NanQue®

# **NQQ8DR-125**

## AUTOMATIC DUAL POWER TRANSFER SWITCH



### PRODUCT INTRODUCTION

This product is applicable to dual-power supply systems with an alternating current of 50Hz/60Hz, a rated operating voltage of less than 400V, and a rated current of less than 125A. It simultaneously detects the two power sources in the three-phase four-wire power grid, namely the common power source (N) and the standby power source (R). When any phase of the common power source experiences undervoltage (including phase loss), it will automatically switch from the common power source to the standby power source (manual switching can also be set). When the common power source is restored, it will automatically switch back to the common power source for power supply, enabling users to achieve an unattended substation for power supply.

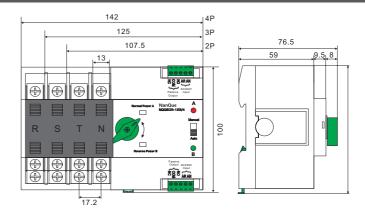
As the requirements for the safety and reliability of power supply systems become increasingly higher, automatic transfer switches are more and more widely used in important places where power outages are not allowed, such as power systems, hospitals, postal and telecommunications, fire protection, hotels, banks, airports, docks, residential quarters, high-rise buildings, television stations, military facilities, and shopping malls.

The ATS compliant with GB/T 14048.11 and IEC 60947-6-1 standard

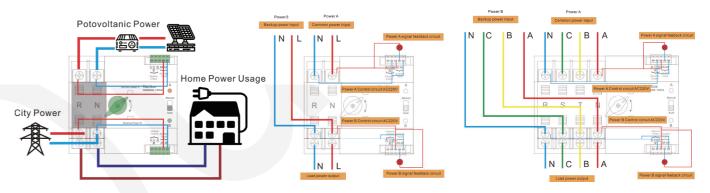
## PARAMETERS

Product Model	NQQ8DR-125		
Туре	Grid (P) - Grid (P), Grid (P) - Oil Engine (G), Grid (P)-Photovoltaic(PV)		
Electrical Characteristics			
Pole Number	2P, 3P, 4P		
Rated Current le (A) Support Customization of Other Currents	63, 80, 100, 125		
Rated Voltage Ue (V)	120, 230, 400		
Rated Insulation Voltage Ui (V)	800		
Rated Withstand Impulse Voltage Uimp (kV)	8		
Electrical category	PC Class		
Usage Category	AC - 33B(63/80/100/125/140)		
Rated Short - time Withstand Current Icw (kA)	8		
Rated Short - circuit Making Capacity Icm (kA)	17		
Operation Method	Auto, Manual		
Mechanical Characteristics			
Mechanical Service Life (Times)	8000		
Electrical Service Life (Times)	2000		
Transfer Time	≤0.008s		
Installation Characteristics			
Terminal	Press Plate Type		
Maximum Torque (N.m)	4		
Installation	Standard DIN rail (35mm width), Panel bracket installation		

# SIZE (UNIT: MM)



## WIRING METHOD



### CONNECTING CABLE

	Current	Recommended Cable (mm²)	Example Terminals
	63A	16	SC16-6
	80A-100	25	SC25-6
	125A	35	SC35-6

# PRECAUTIONS AND WARNING

#### I. Pre-operation Safety

Disconnect and verify both power sources are dead with a tester before operation. Never work on live units—risk of electric shock. Keep the area free of flammables or dust.

### 2. Mode Switching

Check voltage/frequency match before switching manual/auto modes. Avoid forced switching during load surges; may cause malfunctions or damage. Watch for jams/noises manually.

# 3. Maintenance Rules

Never skip insulation tests or interlock checks. Clean contacts with alcohol (no sandpaper). Ensure no simultaneous closing of two sources to prevent short circuits.

#### 4. Load Limits

Never exceed rated current. Avoid sudden heavy inductive loads. Overload can weld contacts or trip circuits. Size ATS for load type, with 1.5-2x margin for inductive loads.

#### 5. Abnormal Handling

Shut off both sources immediately if ATS switches frequently, smells odd, or flashes. No resetting—risk of fire. Only qualified technicians repair, test after fixing.