1. Datasheet

NXZ
Series Automatic Transfer Switching Equipment

1. General Description

1.1 Scope of Application

1.1.1 NXZ series Automatic Transfer Switching Equipment is applicable to the three-phase four-wire duplicate supply power grid of AC 50Hz, rated voltage 400V/415V and below, and rated current up to 630A . It can automatically connect one or several load circuits from one power source to the other to ensure the normal power supply for the load circuit.

1.1.2 This product is applicable to industrial and commercial power use places, high-rise buildings, and residential houses.

1.2 Applicable standards

1.2.1 Product standard

IEC 60947-1.

IEC 60947-6-1.

1.2.2 Standards for use in extreme environment

IEC 60068-2-1. (Low Temperature)

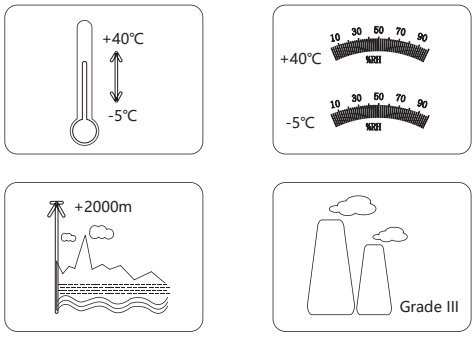
IEC 60068-2-2. (High Temperature)

IEC 60068-2-30. (Cyclic Damp Heat)

IEC 60068-2-11. (Salt mist)

1.2.3 Certification：CB、CE、KEMA

1.3 Normal working conditions



1.3.1 Ambient temperature

5° C~+40° C; Users can custom-tailor relevant product to be used in the environment of -25° C~+70° C, and use the product according to the temperature compensation table.

1.3.2 Sea level elevation

Equal to 2000m or below; if it needs to work above 2000m altitude, it shall be used according to the table of capacity reduction of different altitudes.

1.3.3 Atmospheric conditions

The relative humidity shall not exceed 50% when the surrounding air temperature is +40° C; the relative humidity can be higher when the temperature is lower; the average monthly maximum relative humidity in the wettest month is 90%, and the average monthly minimum temperature shall be +20 ° C. Special measures may be necessary in cases of occasional condensation due to variations in temperature.

1.3.4 Pollution degree: class 3

1.3.5 Installation category

Installation category of the switching equipment of main circuit is category IV.

Installation category of auxiliary circuit is category III.

Installation category of conversion controller is category II.

1.3.6 Utilization category: AC-33B

Electromagnetic compatibility (EMC)
Electrostatic discharge (IEC 61000-4-2) Level 2

Radio-frequency electromagnetic field-radiated electromagnetic field immunity (IEC 61000-4-3) Level 3,

Fast transient bursts (IEC 61000-4-4) Level 3,

Surges (IEC 61000-4-5) Level 3,

Radio-frequency electromagnetic field-conducted immunity (IEC 61000-4-6) Level 3,

Radiation grade (CISPR11) grade B,

3. Functions and characteristics

Technical data of NXZ (Class PC)

Model	NXZ-125	NXZ-250	NXZ-630
Electrical characteristics			
Frame current (A)	125	250	630
Rated current (A)	80,100,125	160,200,250	315,320,400,500,630
Rated operational voltage Ue (V)	400/415 50Hz		
Rated insulation voltage Ui (V)	AC800		
Rated impulse withstand voltage Uimp (kV)	8		
Utilization category	AC-33B		
Number of poles	3P/4P		
Rated conditional short-circuit current Iq (kA)	100		
Rated short-circuit making capacity Icm (kA)	20	30	50
Rated short time withstand current Icw/0.2s (kA)	10	10	25
Contact transfer time (S)	0.6× (1±50%)	1× (1±10%)	1.5× (1±10%)
Operating transfer time (S)	1.2× (1±10%)	2.1× (1±10%)	3.3× (1±10%)
Mechanical endurance (times)	8500	7000	3000
Electrical endurance (times)	1500	1000	1000
Overall dimension			
Width x height x depth (mm)	245×130×126	295×175×175	430×272×230
Controller characteristics			
Controller model	A type (standard), B type (intelligent)		
Installation mode	Integrated, split		
Rated control power supply voltage Us (V)	230/240 50/60Hz		
Control voltage range	85%~110%Ue		

Parameters of controller

Function \ Model	A type (standard)	B type (intelligent)
Manual/automatic transfer	■	■
Main contact positions		
Normal position	■	■
Alternative position	■	■
Off-position	■	■
Automatic control		
Normal supply of monitoring	■ Phase failure/loss of voltage, undervoltage, overvoltage fault	■ Phase failure/loss of voltage, undervoltage, overvoltage fault
Alternative supply of monitoring	■ Phase failure/loss of voltage, undervoltage, overvoltage fault	■ Phase failure/loss of voltage, undervoltage, overvoltage fault
Automatically transfer and restore operation	■	■
Automatically transfer and nonautomatically restore operation	■	■
Grid-grid	■	■
Grid-generator	■	■
Phase failure/loss of voltage transfer	■	■
Under voltage transfer	■	■
Over voltage transfer	■	■
Delay adjustable	■	■
Transfer delay	0s~300s adjustable	0s~300s adjustable
Return delay	0s~300s adjustable	0s~300s adjustable
Generator control	■	■
Fire control linkage	■	■
Indication		
Switching-on/switching-off/Off-position indication	■	■
Normal/alternative supply indication	■	■
Parameter setting indication	■	■
Others		
Communication function	-	■
Display module	■ LED	■ LED

NXZ	250	3	A	200
Product Series	Frame Current	Number of poles	Controller	Rated Current
NXZ	125	3:3P	A:Standard type	80A
	250	4:4P	B:Intelligent type	100A
	630			125A
				160A
				200A
				250A
				315A
				320A
				400A
				500A
				630A

NXZ Series

Mounting Method	Rated Current	Description	Code
125A	80A	NXZ-125/4A 80A	169992
	100A	NXZ-125/4A 100A	169990
	125A	NXZ-125/4A 125A	169991
	80A	NXZ-125/4B 80A	171611
	100A	NXZ-125/4B 100A	169993
	125A	NXZ-125/4B 125A	171610
250A	160A	NXZ-250/4A 160A	171612
	200A	NXZ-250/4A 200A	171613
	250A	NXZ-250/4A 250A	171614
	160A	NXZ-250/4B 160A	171615
	200A	NXZ-250/4B 200A	171616
	250A	NXZ-250/4B 250A	171617
630A	315A	NXZ-630/4A 315A	171618
	320A	NXZ-630/4A 320A	171619
	400A	NXZ-630/4A 400A	171620
	500A	NXZ-630/4A 500A	171621
	630A	NXZ-630/4A 630A	171622
	315A	NXZ-630/4B 315A	171623
	320A	NXZ-630/4B 320A	171624
	400A	NXZ-630/4B 400A	171625
	500A	NXZ-630/4B 500A	171626
	630A	NXZ-630/4B 630A	171627