

Power Distribution

YCQ6s Series Automatic Transfer Switch



General

The YCQ6s series is a PC-class Automatic Transfer Switch (ATS), designed for use in two-source neutral-earthed systems operating at AC 50/60 Hz, rated voltage up to 400V, and rated operating current from 16A to 630A. It automatically transfers the supply between sources upon detection of an abnormality in one source, ensuring reliable and safe power continuity. Widely used for automatic transfer between the primary (normal) supply and secondary (standby) supply in power distribution systems, as well as automatic changeover between two load circuits and safe electrical isolation.

Standard: IEC 60947-6-1

Type designation

YCQ6s - 100 4 A 100A

Company code	Test category	Current	Functions	Functions
YCQ6s	100	4	A	100A
YCQ6s	100 160 250 400 630	3P 4P	A: Basic Type B: Enhanced Type	6A 10A 16A 20A 25A 32A 40A 50A 63A 80A 100A 125A 160A 180A 200A 225A 315A 400A 500A 630A

Operating conditions

1. Ambient air temperature: -5°C to +40°C; 24-hour average temperature not exceeding +35°C.
2. At a maximum temperature of +40°C, relative humidity shall not exceed 50%; maximum monthly average relative humidity: 90%. Higher relative humidity is permissible at lower temperatures. Special measures shall be taken against condensation caused by occasional temperature variation.
3. Installation altitude: not exceeding 2000 m above sea level.
4. Pollution degree: Pollution Degree 3.
5. Utilization categories: AC-31A, AC-33A, AC-33iB.
6. Applicable to Environment A. Use of this product in Environment B may cause harmful electromagnetic interference; in such cases, the user shall take appropriate mitigation measures.

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Technical data

Model / Specification	Unit	YCQ6s-100	YCQ6s-160	YCQ6s-250	YCQ6s-400	YCQ6s-630
Number of Poles		3,4				
Applicable Standard		IEC60947-6-1				
Device Class		PC Class				
Utilization Category		AC-33iB				
Rated Insulation Voltage Ui	V	690				
Rated Impulse Withstand Voltage Uimp	kV	8				
Rated Operating Voltage Ue	V	A400				
Rated Operating Current Ie	A	20,40,60,80,100	100,125,160	200,250	315,350,400	500,630
Rated Making Capacity Icm	kA	10Ie				
Rated Conditional Short-Circuit Current Iq	kA	120				
Rated Short-Time Withstand Current Icw	KA/1s	7			9	13
Control Supply Voltage	V	AC230				
Transfer Time	S	0.45				0.6

Controller Specifications

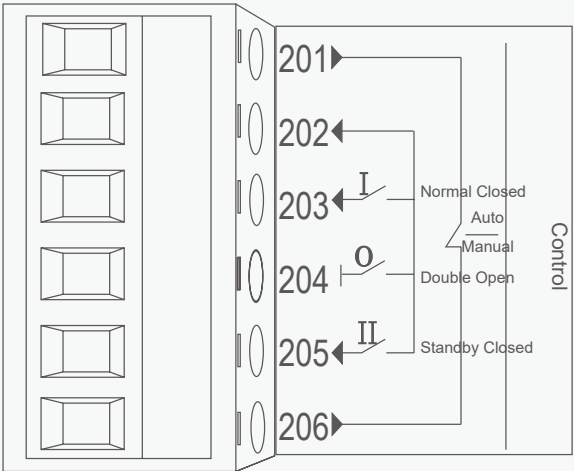
Function	Feature	Controller Type	
		Type A	Type B
I (Normal) / II (Standby) Indication & Signal Output	Power supply indication	■	■
	Closed position indication	■	■
	Active signal output port for power supply indication	-	■
	Closed position status signal output port	-	■
Voltage Monitoring	Phase voltage	Single-phase	Three-phase
	Phase loss detection	-	■
	Overvoltage detection	-	■
	Undervoltage detection	-	■
Transfer Mode	Auto-transfer with auto-restoration	■	■
	Auto-transfer without auto-restoration	-	■
Fire System Interlock	Passive fire system interlock	■	-
	DC 24V fire system interlock	-	■
Other Functions	Generator start function	■	■
	Voltage and frequency monitoring & detection	-	■
	LCD display	-	■
	RS-485 communication port	-	■

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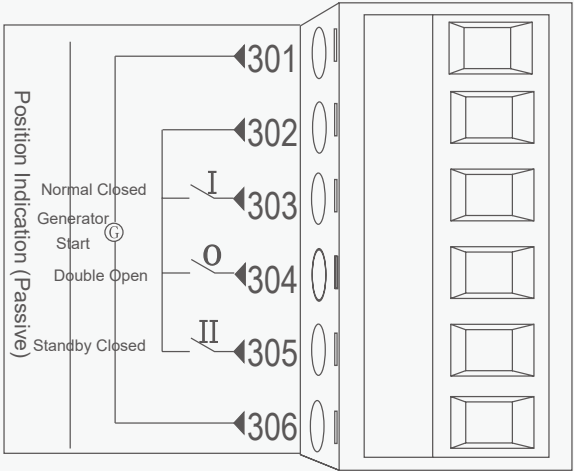
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Terminal Description

100A-630A Basic Type Wiring

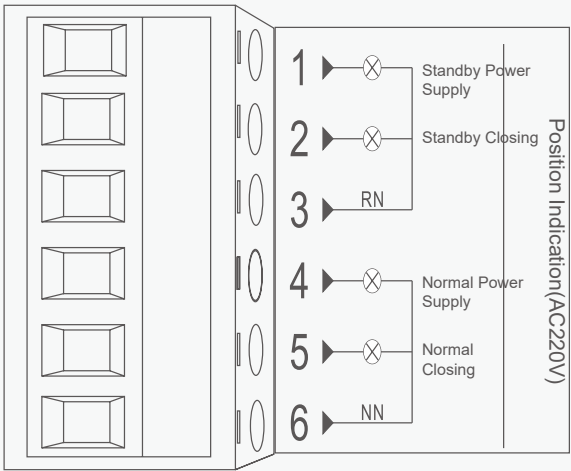


External Terminals

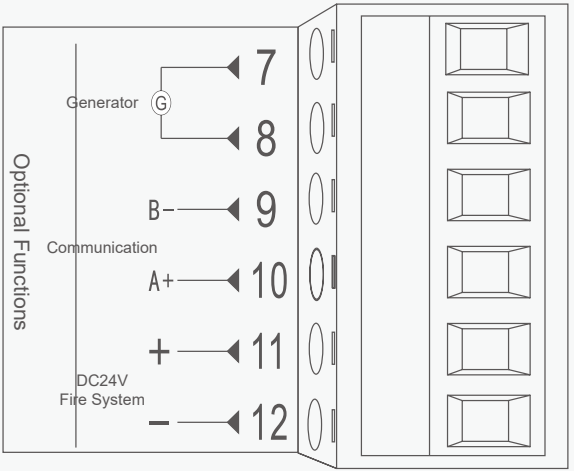


External Terminals

Enhanced Type Wiring



External Terminals

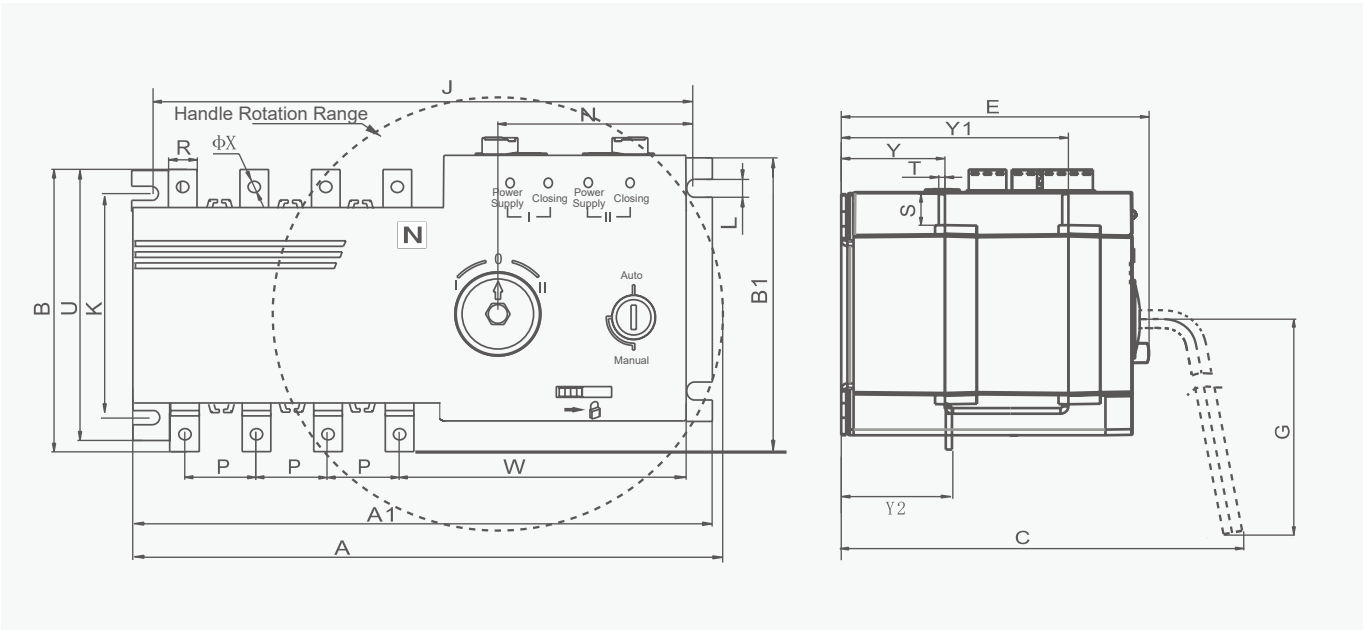


External Terminals

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Overall and mounting dimensions(mm)



Specification	External Dimensions (mm)							Mounting Dimensions (mm)													
In	A	A1	B	B1	C	E	G	J	K	L	N	P	R	S	T	U	W	X	Y	Y1	Y2
100A	280	240	130	144	153	115	125	230	85	6.5	83	30	14	18	2.5	105	125	6.2	38	89	39.5
160A	330	295	149	172	204	168	125	283	110	7	85	36	20	25	3	134	145	9	61	135	66
250A	385	360	180	190	220	183	125	350	110	7	90	50	25	30	3	134	158	11	65	147	68.5
400A	445	436	255	255	280	243	125	424	180	11	90	65	40	50	5	208	173	11	86	200	75
630A	445	436	276	276	280	243	125	424	180	11	90	65	40	50	5	208	173	13	86	200	75