

# Technical catalogue

Automatic Transfer Switches







# **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

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

## General

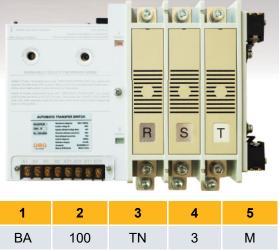
#### **Applied standard**

- 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).





	1. Manufacturer Code
ВА	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					
М	AC 220V					

#### **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



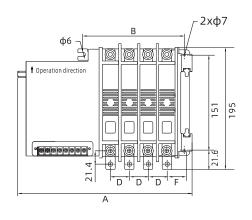


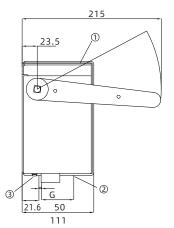
- 1. Manual operation position
- 2. A Power Status indication
- 3. B Power Status indication
- 4. Control interface terminal
- 5. A Power Auxiliary Switch
- 6. B Power Auxiliary Switch

## Selection table

Model		BA063NN BA100NN	BA250NN	BA400NN BA630NN		
Rated operational current, In		63 / 100A 250A 400 / 63				
Rated Operational Voltage, Ue			AC 500V; DC 125\	/		
Rated Insulation Voltage, Ui			690V			
Impulse Withstand Voltage, Uim	р		8kV			
No. of Pole			2/3/4			
Powercable connection method		Fre	ont bus bar connec	tion		
Controller		Not e	equipped with a con	troller		
Rated short-time withstand curr	ent, Icw	10	kA	12kA		
Rated short-circuit making capa	acity, Icm	17	kA	30kA		
Life time	Electric		35000 time			
Life time	Mechanic		180000 time			
Switching frequency	Time / hour	60				
Switching sequence		$ON \leftrightarrow ON (A \leftrightarrow B)$				
	Change-over Time	≤ 14	0ms	≤ 165ms		
Operating Time	Opening Time	≤ 55	≤ 65ms			
	Contact Transfer Time	≤ 85ms		≤ 125ms		
	DC 110/125V	12	15A			
Operating Voltage & Current	AC 100/115V	12	2A	15A		
	AC 200/240V	6	A	8A		
Control voltage	Max	110%	Rated operating v	oltage		
Common voltago	Min	85% Rated operating voltage				
Accessaries		Manual handle				
Withstand Voltage for Main circ	uit		2500V/60s			
Withstand Voltage for Control ci	ircuit		1500V/60s			
	2P	5.7	6.1	12		
Weight (kg)	3P	6.7	7.2	14.8		
	4P	7.7	8.3	17.8		
	2P	223x215x195mm	231x215x195mm	295x222x289mm		
Dimensions (WxLxH)	3P	253x215x195mm	266x215x195mm	357x222x289mm		
	4P	283x215x195mm	301x215x195mm	419x222x289mm		

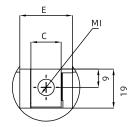
### **Dimensions**



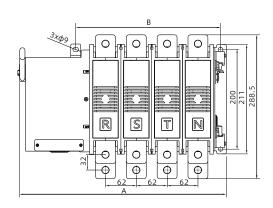


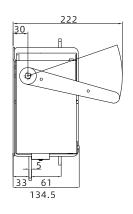
#### Note:

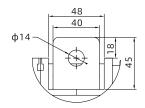
- Common power input terminals are used by the input terminals
- 2. Standby power input terminals are used by the input terminals
- 3. Load power output terminals



Model	Size Pole	A	В	С	D	E	F	G	1
DAGGANNI	2P	218.5	100.5						
BA063NN BA100NN	3P	248.5	130.5	15	30	26	27.5	4	
DATOUNIN	4P	275.5	160.5						M8
	2P	228.5	111.5						IVIO
BA250NN	3P	263.5	145.5	20	35	31	30	4	
	4P	298.5	180.5						

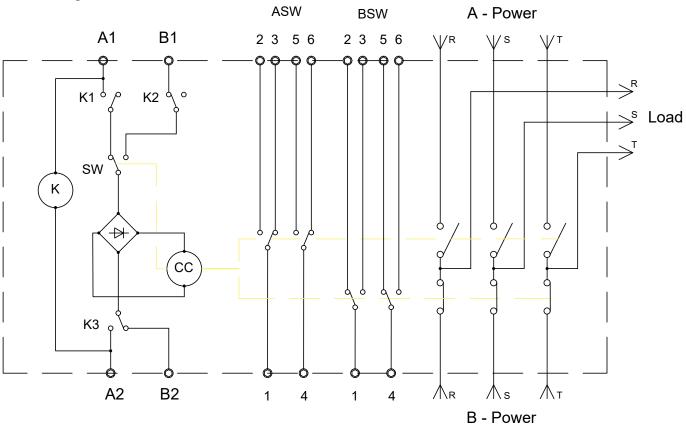






Model	Size Pole	A	В
DA 400NNI	2P	291.5	167.5
BA400NN BA630NN	3P	353.5	229.5
DAOSONN	4P	415.5	291.5

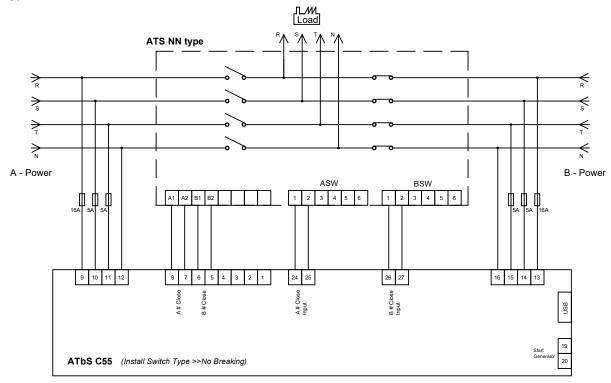
## Internal diagram



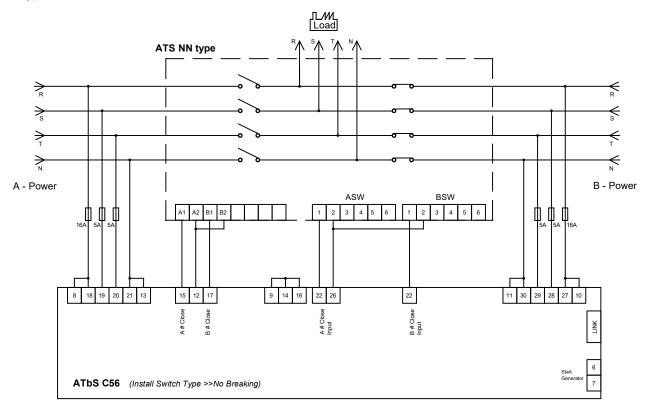
NN-TYPE Automatic Transfer Switches							
A1-A2	A - Power Supply Closing Terminal	CC	Closing Coil				
B1-B2	B - Power Supply Closing Terminal	K	Selective Coil				
ASW 1-2-3, 4-5-6	A - Power Auxiliary Switch	K1-K2-K3	Selective Switch				
BSW 1-2-3, 4-5-6	B - Power Auxiliary Switch	SW	Control Switch				

### Typical connection diagram

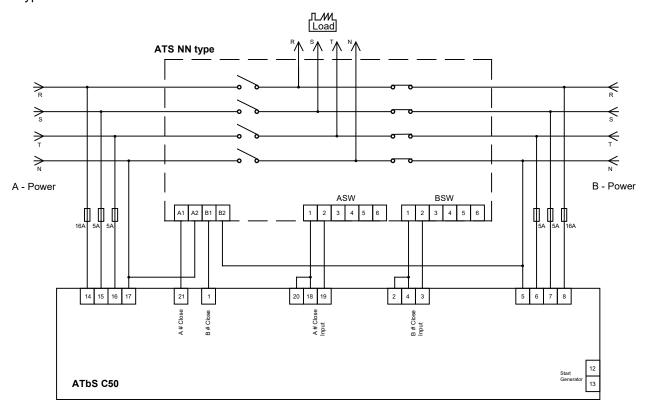
a. NN type with ATbS C55 controller



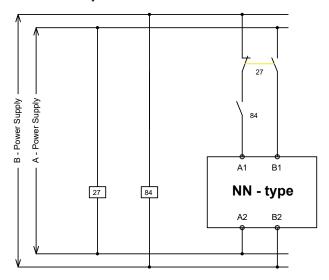
## b. NN type with ATbS C56 controller

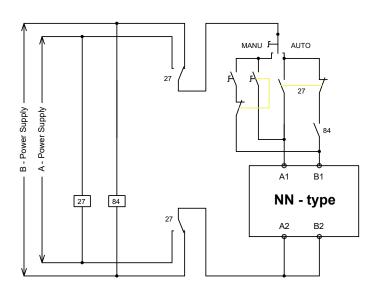


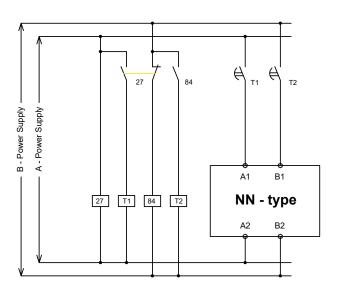
### c. NN type with ATbS C50 controller



## d. NN type controlled via intermediate relays







#### **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



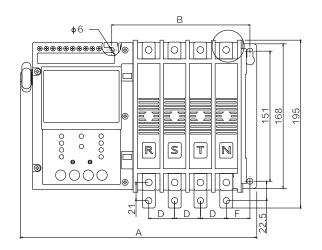


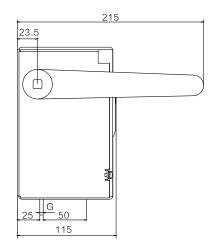
- 1. Manual operation position
- 2. A Power Status indication
- 3. B Power Status indication
- 4. Power ON Button A
- 5. Not function
- 6. Power ON Button B
- 7. Auto / Manual Button

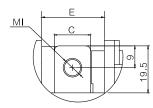
## Selection table

Model		BA063NY BA100NY	BA250NY	BA400NY BA630NY		
Rated operational current, In		63 / 100A 250A 400 / 630				
Rated Operational Voltage, Ue			AC 500V; DC 125V	/		
Rated Insulation Voltage, Ui			690V			
Impulse Withstand Voltage, Uim	np		8kV			
No. of Pole			2/3/4			
Powercable connection method		Fre	ont bus bar connec	tion		
Controller		Equipped	d with a built-in ATS	controller		
Rated short-time withstand curr	ent, Icw	10	kA	12kA		
Rated short-circuit making capa	acity, Icm	17	kA	30kA		
Life time	Electric		35000 time			
Life time	Mechanic		180000 time			
Switching frequency	Time / hour	60				
Switching sequence		$ON \leftrightarrow ON (A \leftrightarrow B)$				
	Change-over Time	≤ 14	≤ 165ms			
Operating Time	Opening Time	≤ 55	≤ 65ms			
	Contact Transfer Time	≤ 85ms		≤ 125ms		
	DC 110/125V	12	15A			
Operating Voltage & Current	AC 100/115V	12	15A			
	AC 200/240V	6	A	8A		
Control voltage	Max	110% Rated operating voltage				
Control Voltage	Min	85% Rated operating voltage				
Accessaries		Manual handle				
Withstand Voltage for Main circu	uit		2500V/60s			
Withstand Voltage for Control ci		1500V/60s				
	2P	5.6	6.2	12		
Weight (kg)	3P	6.6	7.4	15		
	4P	7.6	8.6	18		
	2P	223x215x195mm	231x215x195mm	295x222x289mm		
Dimensions (WxLxH)	3P	253x215x195mm	266x215x195mm	357x222x289mm		
	4P	283x215x195mm	301x215x195mm	419x222x289mm		

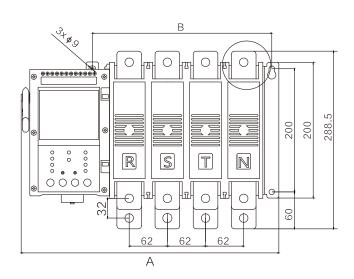
### **Dimensions**

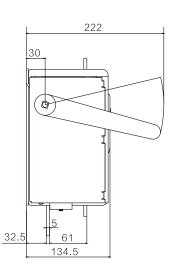


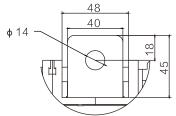




Model	Size Pole	A	В	С	D	E	F	G	ı	
DAGCONIV	2P	213.5	100.5							
BA063NY BA100NY	3P	243.5	130.5	15	30	26	27.5	4		
DATOUNT	4P	273.5	160.5						MO	
	2P	223.5	110.5						M8	
BA250NY	3P	258.5	145.5	20 35	20 35	20 35	35 31	31 30 4	4	
	4P	293.5	180.5							

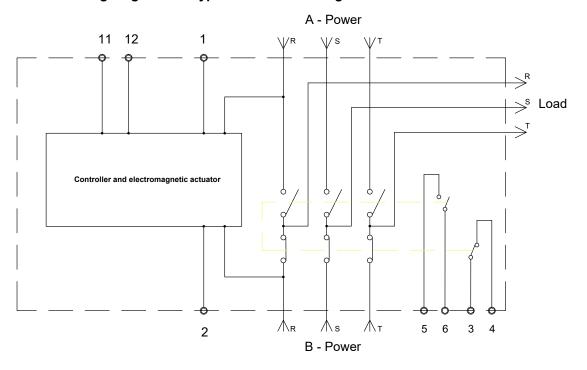


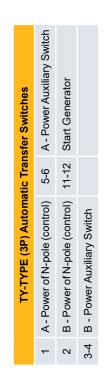


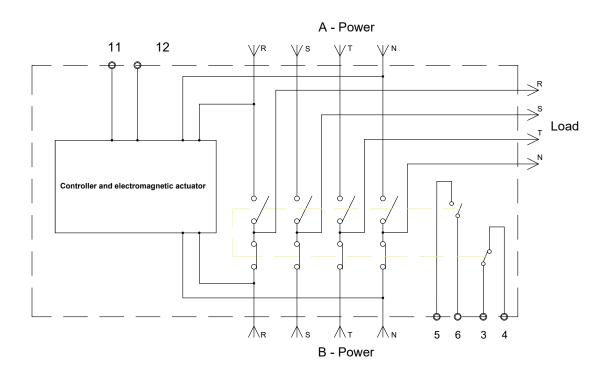


Model	Size Pole	A	В
BA400NY BA630NY	2P	295.5	167.5
	3P	357.5	229.5
	4P	419.5	291.5

#### Internal wiring diagram and typical connection diagram







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

#### **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



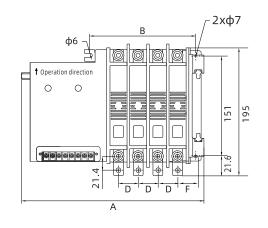


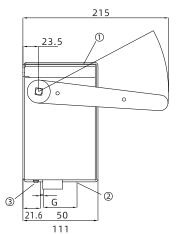
- 1. Manual operation position
- 2. Switch the ATS to OFF position
- 3. Select to close B Power
- 4. A Power Status indication
- 5. B Power Status indication
- 6. Control interface terminal
- 7. A Power Auxiliary Switch
- 8. B Power Auxiliary Switch

## 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	1		
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 e	equipped with a con	troller		
Rated short-time withstand current	t, Icw	10	kA	12kA		
Rated short-circuit making capacit	y, Icm	17	kA	30kA		
Life time	Electric	5000 time				
Life time	Mechanic	10000 time				
Switching frequency	Time / hour	60				
Switching sequence		$ON \leftrightarrow OFF \leftrightarrow ON (A \leftrightarrow OFF \leftrightarrow B)$				
	Making 'A' Power	≤ 70	Oms	≤ 85ms		
Operating Time	Breaking "A" Power	≤ 25ms		≤ 30ms		
operating fillio	Making 'B' Power	≤ 85ms		≤ 100ms		
Breaking "B" Power		≤ 25	≤ 30ms			
	DC 110/125V	6	A	8A		
Operating Voltage & Current	AC 100/115V	6A		8A		
operating vertage a current	AC 200/240V	4A		5A		
	Trip Coil	3A				
Control voltage	Max	110% Rated operating voltage				
Common voltage	Min	85% Rated operating voltage				
Accessaries		Manual handle				
Withstand Voltage for Main circuit		2500V/60s				
Withstand Voltage for Control circu	1500V/60s					
	2P	5.8	6.2	12		
Weight (kg)	3P	6.8	7.3	15		
	4P	7.6	8.4	18		
	2P	223x215x195mm	231x215x195mm	295x222x289mm		
Dimensions (WxLxH)	3P	253x215x195mm	266x215x195mm	357x222x289mm		
	4P	283x215x195mm	301x215x195mm	419x222x289mm		

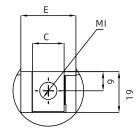
### **Dimensions**



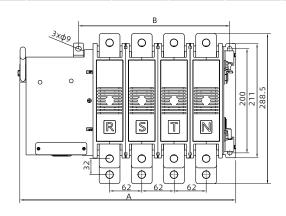


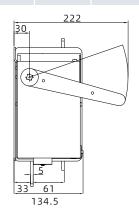
### Note:

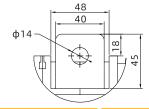
- Common power input terminals are used by the input terminals
- 2. Standby power input terminals are used by the input terminals
- 3. Load power output terminals



Model	Size Pole	Α	В	С	D	E	F	G	1
DAGGEN	2P	213.5	100.5						
BA063TN BA100TN	3P	243.5	130.5	15	30	26	27.5	4	
DATOUTN	4P	273.5	160.5						M8
	2P	223.5	110.5						IVIO
BA250TN	3P	258.5	145.5	20	35	31	30	4	
	4P	293.5	180.5						

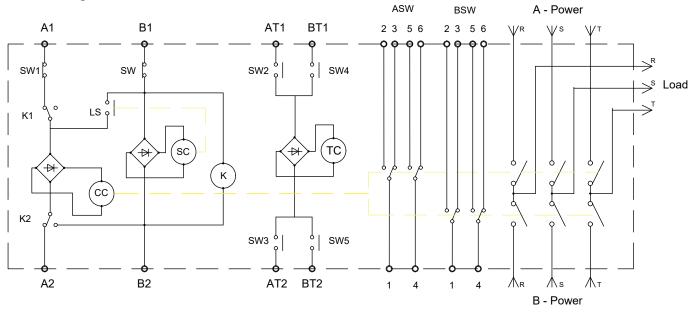






Model	Size Pole	A	В
DAAOOTN	2P	295.5	167.5
BA400TN BA630TN	3P	357.5	229.5
DAOSOTN	4P	419.5	291.5

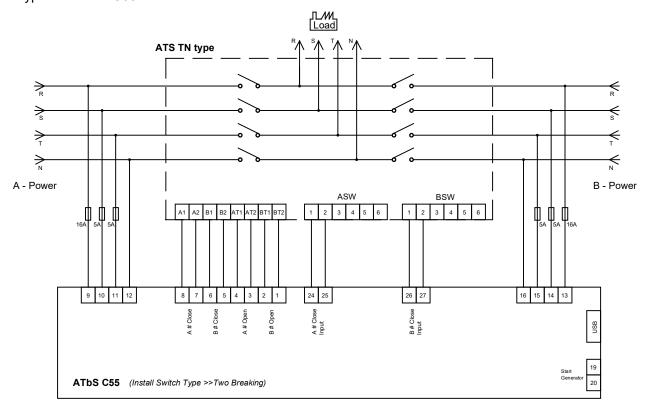
## Internal diagram



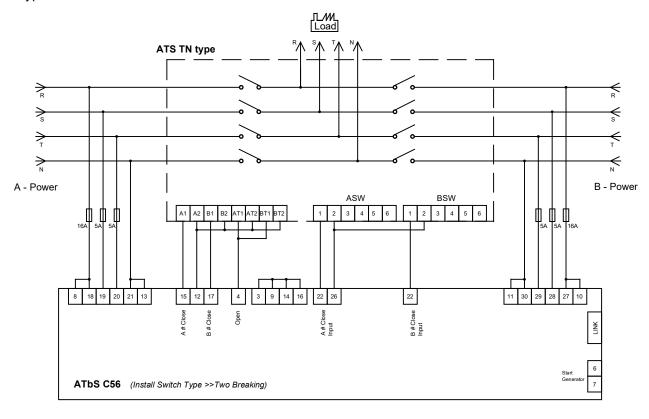
TN-TYPE Automatic Transfer Switches						
A1-A2	A - Power Supply Closing Terminal	CC	Closing Coil			
B1-B2	B - Power Supply Closing Terminal	SC/K	Selective Coil			
AT1-AT2	A - Power Trip Terminal	TC	Tripping Coil			
BT1-BT2	B - Power Trip Terminal	SW-SW1	Control Switch			
ASW 1-2-3, 4-5-6	A - Power Auxiliary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

## Typical connection diagram

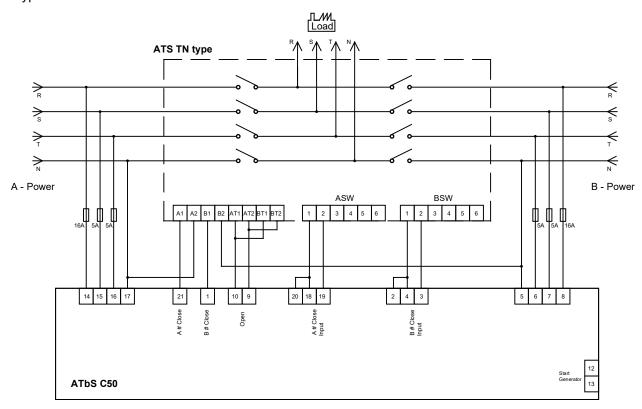
a. TN type with ATbS C55 controller



## b. TN type with ATbS C56 controller



### c. TN type with ATbS C50 controller



#### **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.





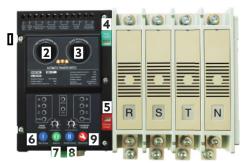


#### **Feature**

- 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



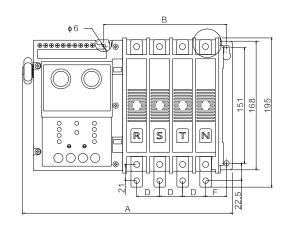


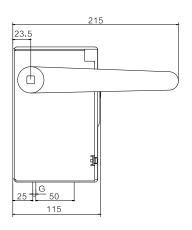
- 1. Manual operation position
- 2. Switch the ATS to OFF position
- 3. Select to close B Power
- 4. A Power Status indication
- 5. B Power Status indication
- 6. Power ON Button A
- 7. Power OFF Button
- 8. Power ON Button B
- 9. Auto / Manual Button

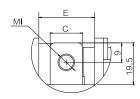
## Selection table

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		Fro	ont bus bar connect	tion		
Controller		Equipped	d with a built-in ATS	controller		
Rated short-time withstand current	t, Icw	10	kA	12kA		
Rated short-circuit making capacit	y, Icm	17	kA	30kA		
Life time	Electric	5000 time				
	Mechanic	10000 time				
Switching frequency	Time / hour	60				
Switching sequence		$ON \leftrightarrow OFF \leftrightarrow ON \; (A \leftrightarrow OFF \leftrightarrow B)$				
	Making 'A' Power	≤ 70	Oms	≤ 85ms		
Operating Time	Breaking "A" Power	≤ 25ms		≤ 30ms		
Speraming rime	Making 'B' Power	≤ 85ms		≤ 100ms		
Breaking "B" Power		≤ 25	≤ 30ms			
	DC 110/125V	6	A	8A		
Operating Voltage & Current	AC 100/115V	6A		8A		
op and any of the second	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 circu	1500V/60s					
	2P	5.6	6.2	12		
Weight (kg)	3P	6.6	7.4	15		
	4P	7.6	8.6	18		
	2P	223x215x195mm	231x215x195mm	295x222x289mm		
Dimensions (WxLxH)	3P	253x215x195mm	266x215x195mm	357x222x289mm		
	4P	283x215x195mm	301x215x195mm	419x222x289mm		

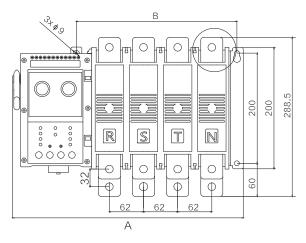
### **Dimensions**

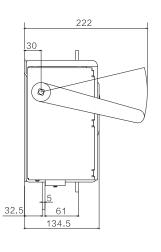


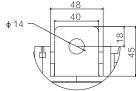




Model	Size Pole	A	В	С	D	E	F	G	1
DAGGTV	2P	213.5	100.5						
BA063TY BA100TY	3P	243.5	130.5	15	30	26	27.5	4	
DATOUTT	4P	273.5	160.5					MO	
	2P	223.5	110.5						M8
BA250TY	3P	258.5	145.5	20	35	31	30	4	
	4P	293.5	180.5						

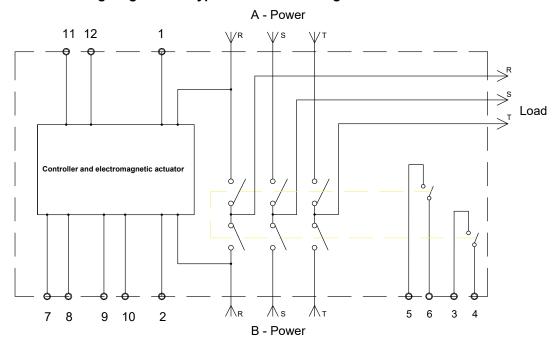




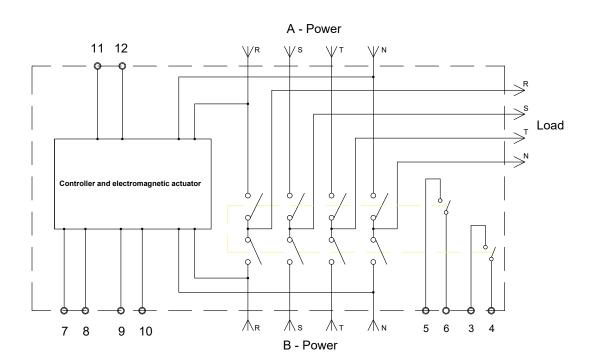


Model	Size Pole	A	В
DA 400TV	2P	295.5	167.5
BA400TY BA630TY	3P	357.5	229.5
DAUSUTT	4P	419.5	291.5

#### Internal wiring diagram and typical connection diagram



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



	TY-TYPE (4P) Automatic Transfer Switches	tic Tran	sfer Switches
182	1&2 Not in use	7-8	7-8 Fire-Fighting Feedback
3-4	3-4 B - Power Auxiliary Switch 9-10 Fire-Fighting	9-10	Fire-Fighting
2-6	5-6 A - Power Auxiliary Switch 11-12 Start Generator	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.

#### **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

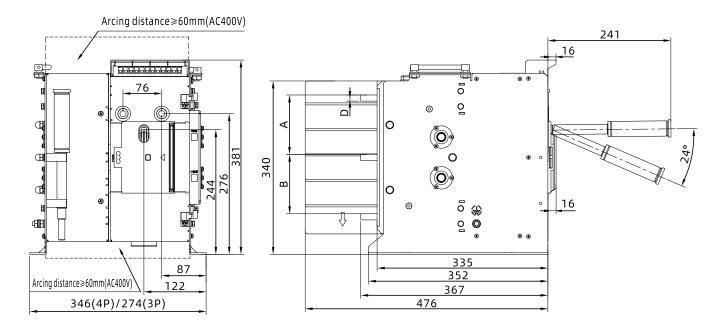


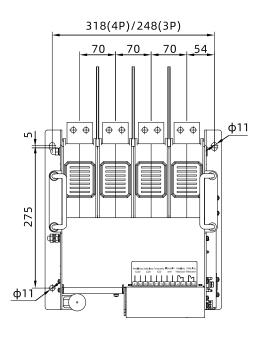
## Selection table

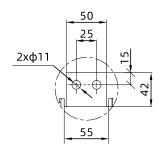
Model		BA800PC BA10HPC BA12HPC	BA16HPC BA20HPC	
Rated operational current, In		800 / 1000 / 1250A	1600 / 2000A	
Rated Operational Voltage, Ue		AC 690V;	DC 240V	
Rated Insulation Voltage, Ui		100	00V	
Impulse Withstand Voltage, Uimp		12	kV	
No. of Pole		3	/ 4	
Powercable connection method		Connect the	rear busbar	
Controller		Not equipped v	vith a controller	
Rated short-time withstand current	, Icw	25kA	35kA	
Rated short-circuit making capacity	, lcm	52kA	73.5kA	
Life time	Electric	5000 time		
Life time	Mechanic		) time	
Switching frequency	Time / hour	50	20	
Switching sequence		$ON \leftrightarrow OFF \leftrightarrow ON \; (A \leftrightarrow OFF \leftrightarrow B)$		
Operating Time	Making 'A' Power	≤ 150ms	≤ 150ms	
	Breaking "A" Power	≤ 110ms	≤ 110ms	
Operating Time	Making 'B' Power	≤ 160ms	≤ 160ms	
	Breaking "B" Power	≤ 110ms	≤ 110ms	
	DC 110/125V	45A	50A	
Operating Voltage & Current	AC 100/115V	45A	50A	
operating voltage a darront	AC 200/240V	30A	40A	
	Trip Coil	6A	8A	
Control voltage	Max	110% Rated op	erating voltage	
Control voltage Min		85% Rated operating voltage		
Accessaries		Manual handle		
Withstand Voltage for Main circuit		4000V/60s		
Withstand Voltage for Control circu	it	2000V/60s		
Weight (kg)	3P	39.5kg	60kg	
Troigite (Ng)	4P	50kg	72.5kg	
Dimensions	3P	274x476x381mm	396x476x381mm	
(WxLxH)	4P	346x476x381mm	506x476x381mm	

### **Dimensions**

## 800A-1250A



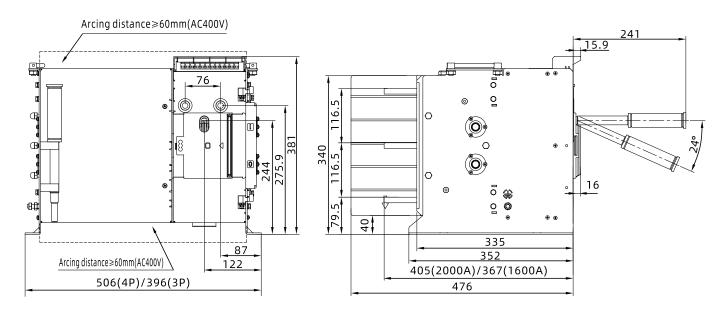


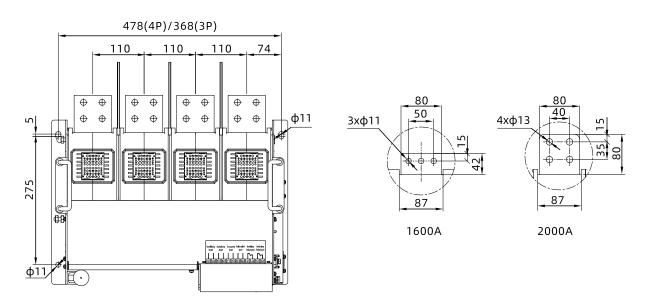


Unit: mm

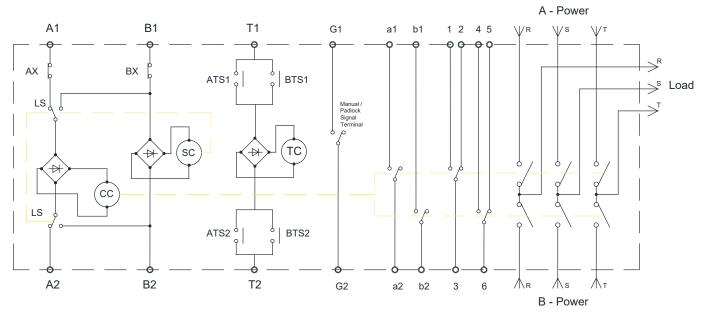
Code	800A	1000A	1250A
Α	113	114.5	116.5
В	113	114.5	116.5
D	5	8	12

## 1600A-2000A





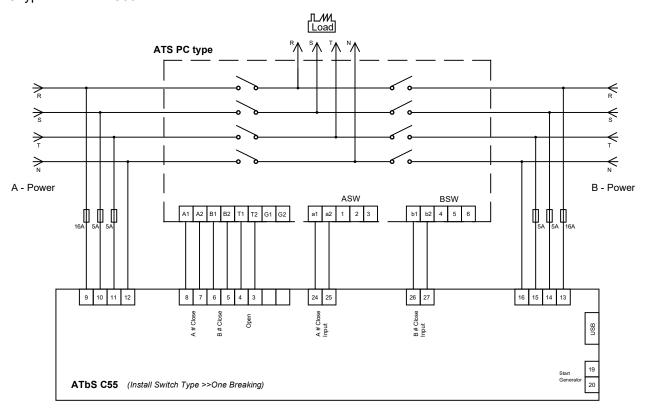
## Internal diagram



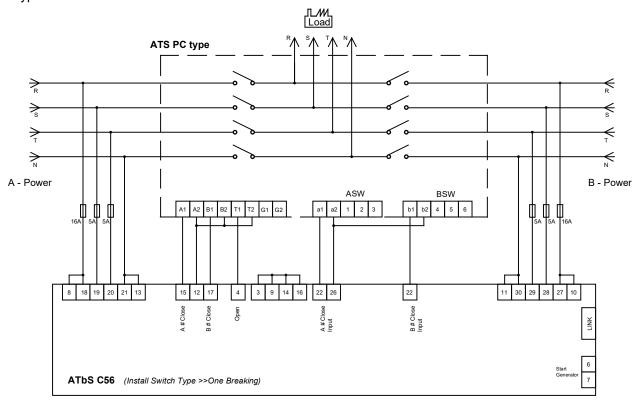
PC-TYPE Automatic Transfer Switches						
A1-A2	A - Power Supply Closing Terminal	CC	Closing Coil			
B1-B2	B - Power Supply Closing Terminal	SC	Selective Coil			
T1-T2	Double - Power Trip Terminal	TC	Tripping Coil			
G1-G2	Manual / Padlock Signal Terminal	AX-BX	Control Switch			
a1-a2	A - Power Auxiliary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

## Typical connection diagram

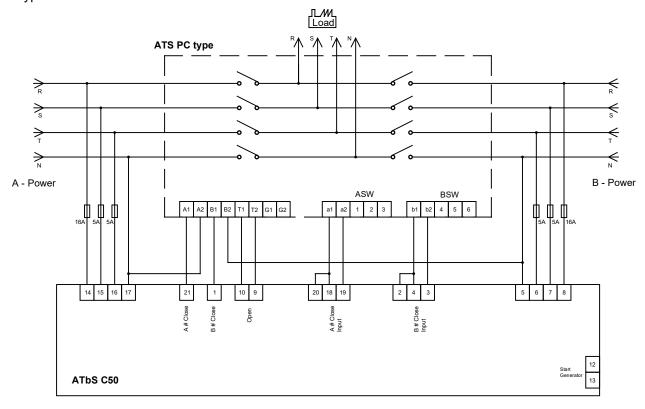
a. PC type with ATbS C55 controller



## b. PC type with ATbS C56 controller



### c. PC type with ATbS C50 controller



#### **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



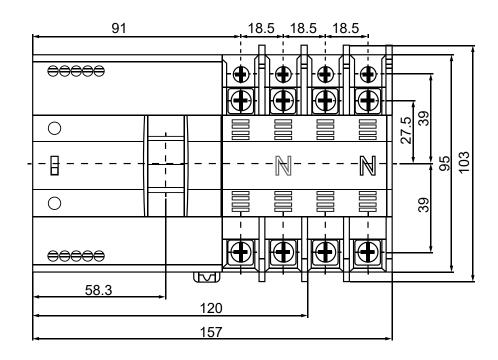


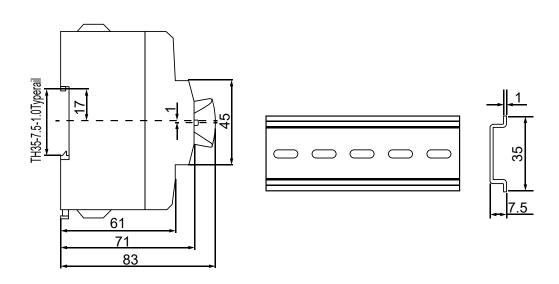
- 1. (1-2-3) A Power Auxiliary Switch
- 2. (4-5) Control power is supplied from source A
- 3. (6-7-8) B Power Auxiliary Switch
- 4. (9-10) Control power is supplied from source B

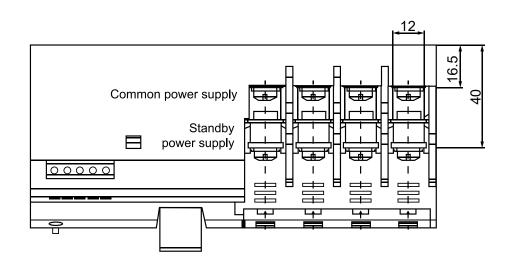
## Selection table

Model		BA063HY		
Rated operational current, In		63A		
Rated Operational Voltage, U	Je	230/400VAC		
Rated Insulation Voltage, Ui		690V		
Impulse Withstand Voltage, L	Jimp	8kV		
No. of Pole		2/4		
Powercable connection meth	od	Front bus bar connection		
Controller		Automatic switching is controlled via an intermediate relay		
Rated short-time withstand or	urrent, Icw	5kA		
Rated short-circuit making ca	pacity, lcm	7kA		
Life time	Electric	1500 time		
Life tillle	Mechanic	6000 time		
Switching frequency	Time / hour	60		
Switching sequence		$ON \leftrightarrow ON \; (A \leftrightarrow B)$		
	Change-over Time	≤ 60ms		
Operating Time	Opening Time	≤ 20ms		
	Contact Transfer Time	≤ 50ms		
Operating Voltage & Current	AC 220V	2A		
Control voltage	Max	110% Rated operating voltage		
Control voltage	Min	85% Rated operating voltage		
Withstand Voltage for Main c	ircuit	2000V/60s		
Withstand Voltage for Contro	l circuit	2000V/60s		
Woight (kg)	2P	0.7		
Weight (kg)	4P	0.9		
Dimensions	2P	120x83x103mm		
(WxLxH)	4P	157x83x103mm		

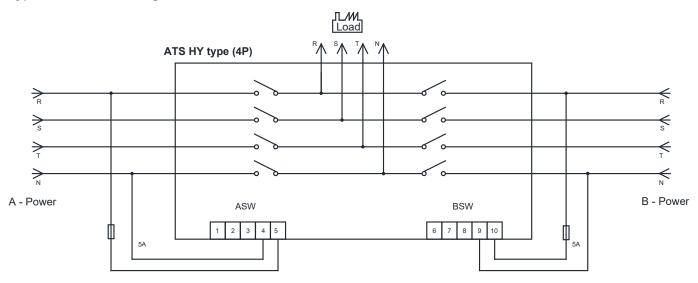
### **Dimensions**

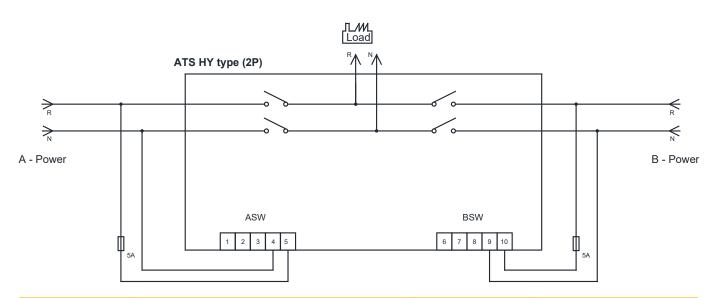






## Typical connection diagram





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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