

SMGQ2 Series

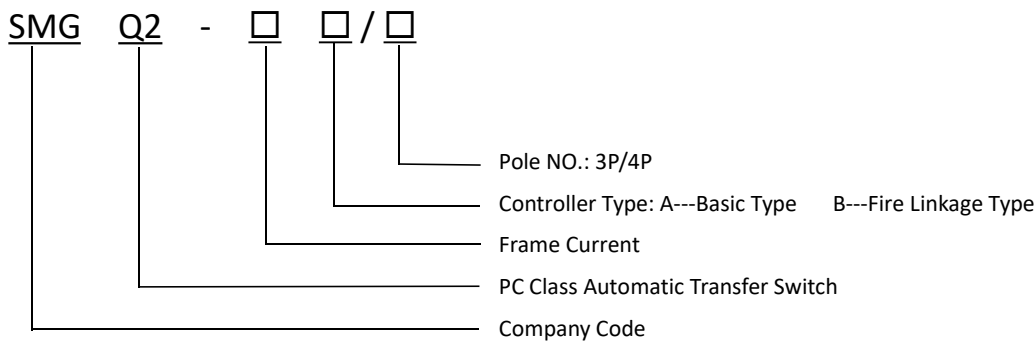
Dual Power Automatic Transfer Switch (PC Class ATS)



Application

SMGQ2 series dual power automatic transfer switch is a new type dual power automatic transfer switch (ATS) integrating switch with logical control and realizing mechatronics, is mainly used in the industrial and enterprise distribution equipment of rated insulation voltage up to 1000V, rated frequency 50Hz, rated voltage up to 400V and conventional thermal current up to 630A to auto transfer between main power and backup power of distribution system or auto transfer and safely isolate between two load equipment, widely used in the important places that disallow power off, such as hospitals, markets, banks, high constructions, highway, airports, industrial assembly lines, and military facilities.

Model Meaning



Controller Type	Function of the Switch	Suitable ATS Type
Type A	<ol style="list-style-type: none"> One phase (Phase A) phase missing monitoring Auto transfer with auto recovery 	SMGQ2 16A-630A
Type B	<ol style="list-style-type: none"> One phase (Phase A) phase missing monitoring Auto transfer with auto recovery Passive fire linkage with passive feedback signal output and generator start function 	SMGQ2 16A-630A

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Working Conditions

- Ambient Temperature: -5°C~+40°C, 24h average not more than +35°C.
- Atmospheric Conditions: Humidity not more than 50% at +40°C max.; a higher humidity is allowed at a lower temperature. Special measurement shall be taken for the condensation occasionally due to temperature variation.
- Altitude: not more than 2000m
- Pollution Class: Class 3 conforming to GB/T14048.11
- Installation Category: AC-33iB
- Installation Conditions: Installed vertically in control and distribution cabinets.

Feature of Basic Type

- Suitable for the transfer between main power and backup power, auto transfer and auto recovery
- Extra function can be external extended.
- Auto, remote and manual control function
- Detect signal 5s delay, avoiding mistaken action
- Remote control "0" under auto mode
- Select operation mode by button

Technical Parameter

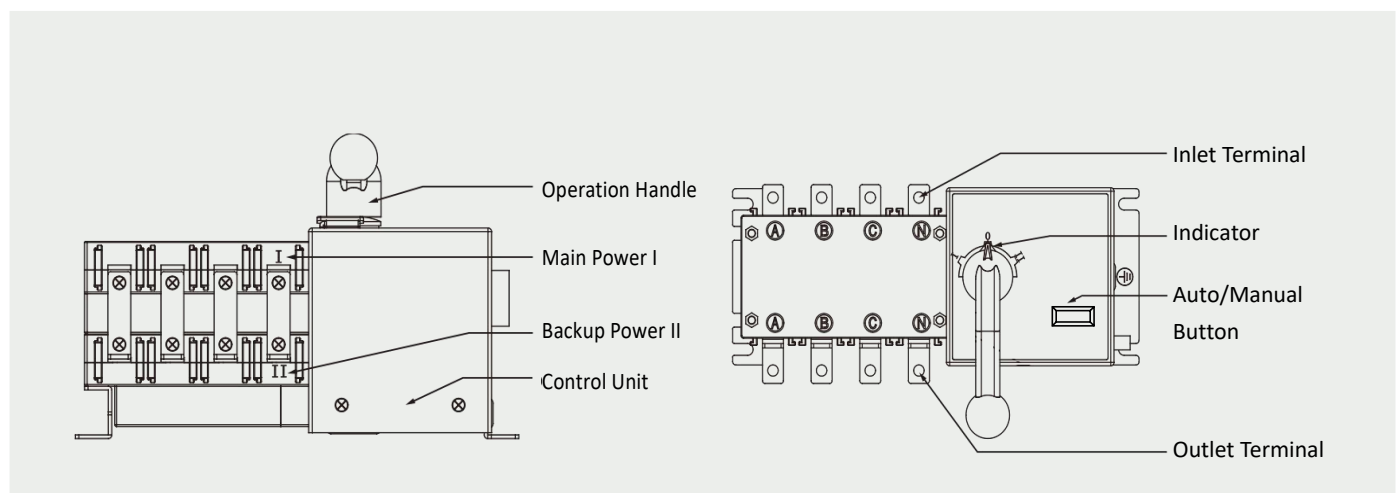
ATS Model		SMGQ2C											
Agreed Heating Current I _{th}		100A						160		250	400	630	
Rated Current I _n (A)		16	20	40	63	80	100	125	160	250	400	630	
Rated Working Voltage (V)		400											
Rated Insulation Voltage U _i (V)		750						1000					
Rated Impulse Withstand Voltage U _{imp} (kV) (Installation Category IV)		8	8	8	8	8	8	8	8	8	8	8	
Rated Working Current I _e (A)	AC-31	16	20	40	63	80	100	125	160	250	400	630	
	AC-35	16	20	40	63	80	100	125	160	250	400	630	
	AC-33	16	20	40	63	80	100	125	160	250	400	630	
Rated Making Capacity (A Rms) 380V		128	160	320	500	640	800	1000	1280	2000	3200	5000	
Rated Breaking Capacity (A Rms) 380V		160	200	400	630	800	1000	1250	1600	2500	4000	6300	
Rated Short Time Withstand Current I _{cw} (kA Rms) 0.1s/1s		7						9			13		
Rated Limit Short Circuit Current I _q (kA Rms) 0.1s/1s		50									70		
Conversion Time	I-0-II or II-0-I (s)	0.45									0.6		
Control Voltage		AC110V AC220V (default)											

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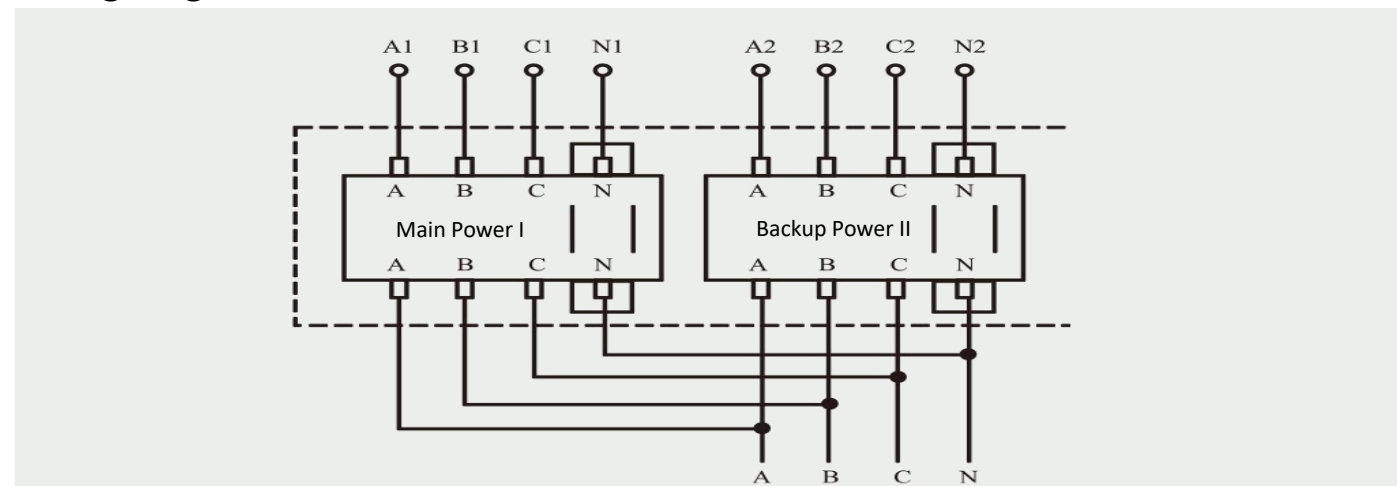
Technical Parameter of Controllers

Controller Type of ATS	Type A	Type B
Item		
Control Working Voltage	AC230V 50/60Hz	
Power Loss	Not more than 10W	
Working Position	I---Main power; II---Backup power	I---Main power; II---Backup power; 0---Double power break
Operation Mode	Manual, Auto	
Transfer Mode	Auto Transfer and Auto Recovery	Auto Transfer and Auto Recovery
Voltage Monitoring	Single Phase Monitoring (Phase A)	Single Phase Monitoring (Phase A)
Generator Control	No	Yes (One set relay dry contact)
Fire Linkage Control	No	Yes (DC24V input)

Structure



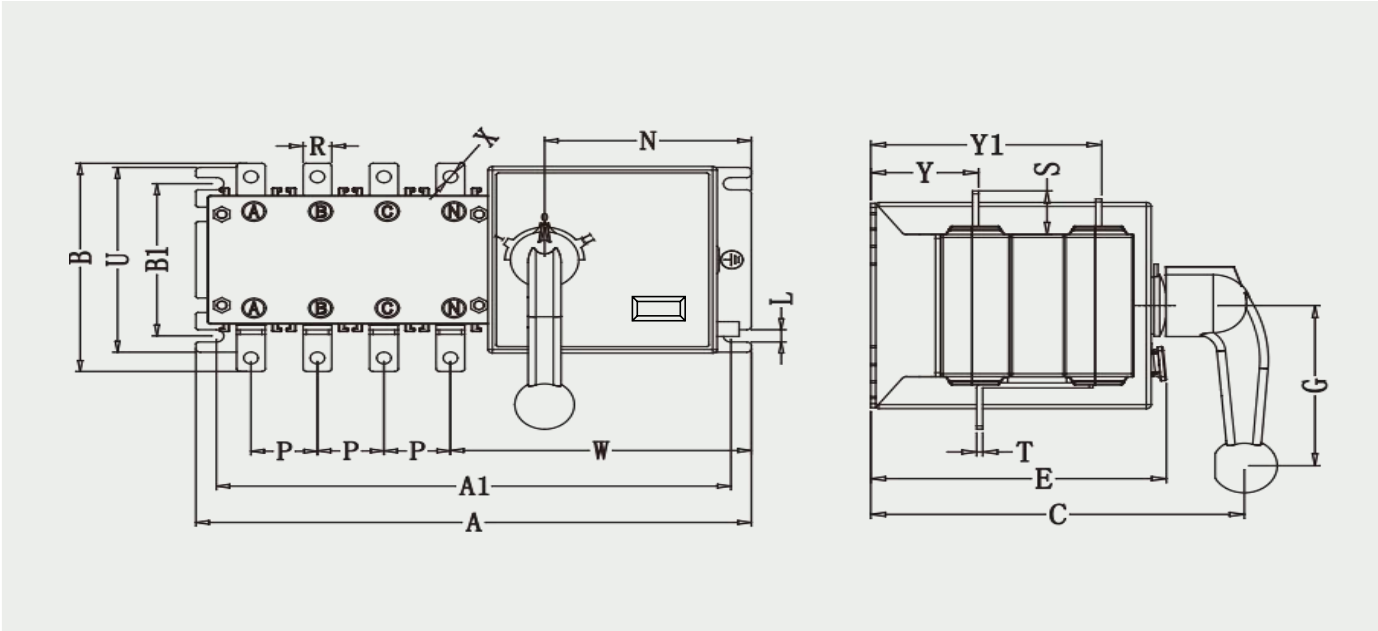
Wiring Diagram of Main Circuit



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Outline and Installation Dimensions



Spec.	Outline Dimension							Installation Dimension							Terminal			
	A	A1	B	B1	C	E	G	L	N	P	R	S	T	U	W	ΦX	Y	Y1
SMGQ2-100/4	255	234	115	84	154	122	80	7	85	30	14	18	2.5	102	136	6	45	95
SMGQ2-160/4	326	305	140	108	193	150	106	7	102	36	20	25	3	134	176	8	58	119
SMGQ2-250/4	386	365	174	108	197	154	106	7	102	50	25	30	3	134	188	10	58	122
SMGQ2-400/4	455	428	248	155	272	222	138	9	96	65	32	38	3	180	198	10	78	178
SMGQ2-630/4	455	428	268	155	272	222	138	9	96	65	40	38	3	180	198	12	78	178

Wiring Diagram of External Terminals

