

RDQ1 Series

Automatic transfer switch



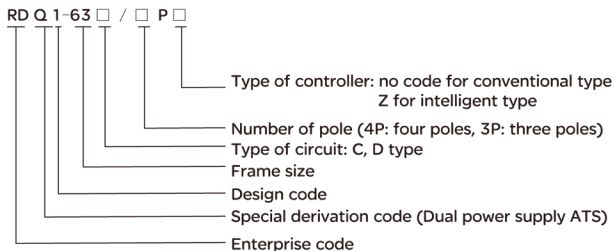
Description

RDQ1 series Dual Power Supply Auto-Transfer Switch is suitable for the power-supply system of AC 50Hz, rated operating voltage 400V, rated operating current 63 A and below. It can switch optionally between two circuit power supplies according to requirements. This product has the protective functions of over-load, short-circuit, under-voltage, meanwhile, it also has the functions of fire protection, double breaking and output the closing signal, which is especially suitable for the lighting circuit of the office building, shopping mall, bank, high-rise building that require fire protection.

RDQ1 Series

Automatic transfer switch

Model No.



Normal operating condition and installation condition

- 3.1 Altitude of installation place does not exceed 2000m.
- 3.2 Ambient temperature: $-5^{\circ}\text{C}\sim+40^{\circ}\text{C}$, average value within 24h does not exceed $+35^{\circ}\text{C}$.
- 3.3 Atmosphere condition: The relative humidity does not exceed 50% when the highest temperature is $+40^{\circ}\text{C}$, it is allowed relatively high relative humidity at the relatively low temperature, for example, it reaches 90% when 20°C , and it should take special measurements when there occurred the condensation on the products that is due to the variation of humidity.
- 3.4 Grade of pollution: 3
- 3.5 Installation condition: it is installed at the places that without impact vibration and without rain and snow; The upper terminal connects to the power supply side, the lower terminal connects to the load side, and the gradient between the installation side and the vertical side does not exceed 5° .
- 3.6 Installation category: III
- 3.7 External magnetic field of the installation place nearby does not exceed 5 times of earth magnetic field at any direction.

RDQ1 Series

Automatic transfer switch

Technical parameter

4.1 Basic parameter of double power supply ATS to see table 1

Table 1

Product performance parameter		
Confirms to standards	IEC60947-6-1	
ATS grade CB class	CB	
Usage category	AC-33iB	
Rated operating voltage Ue	AC230V-400V	
Rated operating frequency	50Hz/60Hz	
Rated operating current Ie	6A、10A、16A、20A、25A、32A、40A、50A、63A	
Switch control voltage	Ac230 V	
Rated insulation voltage Ui	AC690V	
Transfer action time	≤ 3s (cannot be adjustable)	
Life	Electrical life	1500 times
	Mechanical life	6000 times
Rated short-circuit connecting capacity Icm	7. 5kA	
Rated short-circuit breaking capacity Icn	5kA	

4.2 Basic parameter for the conventional type and intelligent type double power supply ATS to see table 2

Table 2

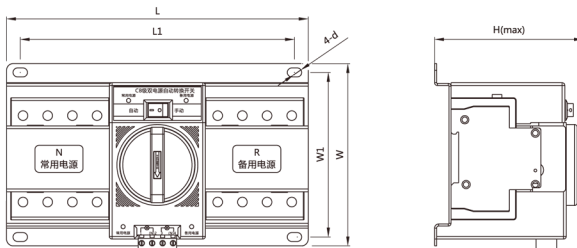
Product model	Conventional type	Intelligent type
Installation mode	Integrated type	Integrated type
Operation mode	Automatic and manual	Automatic and manual
Monitor function	Breaking phase detection	Under voltage, loss of phase and break phase detection of conventional power supply
Transfer mode	Automatic transfer and automatic recovery	Automatic transfer but does not automatic recovery
Fire protection linkage control	Non	DC12-24V input double break (fire auto cut off function)
Display function	LED light	LED light

RDQ1 Series

Automatic transfer switch

External and installation dimension

External and installation dimension confirm to table 3 and map 1



Map1

Table 3

Dimensions Model	External dimension			Installation dimension		
	L	W	H	L1	W1	ϕ d
Four poles	222	135	116	202	123	5
Three poles	185			165		

Installation

6.1 Conductive wire

The conductive wire (cable) adopted by the double power supply is the single core PVC insulation copper wire or equal copper bar, the cross section according to table 4.

Table 2

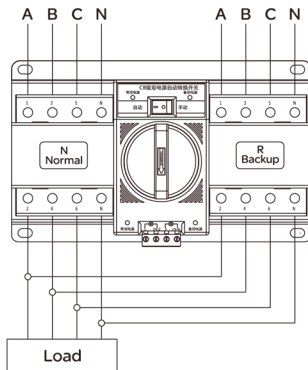
Rated current I_n (A)	6	10	16 20	25	32	40 50	63
Cross section of wire or cable mm^2	1.0	1.5	2.5	4.0	6.0	10	16

RDQ1 Series

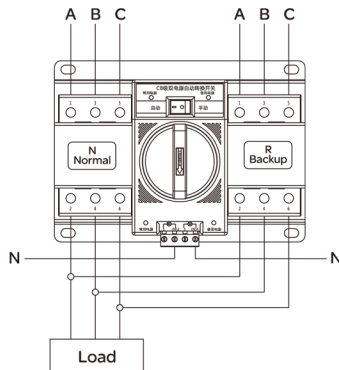
Automatic transfer switch

6.2 Wiring map of dual power supply ATS

6.2.1 Wiring map for the four poles of ATS to see map 2



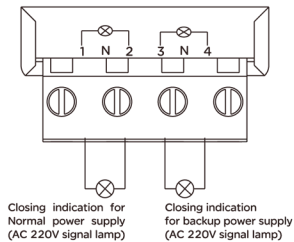
Map2



Map3

6.3 Wiring sketch map for the output terminal of ATS

6.3.1 Wiring sketch map for the output terminal of conventional type to see map 4

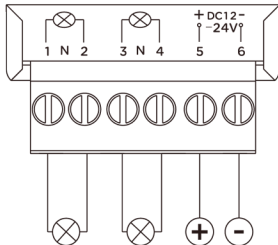


Map4

RDQ1 Series

Automatic transfer switch

6.3.2 Wiring sketch map for the output terminal of intelligent type to see map 5



Closing indication
for normal power
supply(AC 220V
signal lamp)

Closing indication
for backup power
supply(AC 220V
signal lamp)

EPS fire protection
(DC12-24V)