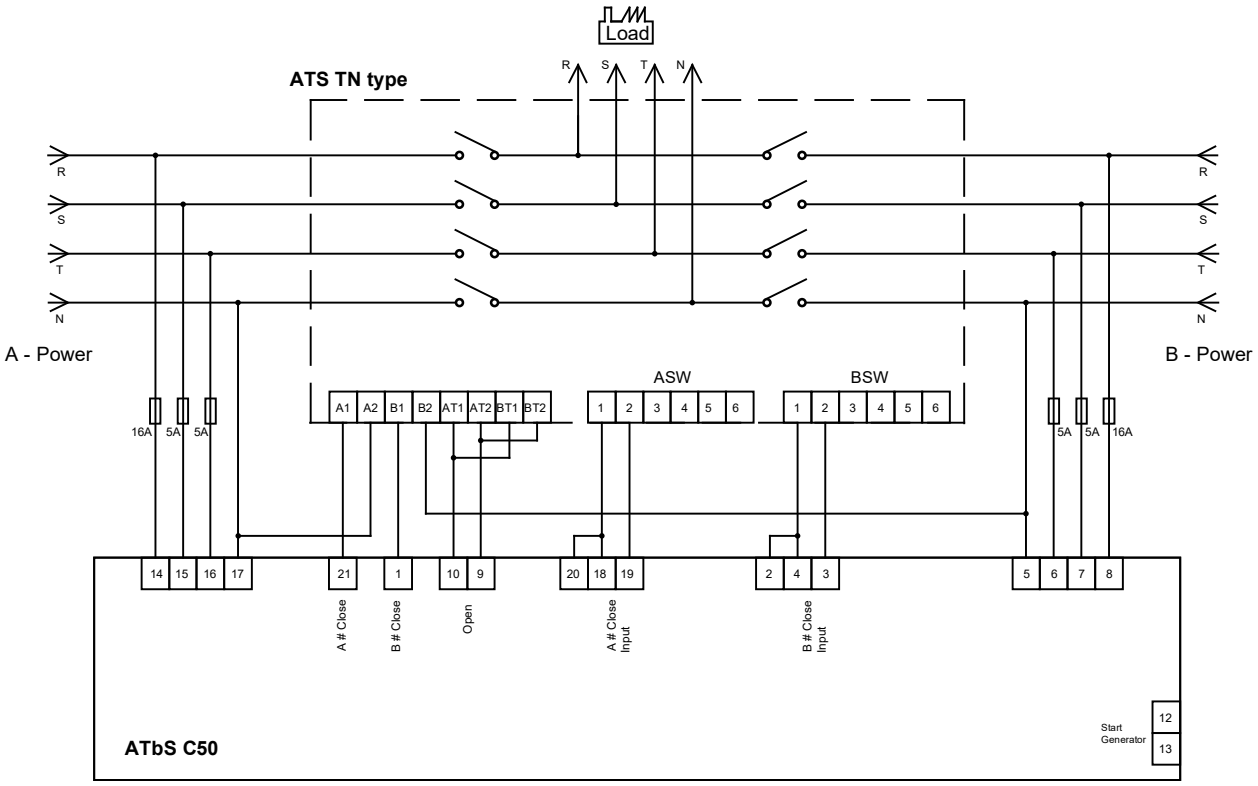
a. TN type with ATbS C55 controller



b. TN type with ATbS C56 controller



c. TN type with ATbS C50 controller



TY type | Automatic Transfer Switches

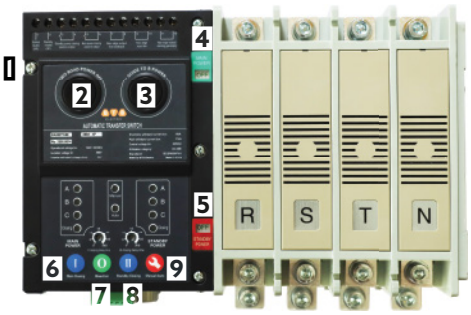
Application

TY type - Three-position switch with controller. It operates in an ON–OFF–ON configuration and comes equipped with an integrated automatic controller. The three-position design offers key advantages, including the prevention of simultaneous power supply from multiple sources, clear source status control, enhanced safety, and ease of maintenance. Additionally, the built-in controller simplifies installation and operation. The TY-type ATS is especially suitable for residential areas, commercial buildings, or factories with moderate power demands that require a high level of safety during power source switching.

Feature

- OFF Position Capability: The ATS controller remains in the “OFF” position when both power sources are unstable, and especially when a signal is received from the fire alarm panel. The ATS will only transfer once the power supply is stable or the fire alarm signal has been cleared. This is a major advantage of the 3-position ATS.
- Compact & Lightweight Design: The compact and lightweight design minimizes mounting space and facilitates convenient installation.
- Excellent Breaking Capacity: The device is designed with a sufficiently large chamber to extinguish the arc during transfer. The arc-extinguishing area is also designed for easy inspection and maintenance.
- Protection Against the Remaining Power Source: A time delay for transfer is provided to ensure that the remaining power cannot be fed back into the main power source, thus protecting the load.
- Construction for Safety: For safe operation, a molded construction is used for breaking parts. Additionally, a latching indicator is provided to show the operational status.
- The TY-series ATS can lock in the OFF position upon receiving a fire alarm signal and can start the generator when a power outage from the grid is detected.
- When a fault occurs in the normal power source, this terminal will activate after a short delay to start the generator.
- The ATS is capable of RS485 communication connectivity.

Image and structure

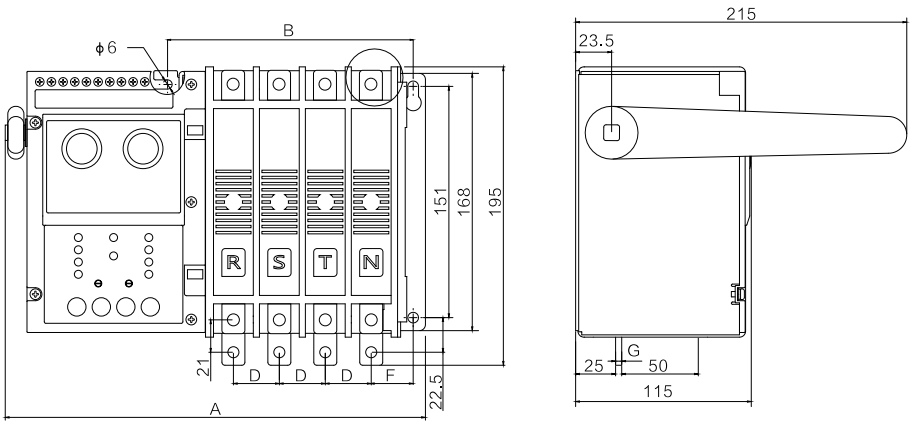


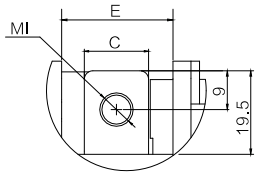
1. Manual operation position
2. Switch the ATS to OFF position
3. Select to close B - Power
4. A - Power Status indication
5. B - Power Status indication
6. Power ON Button A
7. Power OFF Button
8. Power ON Button B
9. Auto / Manual Button

Selection table

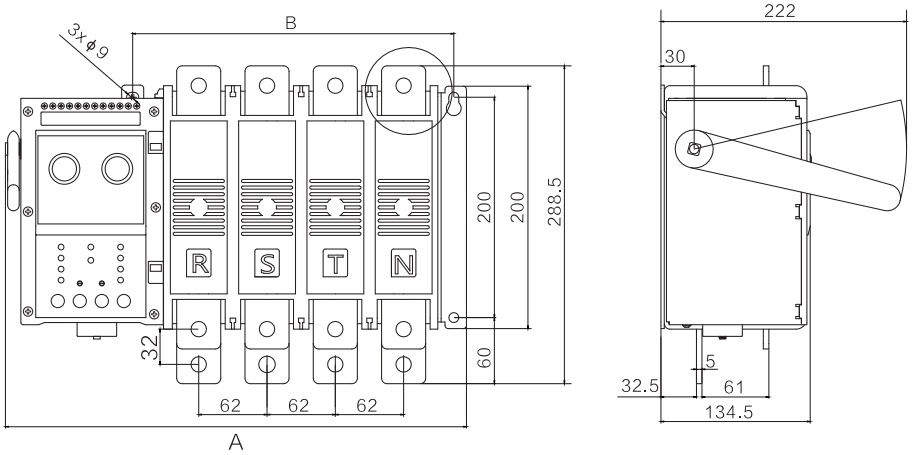
Model		BA063TY BA100TY	BA250TY	BA400TY BA630TY
Rated operational current, In		63 / 100A	250A	400 / 630A
Rated Operational Voltage, Ue		AC 500V; DC 125V		
Rated Insulation Voltage, Ui		690V		
Impulse Withstand Voltage, Uimp		8kV		
No. of Pole		2 / 3 / 4		
Powercable connection method		Front bus bar connection		
Controller		Equipped with a built-in ATS controller		
Rated short-time withstand current, Icw		10kA		12kA
Rated short-circuit making capacity, Icm		17kA		30kA
Life time	Electric	5000 time		
	Mechanic	10000 time		
Switching frequency	Time / hour	60		
Switching sequence		ON ↔ OFF ↔ ON (A ↔ OFF ↔ B)		
Operating Time	Making ‘A’ Power	≤ 70ms		≤ 85ms
	Breaking "A" Power	≤ 25ms		≤ 30ms
	Making ‘B’ Power	≤ 85ms		≤ 100ms
	Breaking "B" Power	≤ 25ms		≤ 30ms
Operating Voltage & Current	DC 110/125V	6A		8A
	AC 100/115V	6A		8A
	AC 200/240V	4A		5A
	Trip Coil	3A		
Control voltage	Max	110% Rated operating voltage		
	Min	85% Rated operating voltage		
Accessaries		Manual handle		
Withstand Voltage for Main circuit		2500V/60s		
Withstand Voltage for Control circuit		1500V/60s		
Weight (kg)	2P	5.6	6.2	12
	3P	6.6	7.4	15
	4P	7.6	8.6	18
Dimensions (WxLxH)	2P	223x215x195mm	231x215x195mm	295x222x289mm
	3P	253x215x195mm	266x215x195mm	357x222x289mm
	4P	283x215x195mm	301x215x195mm	419x222x289mm

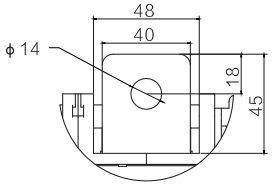
Dimensions





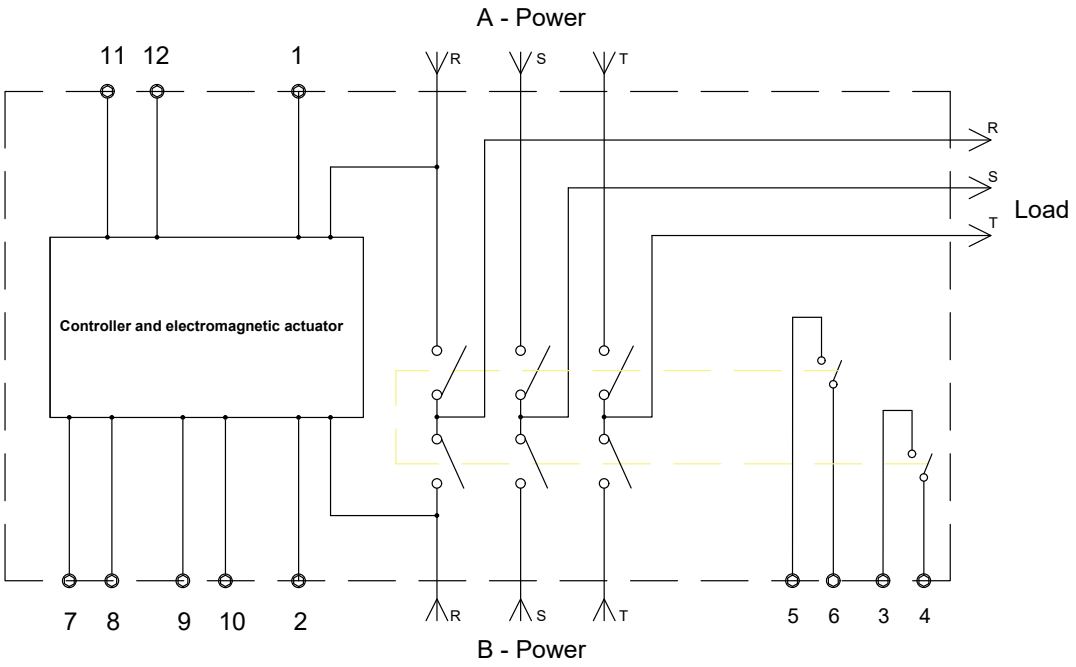
Model	Size / Pole	A	B	C	D	E	F	G	I
BA063TY BA100TY	2P	223	100	15	30	26	27.5	4	M8
	3P	253	130						
	4P	283	160						
BA250TY	2P	231	111	20	35	31	30	4	
	3P	266	146						
	4P	301	181						



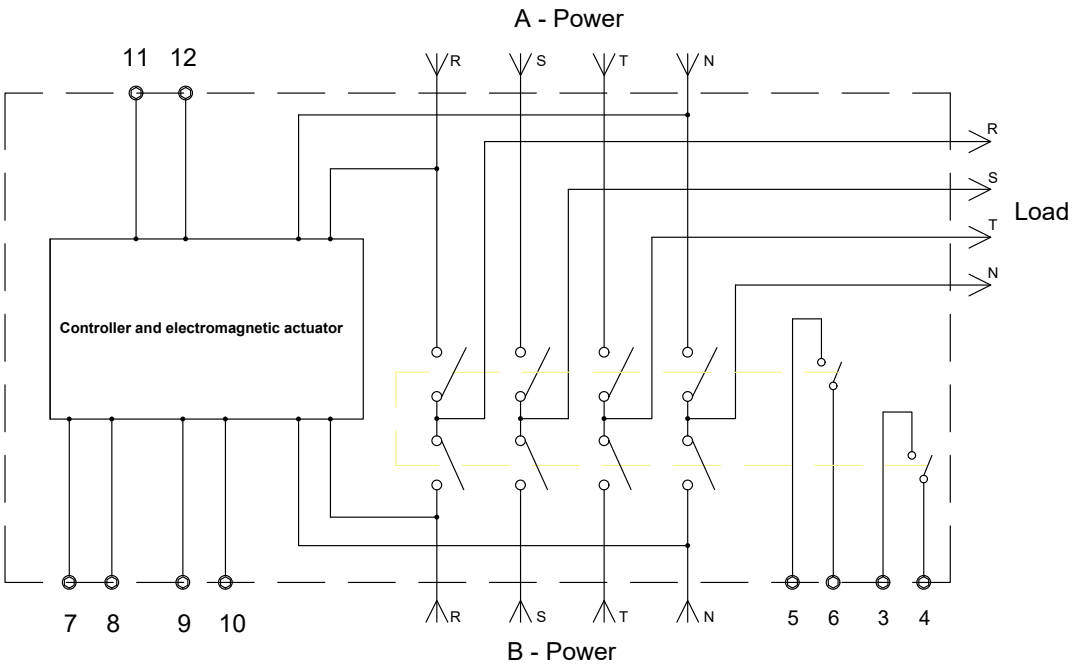


Model	Size / Pole	A	B
BA400TY BA630TY	2P	295	168
	3P	357	230
	4P	419	292

Internal wiring diagram and typical connection diagram



TY-TYPE (3P) Automatic Transfer Switches				
1	A - Power of N-pole (control)	7-8	Fire-Fighting Feedback	
2	B - Power of N-pole (control)	9-10	Fire-Fighting	
3-4	B - Power Auxiliary Switch	11-12	Start Generator	
5-6	A - Power Auxiliary Switch			



TY-TYPE (4P) Automatic Transfer Switches				
1&2	Not in use	7-8	Fire-Fighting Feedback	
3-4	B - Power Auxiliary Switch	9-10	Fire-Fighting	
5-6	A - Power Auxiliary Switch	11-12	Start Generator	

1: When the ATS is 3-phase, the earth wire of the normal power source must be connected to this terminal.

2: When the ATS is 3-phase, the earth wire of the standby power source must be connected to this terminal.

3-4: Standby Close: When the standby power source of the ATS is in the closed state, a non-powered closing signal is output from this terminal.

5-6: Normal close: When the normal power of ATS is in closing state, closing signal without power is output from this port.

7-8: Fire-Fighting Feedback: When the ATS is in the double-disconnection state, the fire-fighting terminal is activated.

9-10: Fire-Fighting: Connect the fire-fighting terminal — the double-disconnection indicator will turn on, and the ATS will switch to the double-disconnection state. To reset, disconnect the terminal and press the automatic/manual pushbutton.

11-12: Start Generator: When a fault occurs in the normal power source, this terminal will activate after a short delay.

PC type | Automatic Transfer Switches

Application

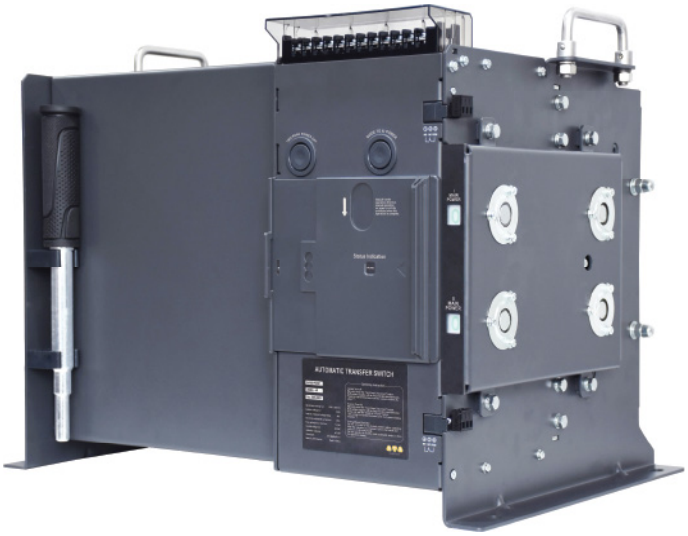
PC type – Three-position switch with PC design. This device operates in an ON–OFF–ON configuration and is designed similarly to a fixed ACB (Air Circuit Breaker). The three-position design offers several key advantages, including the prevention of simultaneous power supply from multiple sources, clear source status indication, enhanced safety, and ease of maintenance. The PC-type ATS is particularly suitable for residential areas, commercial buildings, or factories with high-capacity power transfer needs and strict safety requirements.

Feature

- Perfect transfer mechanism: With a spring-loaded transfer mechanism, the ATS can be completely and reliably transferred. It always includes an independent “OFF” position in all cases.
- Sufficient current capacity: The current-carrying contacts are designed with adequate capacity to withstand overcurrent conditions.
- Compact & Lightweight Design: The compact and lightweight design minimizes mounting space and facilitates convenient installation.
- Excellent Breaking Capacity: The device is designed with a sufficiently large chamber to extinguish the arc during transfer. The arc-extinguishing area is also designed for easy inspection and maintenance.
- Protection Against the Remaining Power Source: A time delay for transfer is provided to ensure that the remaining power cannot be fed back into the main power source, thus protecting the load.
- Easier busbar arrangement: When the ATS is installed together with the ACB in switchgear, the busbar can be easily arranged.

Image and structure

1. Manual operation position (when in manual mode)
2. Indicates manual /automatic / non-operating status
3. Switch the ATS to OFF position
4. Select to close B - Power
5. A - Power Status indication
6. B - Power Status indication
7. Control interface terminal
8. Lever used for manual operation

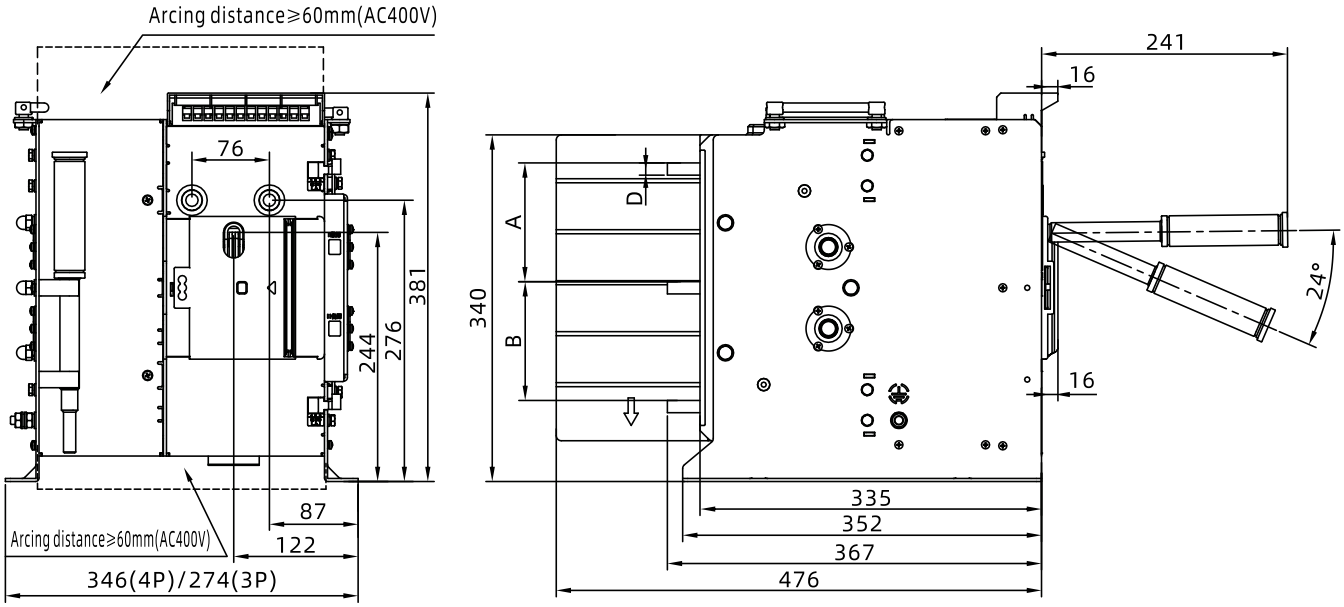


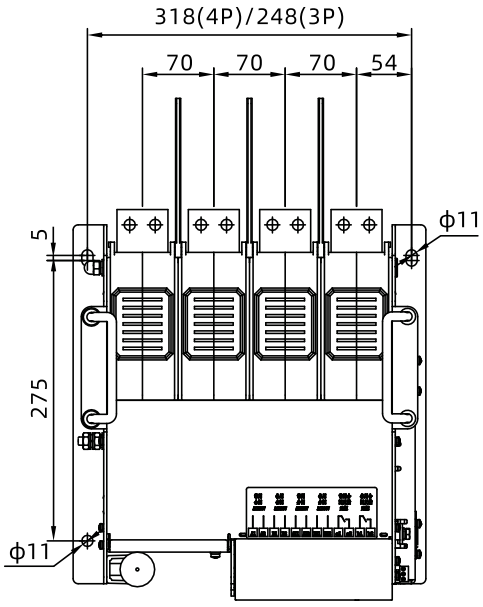
Selection table

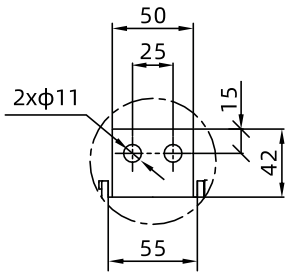
Model		PC800PC PC10HPC PC12HPC	PC16HPC PC20HPC
Rated operational current, In		800 / 1000 / 1250A	1600 / 2000A
Rated Operational Voltage, Ue		AC 690V; DC 240V	
Rated Insulation Voltage, Ui		1000V	
Impulse Withstand Voltage, Uimp		12kV	
No. of Pole		3 / 4	
Powercable connection method		Connect the rear busbar	
Controller		Not equipped with a controller	
Rated short-time withstand current, Icw		25kA	35kA
Rated short-circuit making capacity, Icm		52kA	73.5kA
Life time	Electric	5000 time	
	Mechanic	10000 time	
Switching frequency	Time / hour	50	20
Switching sequence		ON ↔ OFF ↔ ON (A ↔ OFF ↔ B)	
Operating Time	Making ‘A’ Power	≤ 150ms	≤ 150ms
	Breaking "A" Power	≤ 110ms	≤ 110ms
	Making ‘B’ Power	≤ 160ms	≤ 160ms
	Breaking "B" Power	≤ 110ms	≤ 110ms
Operating Voltage & Current	DC 110/125V	45A	50A
	AC 100/115V	45A	50A
	AC 200/240V	30A	40A
	Trip Coil	6A	8A
Control voltage	Max	110% Rated operating voltage	
	Min	85% Rated operating voltage	
Accessaries		Manual handle	
Withstand Voltage for Main circuit		4000V/60s	
Withstand Voltage for Control circuit		2000V/60s	
Weight (kg)	3P	39.5kg	60kg
	4P	50kg	72.5kg
Dimensions (WxLxH)	3P	274x476x381mm	396x476x381mm
	4P	346x476x381mm	506x476x381mm

Dimensions

800A-1250A



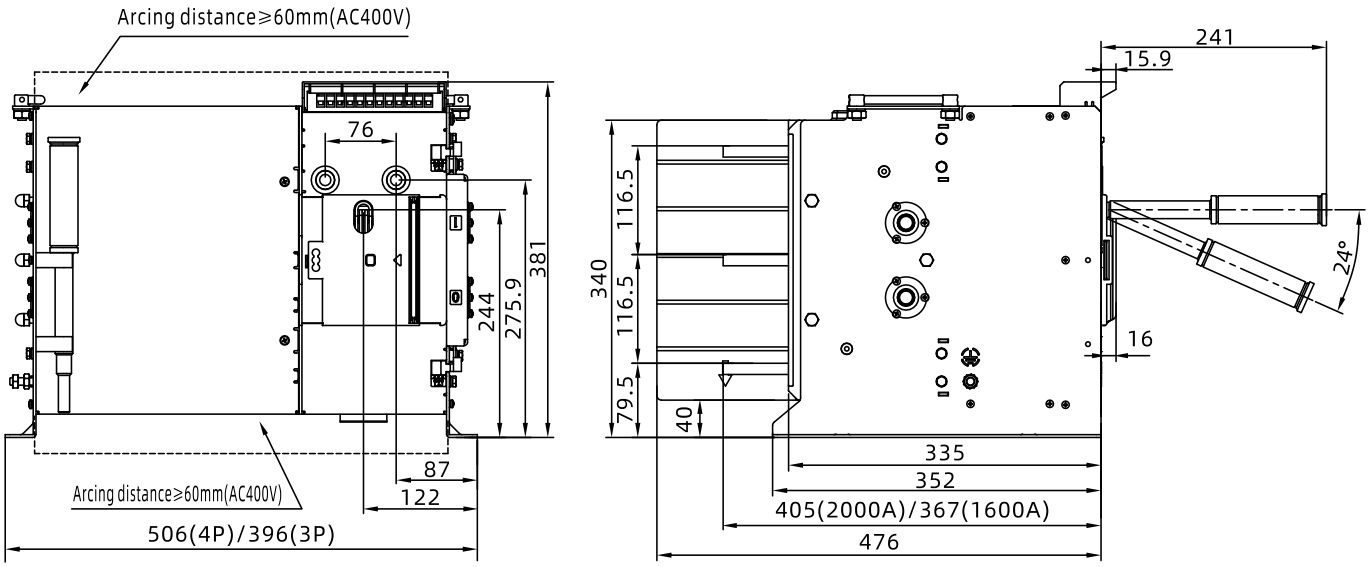


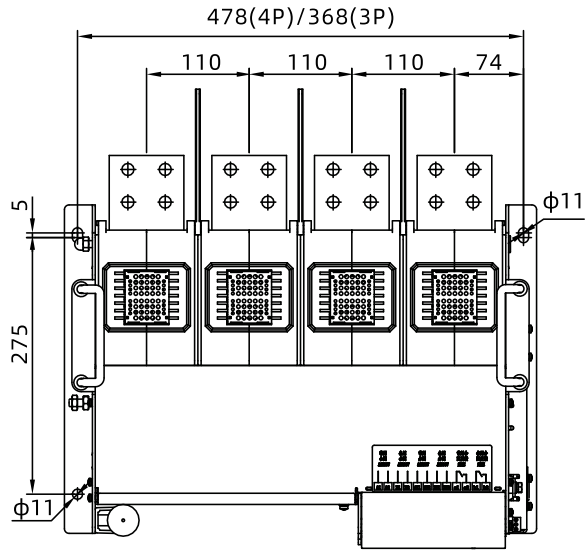


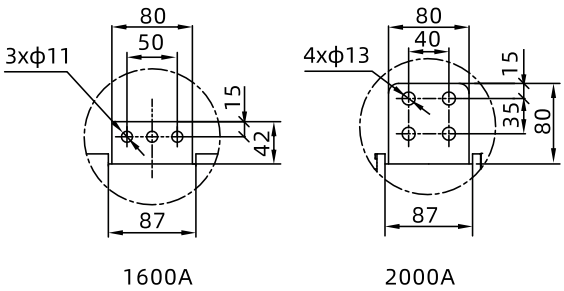
Unit: mm

Code	800A	1000A	1250A
A	113	114.5	116.5
B	113	114.5	116.5
D	5	8	12

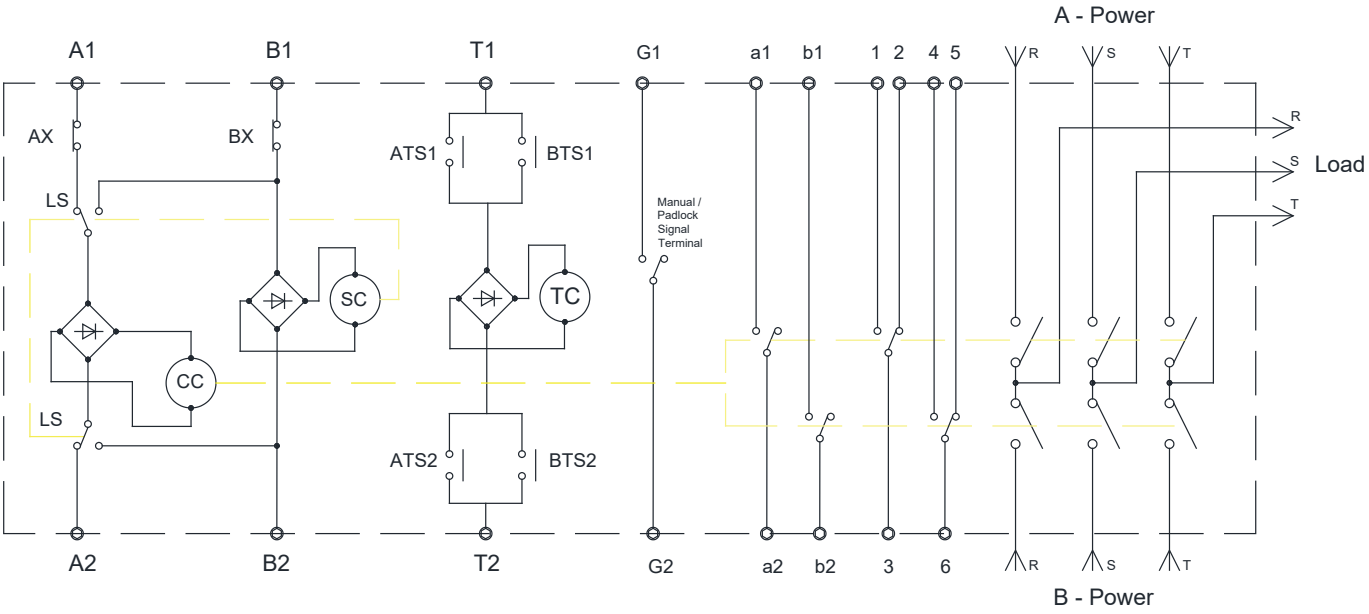
1600A-2000A


Arcing distance≥60mm(AC400V)
76
381
275.9
244
87
122
Arcing distance≥60mm(AC400V)
506(4P)/396(3P)
241
15.9
116.5
116.5
340
79.5
40
24°
16
335
352
405(2000A)/367(1600A)
476


478(4P)/368(3P)
110
110
110
74
5
275
ϕ11
ϕ11


80
50
3xϕ11
15
42
87
1600A
80
40
4xϕ13
15
35
80
87
2000A

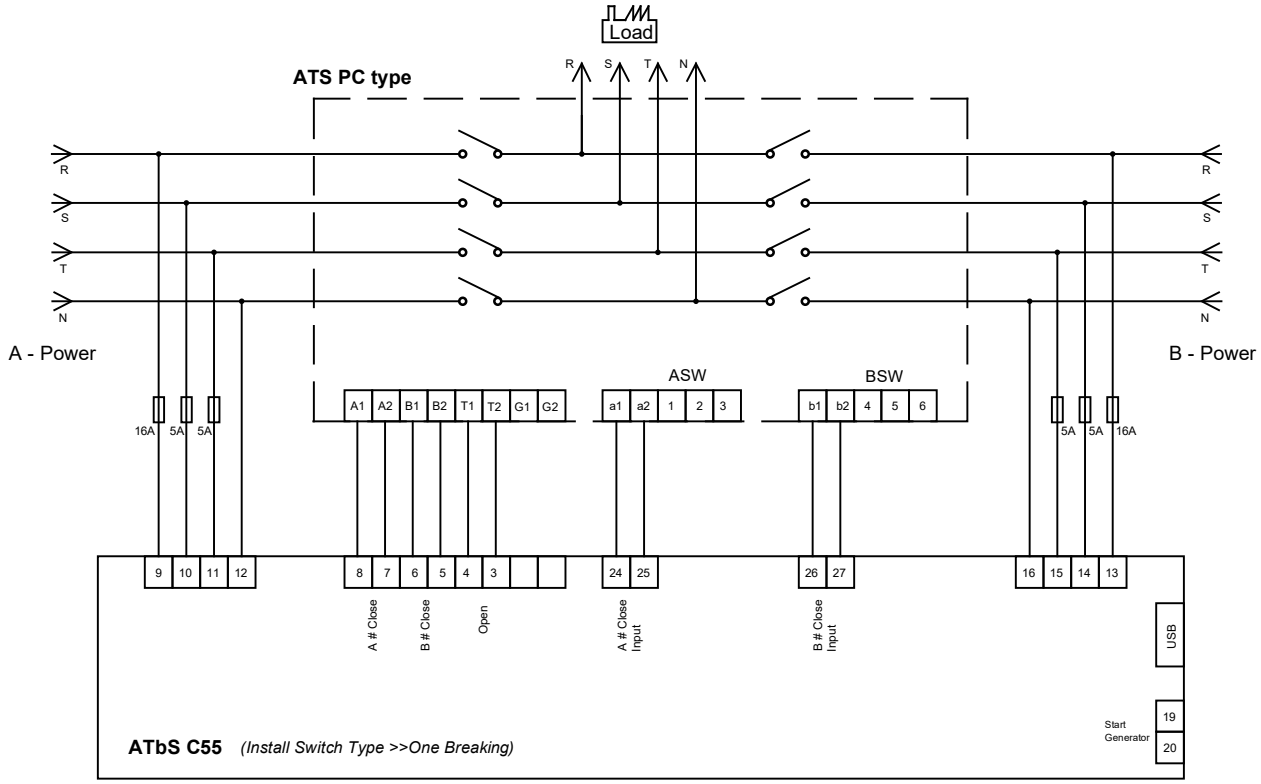
Internal diagram



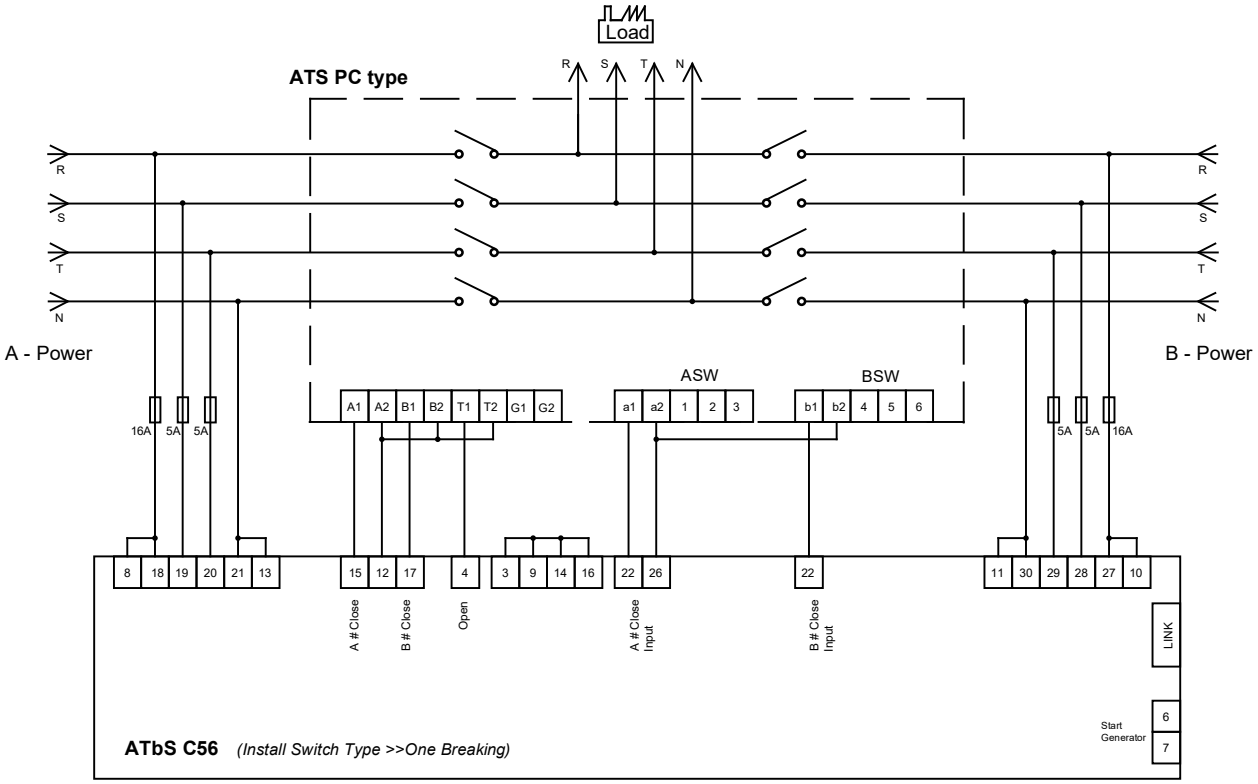
PC-TYPE Automatic Transfer Switches			
A1-A2	A - Power Supply Closing Terminal	CC	Closing Coil
B1-B2	B - Power Supply Closing Terminal	SC	Selective Coil
T1-T2	Double - Power Trip Terminal	TC	Tripping Coil
G1-G2	Manual / Padlock Signal Terminal	AX-BX	Control Switch
a1-a2	A - Power Auxiliary Switch	LS	Selective Switch
b1-b2	B - Power Auxiliary Switch	AUX (1-2-3, 4,5,6)	Auxiliary Switch

Typical connection diagram

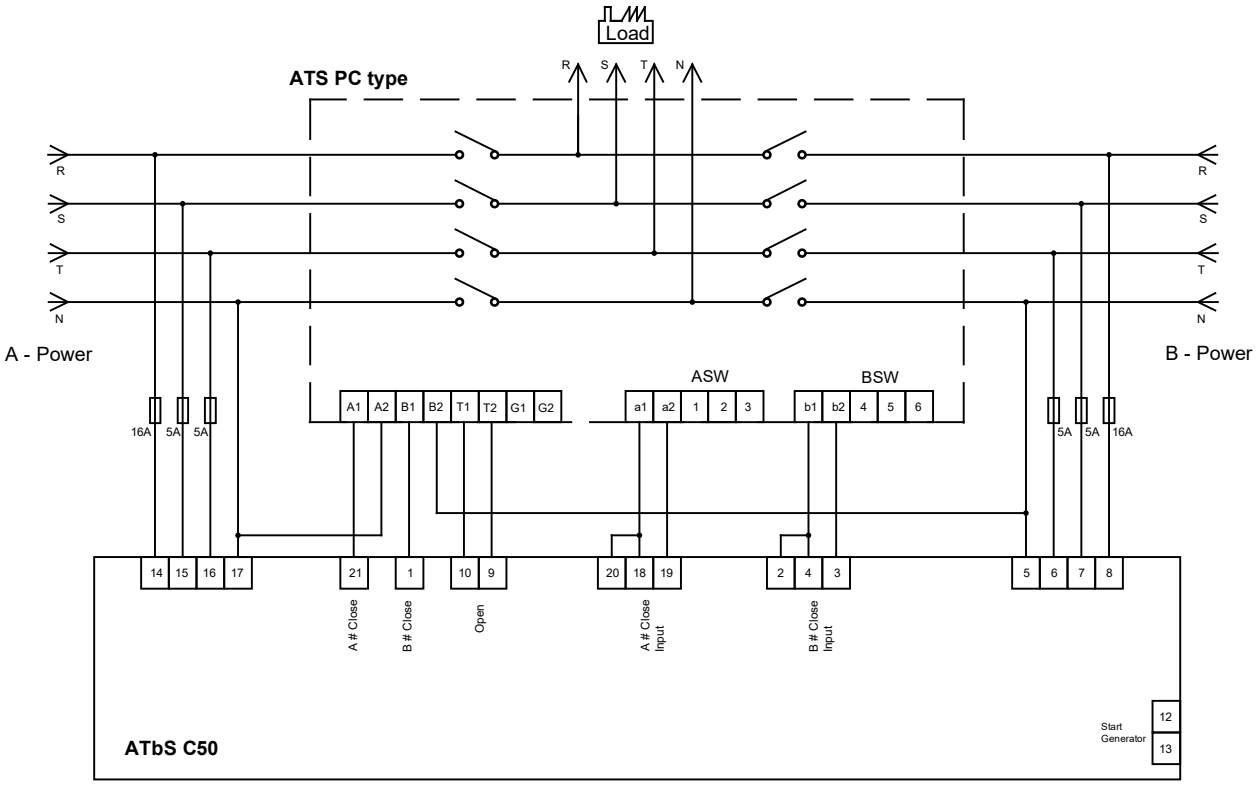
a. PC type with ATbS C55 controller



b. PC type with ATbS C56 controller



c. PC type with ATbS C50 controller



HY type | Automatic Transfer Switches

Application

HY type - Two-position automatic switch for residential use. This ATS operates in an ON–ON configuration and is capable of automatic self-control without the need for external devices. It features a simple, compact design, fast operation, and easy installation, making it ideal for modern homes.

Feature

- Automatic source switching: Automatically switches between the utility power and the generator in the event of a power outage.
- Auto/Manual mode selection: Allows switching to manual mode, in which the ATS functions like a basic circuit breaker.
- ON–ON configuration: Two power source states (main and backup), with no intermediate OFF position.
- Compact design: Suitable for installation in limited residential spaces.
- Fast operation: Ensures short transfer time, minimizing power interruption.
- Integrated automatic control: Operates automatically without the need for an external controller, making installation and use simple.

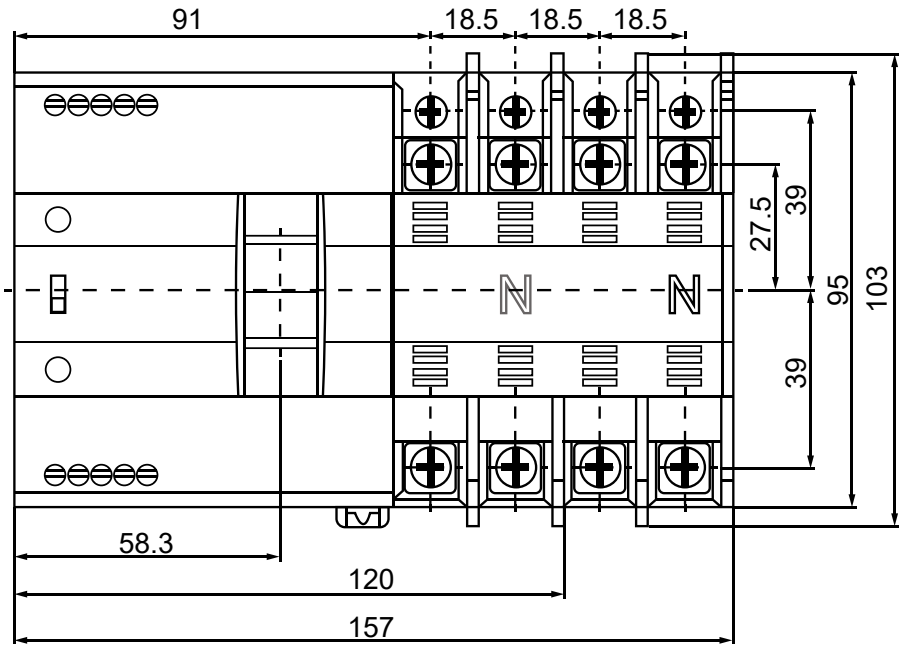
Image and structure

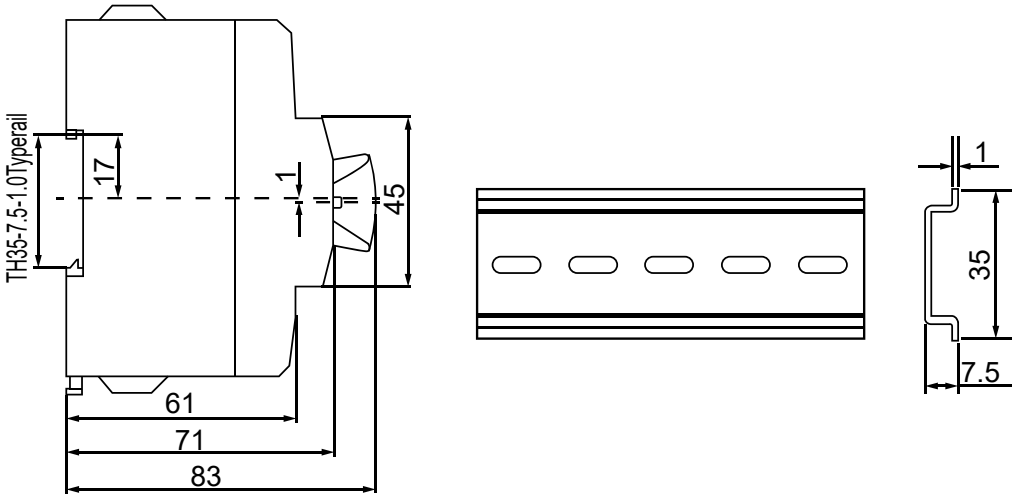
1. (1-2-3) A - Power Auxiliary Switch
2. (4-5) Control power is supplied from source A
3. (6-7-8) B - Power Auxiliary Switch
4. (9-10) Control power is supplied from source B

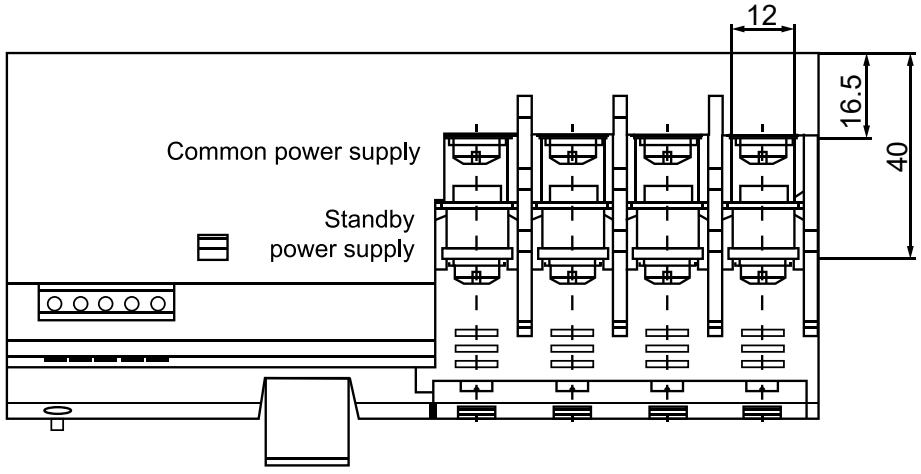
Selection table

Model		BA063HY
Rated operational current, In		63A
Rated Operational Voltage, Ue		230/400VAC
Rated Insulation Voltage, Ui		690V
Impulse Withstand Voltage, Uimp		8kV
No. of Pole		2 / 4
Powercable connection method		Front bus bar connection
Controller		Automatic switching is controlled via an intermediate relay
Rated short-time withstand current, Icw		5kA
Rated short-circuit making capacity, Icm		7kA
Life time	Electric	1500 time
	Mechanic	6000 time
Switching frequency	Time / hour	60
Switching sequence		ON ↔ ON (A ↔ B)
Operating Time	Change-over Time	≤ 60ms
	Opening Time	≤ 20ms
	Contact Transfer Time	≤ 50ms
Operating Voltage & Current	AC 220V	2A
Control voltage	Max	110% Rated operating voltage
	Min	85% Rated operating voltage
Withstand Voltage for Main circuit		2000V/60s
Withstand Voltage for Control circuit		2000V/60s
Weight (kg)	2P	0.7
	4P	0.9
Dimensions (WxLxH)	2P	120x83x103mm
	4P	157x83x103mm

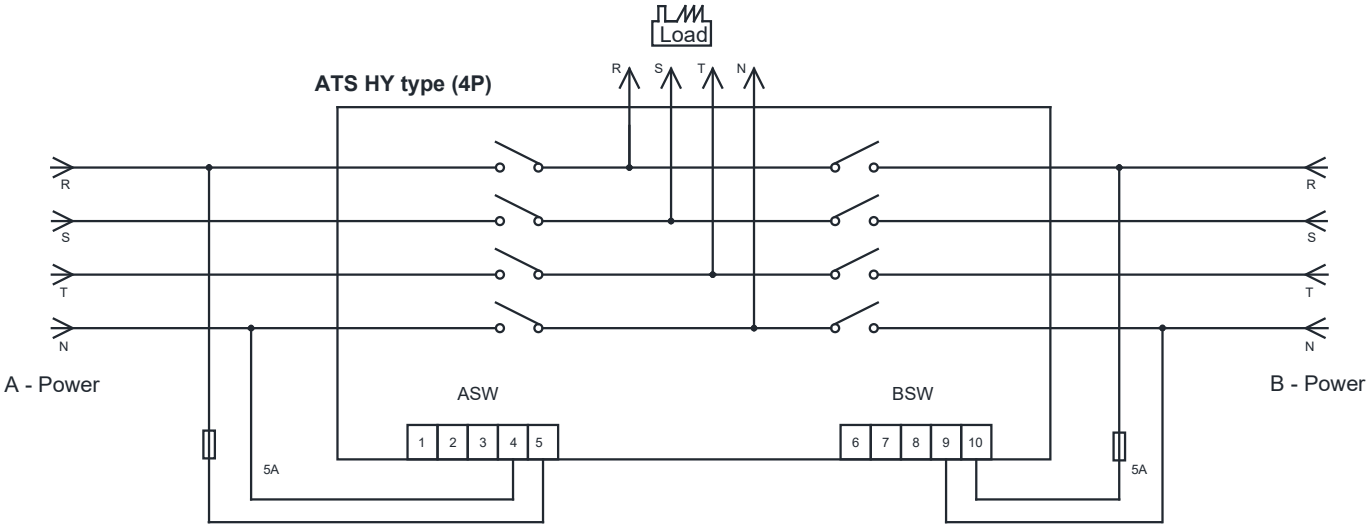
Dimensions

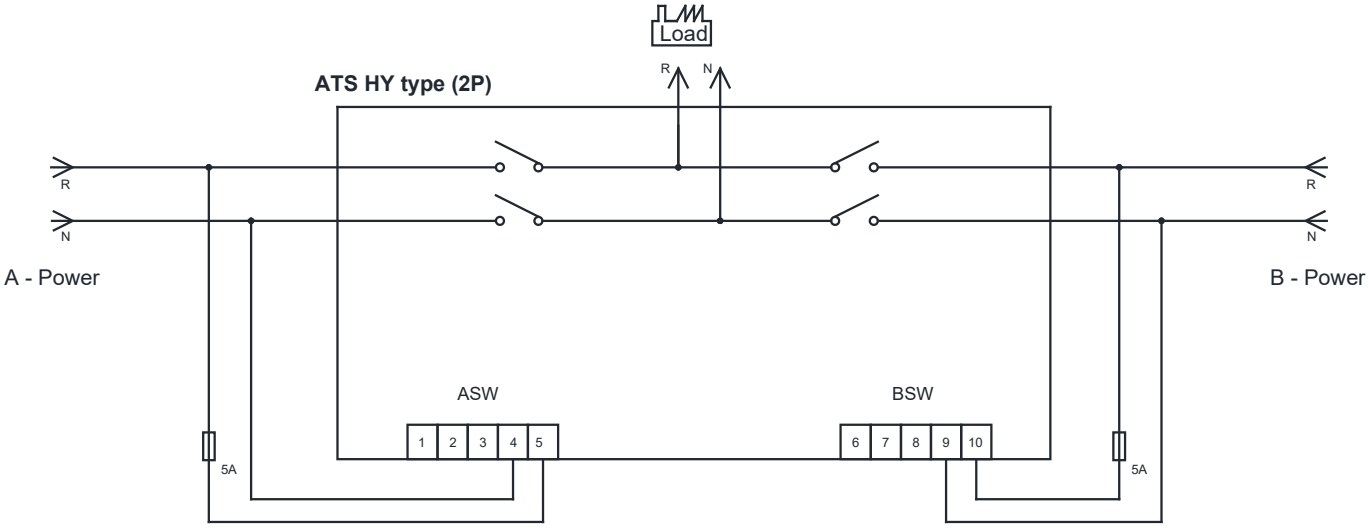

91
18.5
18.5
18.5
27.5
39
95
103
39
58.3
120
157


TH35-7.5-1.0Typerail
17
1
45
61
71
83
1
35
7.5


12
16.5
40
Common power supply
Standby
power supply

Typical connection diagram





HY-TYPE Automatic Transfer Switches			
ASW 4-5	Control power is supplied from source A	ASW 1-2-3	A - Power Auxiliary Switch
BSW 9-10	Control power is supplied from source B	BSW 6-7-8	B - Power Auxiliary Switch

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