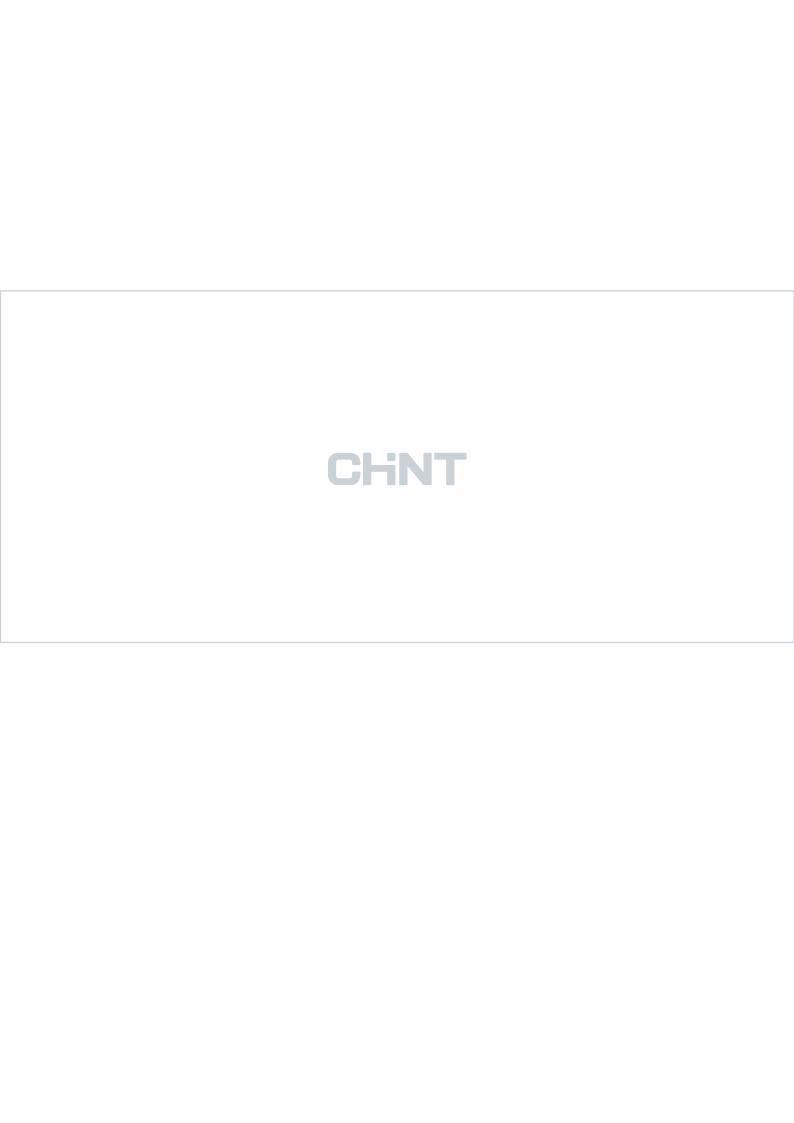
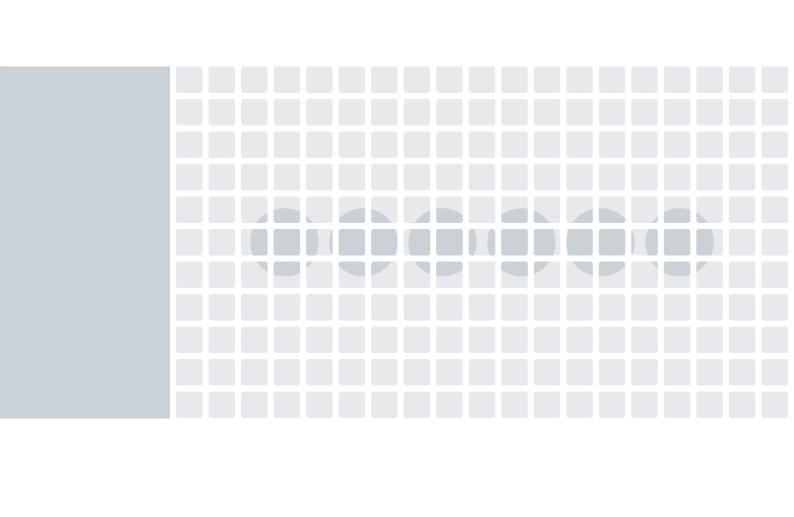


**Low Voltage Brief Catalogue** 





# **CHINT Electrics**









# **CHINT Low-voltage Electrical Products**

Zhejiang CHINT Electrics Co., Ltd, the business unit of CHINT for Low-voltage Electrical Products, is a nationwide leader in power distribution and industrial control industry and is one of the core businesses of CHINT Group. The product lines cover low-voltage electrical products of circuit breakers, contactors, pushbuttons, switches, transformers, relays, capacitors, motor starters, etc. The company adopts an ERP system by SAP and automatic warehouse guarantee just-in-time operations and lead-time. Many of CHINT Low-voltage electrical products have been certified under important international certificates such as

CE, DNV, AENOR, KEMA, ASTA, VDE,TÜV, SEMKO, FIMKO, CCC, EK, ESC, SNI, UKRtest, PCT, RCC, SLSI, SAA, UL, CSA, etc. Exquisitely manufactured and strictly tested, CHINT Low-voltage Electrical Products will meet your various demands for industrial, commercial, and residential applications on reliable operations and considerate before & after-sale services.



# Chint products are certified by the following international certificates:





# **Low Voltage Brief Catalogue**

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Power Relay	Page 35
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#### **NB1 Miniature Circuit Breaker**

#### General

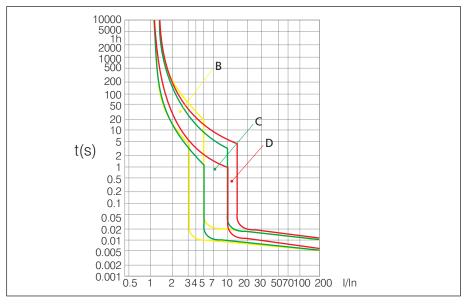
- Short circuit protection
- Overload protection
- Switch
- Isolation
- Contact position indicator
- Advanced current-limit technology
- Heat dissipation gap for better cooling
- Extendable DIN-rail holder for easy installation

#### Technical features

Standard		IEC/EN 60898-1	IEC/EN 60947-2	UL1077	UL1077
Rated current In	Α	1, 2, 3,	4, 6, 10, 13, 16	, 20, 25, 32, 4	0, 50, 63
Poles		1P, 2P, 3P, 4P	1P, 2P, 3P, 4P	1P, 2P, 3P, 4P	1P, 2P
Rated voltage Ue	V	240/415	240/415	277/480	110/125
Rated frequency	Hz		AC 50/60	'	DC
Rated breaking capacity	Α	6000/10000	6k	5k	10k
Energy limiting class		3			
Rated impulse withstand voltage(1.2/50) Uimp	V		60	00	
Thermo-magnetic release characteristic		B, C, D	8-12In	B, C, D	4-7ln, 7-14ln
Electrical life			8, (	000	•
Mechanical life			20,	000	
Mounting		On DIN rail E	N 60715 (35mm	n) by means of fa	st clip device
Connection			From top a	and bottom	
Auxiliary contact		Yes			
Shunt release		Yes			
Under voltage release		Yes			
Alarm contact		Yes			

#### Curve

IEC/EN 60898-1 B, C, D curve









еΒ

# CE 🛛 🕲 SAA

#### *C*B Miniature Circuit Breaker

#### General

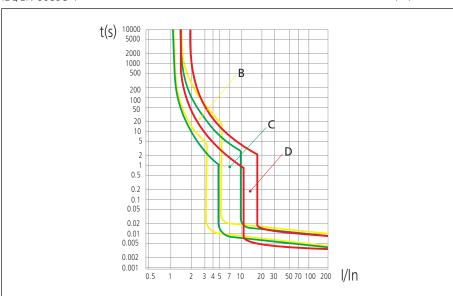
- Short circuit protection
- Overload protection
- Switch
- Isolation
- Economic type breaker
- High cost-effective

#### Technical features

Standard		IEC/EN 60898-1	IEC/EN 60947-2		
Rated current In	Α	1, 2, 3, 4, 6, 10, 13, 16, 20, 25, 32, 40, 50, 63			
Poles		1P, 2P, 3P, 4P			
Rated voltage Ue	V	230/400	240/415		
Rated frequency	Hz	50,	/60		
Rated breaking capacity	А	3000/4500	4.5k/3k		
Rated impulse withstand voltage(1.2/50) Uimp	V	4000			
Thermo-magnetic release characteristic		B, C, D 8-12In			
Electrical life		4, 000			
Mechanical life		10, 000			
Terminal connection type		Cable/Pin-type busbar			
Mounting		On DIN rail EN 60715 (35mm) by means of fast clip device			
Connection		From top and bottom			

#### Curve

IEC/EN 60898-1 B, C, D curve







UB

# CE S SAA

## **UB Miniature Circuit Breaker**

#### General

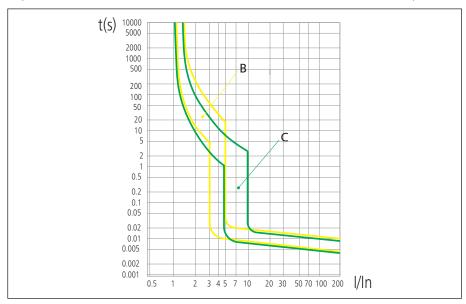
- Short circuit protection
- Overload protection
- Switch
- Isolation
- Various wiring solutions : U-type/pin-type/Comb-type Busbar/Cable

#### Technical features

Standard		IEC/EN 60898-1
Rated current In	Α	6, 10, 13, 16, 20, 25, 32, 40
Poles		1P, 2P, 3P, 4P
Rated voltage Ue	V	230/400
Rated frequency	Hz	50/60
Rated breaking capacity	Α	6000
Rated impulse withstand voltage(1.2/50) Uimp	V	4000
Thermo-magnetic release characteristic		В, С
Electrical life		4,000
Mechanical life		10,000
Mounting		On DIN rail EN 60715 (35mm) by means of fast dip device
Connection		From top and bottom

#### Curve

IEC/EN 60898-1 B, C curve







DZ158

# (€ S) ⊕ RCC SAA

#### **DZ158 Miniature Circuit Breaker**

#### General

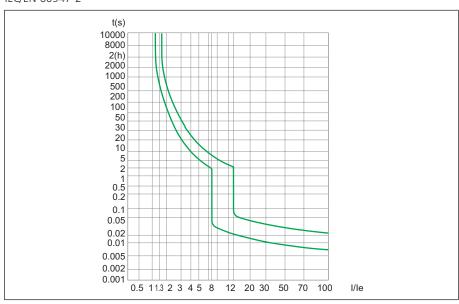
- Short circuit protection
- Overload protection
- Switch
- Isolation
- Contact position indicator

#### Technical features

Standard		IEC/EN 60947-2
Rated current In	Α	63, 80, 100, 125
Poles		1P, 2P, 3P, 4P
Rated voltage Ue	V	230/400
Rated frequency	Hz	50/60
Rated breaking capacity	kA	6/10
Rated impulse withstand voltage(1.2/50) Uimp	V	6000
Thermo-magnetic release characteristic		8-12ln
Electrical life		1,500 (In=63A, 80A, 100A)
		1,000 (In=125A)
Ada base at 186		8,000 (In=63A, 80A, 100A)
Mechanical life		7,000 (In=125A)
Mounting		On DIN rail EN 60715 (35mm) by
		means of fast clip device
Connection		From top

#### Curve

#### IEC/EN 60947-2







NBH8



#### **NBH8 Miniature Circuit Breaker**

#### General

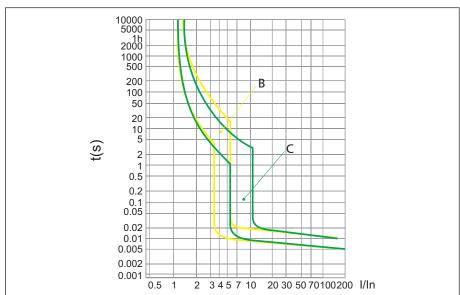
- Short circuit protection
- Overload protection
- Switch
- Isolation
- 1P+N in one module.
- Contact position indicator

#### Technical features

Standard		IEC/EN 60898-1
Rated current In	Α	1, 2, 3, 4, 6, 10, 13, 16, 20, 25, 32, 40
Poles		1P+N
Rated voltage Ue	V	230
Thermo-magnetic release characteristic		В, С
Rated frequency	Hz	50/60
Rated breaking capacity	А	4500/6000
Rated impulse withstand voltage(1.2/50) Uimp	V	4000
Electrical life		4, 000
Mechanical life		10, 000
Mounting		On DIN rail EN 60715 (35mm) by means of fast clip device
Terminal connection type		Cable/Pin-type busbar
Auxiliary contact		Yes
Shunt release		Yes
Under voltage release		Yes
Alarm contant		Yes

#### Curve

IEC/EN 60898-1 B, C curve







DZ267



#### **DZ267 Miniature Circuit Breaker**

#### General

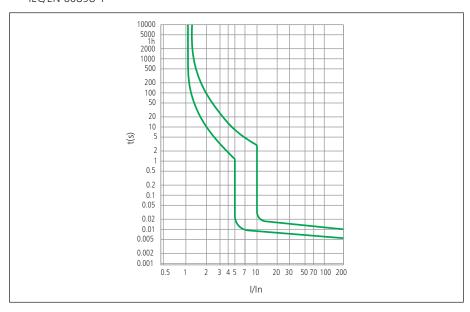
- Short circuit protection
- Overload protection
- Switch
- Isolation
- 1P+N in one module.
- Only C curve available

#### Technical features

Standard		IEC/EN 60898-1
Rated current In	Α	6, 10, 13, 16, 20, 25, 32
Poles		1P+N
Rated voltage Ue	V	230
Rated frequency	Hz	50/60
Rated breaking capacity	А	3, 000
Rated impulse withstand voltage(1.2/50) Uimp	V	4, 000
Electrical life		4, 000
Mechanical life		10, 000
Terminal connection type		Cable/Pin-type busbar
Connection		From top

#### Curve

IEC/EN 60898-1







NL1



# NL1 Residual Current Operated Circuit Breaker without Over-current Protection (Magnetic)

#### General

- Protection against risk of fire
- Protection against risk of electric shock
- Protection class: AC, A, AC-S, A-S
- Tripping class
  - AC class Tripping is ensured for sinusoidal, alternating currents, whether they be quickly applied or slowly increase.
  - A class Tripping is ensured for sinusoidal, alternating residual currents as well as for pulsed DC residual currents, whether they be quickly applied or slowly increase.
  - S class can be used as upstream group switch for selective tripping contrary to a downstream standard RCCB
- Rated residual operating current
  - 30mA- to give a high degree of protection against electric shock in a situation where supplementary protection against shock from accidental direct contact is required when it must be able to trip within 40 milliseconds when a fault current of 150mA is detected.
  - 100mA- to give a degree of protection against electric shock due to indirect contact situation.
  - 300mA- to give overall protection against risk of fire from electrical faults in wiring etc, only where sufficient current (typically less than 500mA) may cause incandescence of metal parts in suitable circumstances and in consideration that installed over current devices would require far in excess of 300mA to operate.
- Fault current indicator

Standard		IEC/EN 61008-1
Type (wave form of the earth leakage sensed)		AC, A, AC-S, A-S
Rated current In	Α	25, 40, 63, 80, 100
Poles		2P, 4P
Rated voltage Ue	V	230/400
Rated sensitivity I△n	Α	0.03, 0.1, 0.3
Short-circuit current lcn=l△c	Α	6000/10000
Electrical life		2, 000
Mechanical life		2, 000
Terminal connection type		Cable/U-type busbar/Pin-type busbar
Mounting		On DIN rail EN 60715 (35mm) by means of fast clip device
Connection		From top and buttom





NB1L



# NB1L Residual Current Operated Circuit Breaker with Over-current Protection (Magnetic)

#### General

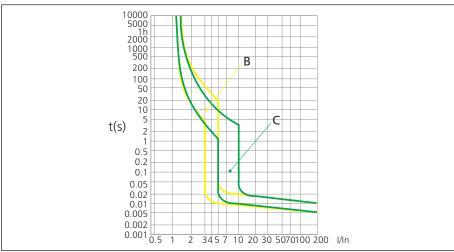
- Protection against risk of fire
- Protection against risk of electric shock
- Protection against overload
- Protection against short circuit
- Contact position indicator

#### Technical features

Standard		IEC/EN 61009-1			
Type (wave form of the earth leakage sensed)		AC, A			
Thermo-magnetic release characteristic			В, С		
Rated current In	^	MCB+add-on RCD block	1, 2, 3, 4, 6, 10, 13, 16, 20, 25, 32, 40, 50, 63		
kated current in	А	Combined	1, 2, 3, 4, 6, 10, 13, 16, 20, 25, 32, 40		
Poles		MCB+add-on RCD block	1P+N, 2P, 3P, 3P+N, 4P		
Poles		Combined	1P+N, 2P		
Rated voltage Ue	V	230/400			
Rated sensitivity I△n		MCB+add-on RCD block	0.03, 0.1, 0.3		
Nateu sensitivity IZII	Α	Combined	0.03		
Rated short-circuit capacity lcn	Α	6,000/10,000			
Break time under I△n	S		≤0.1		
Electrical life			2,000		
Mechanical life		2,000			
Mounting		On DIN rail EN 60715 (35mm) by means of fast clip device			
Connection		From top and bottom (for combined type)			
Connection		From top (MCB+add-on RCD block)			

#### Curve

IEC/EN 61009-1 B, C curve







# NB3LE Residual Current Operated Circuit Breaker with Over-current Protection (Electronic)





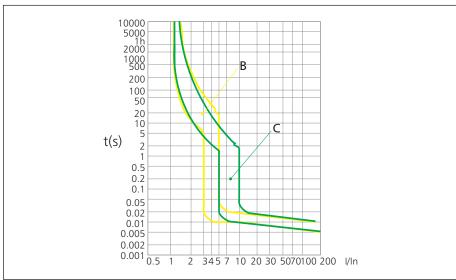
- Protection against risk of fire
- Protection against risk of electric shock
- Protection against overload
- Protection against short circuit
- 1P+N in one module
- Contact position indicator

#### Technical features

Standard		IEC/EN 61009-1
Type (wave form of the earth leakage sensed)		AC
Thermo-magnetic release characteristic		В, С
Rated current In	Α	6, 10, 16, 20, 25, 32
Poles		1P+N
Rated voltage Ue	V	240
Rated sensitivity I△n	Α	0.03
Short-circuit current Icn	А	6,000
Break time under I△n	S	≤0.1
Electrical life		2, 000
Mechanical life		2,000
Terminal connection type		Cable/U-type busbar/Pin-type busbar
Mounting		On DIN rail EN 60715 (35mm) by means of fast clip device
Connection		From top

#### Curve

B, C curve





NB3LE





# **NB3LEU Residual Current Operated Circuit Breaker** with Over-current Protection (Electronic)





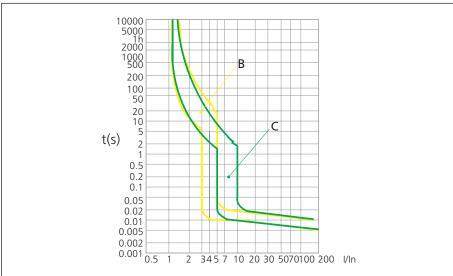
- Protection against risk of fire
- Protection against risk of electric shock
- Protection against overload
- Protection against short circuit
- 1P+N in one module
- Contact position indicator

#### Technical features

Standard		IEC/EN 61009-1
Type (wave form of the earth leakage sensed)		AC
Thermo-magnetic release characteristic		В, С
Rated current In	Α	6, 10, 16, 20, 25, 32,40
Poles		1P+N
Rated voltage Ue	V	240
Rated sensitivity I△n	Α	0.03
Short-circuit current Icn	Α	10,000
Break time under I△n	S	≤0.1
Electrical life		2, 000
Mechanical life		2, 000
Terminal connection type		Cable/U-type busbar/Pin-type busbar
Mounting		On DIN rail EN 60715 (35mm) by means of fast clip device
Connection		From top

#### Curve







NB3LEU





DZ47LE



## **DZ47LE Residual Current Operated Circuit Breaker** with Over-current Protection (Electronic)

#### General

- Protection against risk of fire
- Protection against risk of electric shock
- Protection against overload
- Protection against short circuit

#### Technical features

Standard		IEC/EN 61009-1
Type (wave form of the earth leakage sensed)		AC
Thermo-magnetic release characteristic		C, D
Rated current In	Α	6, 10, 16, 20, 25, 32, 40, 50, 60
Rated voltage Ue	V	230/400
Rated sensitivity I△n	Α	0.03, 0.1, 0.3
Short-circuit current Icn	Α	4,500/6,000
Electrical life		2, 000
Mechanical life		2, 000
Mounting		On DIN rail EN 60715 (35mm) by means of fast clip device
Connection		From top





# **NBH8LE Residual Current Operated Circuit Breaker** with Over-current Protection (Electronic)

#### General

- Protection against risk of fire
- Protection against risk of electric shock
- Protection against overload
- Protection against short circuit

Standard		IEC/EN 61009-1
Type (wave form of the earth leakage sensed)		AC
Thermo-magnetic release characteristic		С
Rated current In	Α	1, 2, 3, 4, 6, 10, 16, 20, 25, 32, 40
Poles		1P+N
Rated voltage Ue	V	230
Rated sensitivity I△n	Α	0.03
Short-circuit current Icn	Α	4,500
Electrical life		2, 000
Mechanical life		2, 000
Mounting		On DIN rail EN 60715 (35mm) by means of fast clip device
Connection		From top



NBH8LE





# **DZ158LE Residual Current Operated Circuit Breaker**

#### General

- Protection against risk of fire
- Protection against risk of electric shock
- Protection against overload
- Protection against short circuit

#### Technical features

Standard		IEC/EN 60947-2
Type (wave form of the earth leakage sensed)		AC
Thermo-magnetic release characteristic		8~12In
Rated current In	Α	63, 80, 100
Poles		1P+N, 2P, 3P, 3P+N, 4P
Rated voltage Ue	V	230/400
Rated sensitivity I△n	Α	0.03, 0.1, 0.3
Short-circuit current Icn	Α	6,000
Electrical life		1, 500
Mechanical life		8,500
Mounting		On DIN rail EN 60715 (35mm) by means of fast clip device
Connection		From top



## **DZ267LE Residual Current Operated Circuit Breaker**

#### General

- Protection against risk of fire
- Protection against risk of electric shock
- Protection against overload
- Protection against short circuit

Standard		IEC/EN 61009-1
Type (wave form of the earth leakage sensed)		AC
Thermo-magnetic release characteristic		С
Rated current In	А	6, 10, 16, 20, 25, 32
Poles		1P+N
Rated voltage Ue	V	230
Rated sensitivity I△n	А	0.03
Short-circuit current Icn	А	3,000
Electrical life		2,000
Mechanical life		4,000
Mounting		On DIN rail EN 60715 (35mm) by means of fast clip device
Connection		From top



DZ158LE



DZ267LE













#### XF9 (Auxiliary Contact for NB1, NBH8, NB1L, NB3LE, NBH8LE)

#### General

- General: Indication of the position of the device's contacts.
- Manufactured according to IEC/EN 60947-5-1
- Rated voltage: DC 24V, 48V, 130V

AC 240V, 415V

- Configurations: 1N/O+1N/C
- Mounted on the left of the MCBs/RCBOs.

#### XF9J (Alarm Auxiliary Contact for NB1, NBH8, NB1L, NB3LE, NBH8LE)

#### General

- General: Indication of the position of the device's contacts only after the automatic release of the MCBs/RCBOs due to overload or short circuit.
- Manufactured according to IEC/EN 60947-5-1
- Rated voltage: DC 24V, 48V, 130V

AC 240V, 415V

- Configurations: 1N/O+1N/C
- Mounted on the left of the MCBs/RCBOs.

#### S9 (Shunt Release for NB1, NBH8, NB1L, NB3LE, NBH8LE)

#### General

- General: Remote opening of the device when a voltage is applied.
- Manufactured according to IEC/EN 60947-5-1
- Rated voltage: DC 24V, 48V

AC 24V, 230V, 400V

Mounted on the left of the MCBs/RCBOs.

#### V9 (Under Voltage Release for NB1, NBH8, NB1L, NB3LE, NBH8LE)

#### General

- General: Reliable break the device in the case of a voltage drop (between 35% and 70% of its rated value)
- Manufactured according to IEC/EN 60947-5-1
- Rated voltage: AC 24V, 230V, 400V
- $\bullet$  Mounted on the left of the MCBs/RCBOs .

# AX-1 (Auxiliary Contact for DZ158, DZ158LE)

#### General

- General: Indication of the position of the device's contacts.
- Manufactured according to IEC/EN 60947-5-1
- Rated voltage: DC 110V

AC 400V

- Configurations: 1N/O+1N/C
- Mounted on the left of the MCBs/RCBOs.





NH2



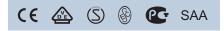
#### **NH2 Switch Disconnector**

#### General

- Isolation
- Designed match DZ series MCBs/RCBOs

#### Technical features

- Manufactured according to IEC/EN 60947-3
- Electric ratings: 32A, 63A,100A, 230/400V, 50/60Hz
  Rated short circuit breaking capacity: 20le, t=0.1s
- Electric life: 1500Mechanical life: 8500
- Connection: From top and bottom



#### **NH4 Switch Disconnector**

#### General

- Isolation
- Designed match N series MCBs/RCBOs

#### Technical features

- Manufactured according to IEC/EN 60947-3
- Electric ratings: 32A, 63A, 100A, 125A, 230/400V, 50/60Hz
- Rated short circuit breaking capacity: 20le, t=0.1s
- Electric life: 1500Mechanical life: 8500
- Connection: From top and bottom



#### **NH9 Switch Disconnector**

#### General

Isolation

- Manufactured according to IEC/EN 60947-3
- Electric ratings: 32A, 230/400V, 50/60Hz
- Rated short circuit breaking capacity: 20le, t=0.1s
- Electric life: 1500Mechanical life: 8500
- Connection: From top and bottom



NH4



NH9





NU6-I



NU6-II



NU6-III



NTE8

#### **NU6 Low-voltage Surge Arrester**

#### General

- Protect electric system and on-loading electrical apparatus from thunder.
- Protect electric system and on-loading electrical apparatus from instantaneous over-voltage.

#### Technical features

- NU6- I:
- Manufactured according to IEC/EN 61643-1
- Electric ratings: 230/400V, AC50/60Hz, 3-phases
- Shock current limp peak (10/350 µs)(kA): 15kA, 25kA, 40kA
- Max. continuous operational voltage Uc(V): 275V, 320V, 385V, 440V
- NU6-II:
- Manufactured according to IEC/EN 61643-1
- Composed by two independent components
- With remote control port
- Electric ratings: 230/400V, AC50/60Hz, 3-phases
- Nominal discharge current (kA): 5kA, 15kA, 25kA, 40kA.
- Max. continuous operational voltage Uc (V): 275V, 320V, 385V, 460V, 510V, 550V
- NU6-III:
- Manufactured according to IEC/EN 61643-1
- Composed by two independent components
- With remote control port
- Electric ratings: 230/400V, AC50/60Hz, 3-phases
- Uoc (1.2/50µs)(kV): 2kV, 3kV, 4kV, 6kV, 10kV
- Max. continuous operational voltage Uc (V): 275V, 320V, 385V

# CE (S) (§)

#### **NTE8 Time Relay**

#### General

• For making or breaking the device according to setting time value

- Manufactured according to IEC/EN 60947-5-1
- Electric ratings: 5A/1A, AC230V/DC30V, 50/60Hz
- Number of contanct: 1N/O
- Delay time range: from 0.1s to 480s
- Low power consumption: <1W



# CHNT—NPP BOOK CE

NP9

#### **NP9 Pushbutton**

#### General

• For controlling starters, contactors, relays and other electric wire in the electric system. And the pushbutton with the lamp also could be used as light indication.

#### Technical features

- Manufactured according to IEC/EN 60947-5-1
- Two type: Pushbutton without illuminated lamp
   Pushbutton with illuminated lamp
- Electric ratings: 6A, 230V, AC50/60Hz
- Electric life: 100,000Mechanical life: 250,000
- Assembly of contact: 1N/C+2N/O, 2N/C+1N/O, 3N/O, 2N/C+2N/O (Not available for illuminated type)
- Mounting on Din rail (TH35-7.5)

# **ND9 Indicator Light**

#### General

• Indication of signal, pre-set signal, malfunction signal in electric system.

#### Technical features

- Manufactured according to IEC/EN 60947-5-1
- Two type: Pushbutton without illuminated lamp Pushbutton with illuminated lamp
- Electric ratings: 6A, 230V, AC50/60Hz
- Electric life: 100,000Mechanical life: 250,000
- Assembly of contact: 1N/C+2N/O, 2N/C+1N/O, 3N/O, 2N/C+2N/O (Not available for illuminated type)
- Mounting on Din rail (TH35-7.5)



#### **NCH8 Modular AC Contactor**

#### General

• For controlling the household device or similar low inductive electric device

- Manufactured according to IEC/EN 61095
- Electric ratings: up to 20A, 40A, 63A, 230V, AC50/60Hz
- Utilization category: AC-1, AC-7a, AC-7b



ND9



NCH8





NX2

#### **NX2 Consumer Unit**

#### General

• For installing the modular DIN-rail products together to control the electric system

#### Technical features

- Manufactured according to IEC/EN 60439-3
- Electric ratings: up to 100A, 230V, AC50/60Hz
- On-load current(A): 100/1-phase, 63/3-phase
- No. of mounted units: 10,14,18, 28, 36
- Surface mounting

#### **NX8 Consumer Unit**



• For installing the modular DIN-rail products together to control the electric system

#### Technical features

- Manufactured according to IEC/EN 60439-3
- Electric ratings: up to 100A, 230V, AC50/60Hz
- On-load current(A): 100/1-phase, 63/3-phase
- No. of mounted units: 5, 8, 12, 15, 20, 24
- Flush mounting



NX8

## **NXW1 Consumer Unit for Outdoor Application**

#### General

 $\bullet$  For installing the modular DIN-rail products together to control the electric system

- Manufactured according to IEC/EN 60439-3
- Electric ratings: up to 63A, 230V, AC50/60Hz
- No. of mounted units: 3, 5
- High protection degree up to IP65
- Surface mounting



NXW1





#### NX6

#### **NX6 Consumer Unit**

#### General

• For installing the modular DIN-rail products together to control the electric system

#### Technical features

- Manufactured according to IEC/EN 60439-3
- Designed for single phase circuit system
- Electric ratings: 240V, AC50/60Hz

Max. incoming current (A): 125A Max. outgoing current (A): 63A

- Protection degree: IP40
- No. of mounted units: 10, 15,17,21,23 Surface mounting for indoor installation.

# **NX9 Distribution Board**

#### General

• For installing the modular DIN-rail products together to control the electric system

#### ■ Technical features

- Manufactured according to IEC/EN 60439-3
- Designed for three phases circuit system

NX9-: Incoming DIN-rail fitted with Switch Disconnector.

NX9- $\square$ M: Incoming DIN-rail fitted with MCCB

● Electric ratings: 240/415V, AC50/60Hz

Max. incoming current (A): 200A Max. outgoing current (A): 63A

- Protection degree: IP40
- No. of mounted units: 4,6,8,12,16,20
- Surface mounting for indoor installation.

#### **JXF Wall Mounting Enclosure**

#### General

• For installing the modular DIN-rail products together to control the electric system

#### Technical features

- Manufactured according to IEC/EN 60439-1
- Designed for three phases circuit system
- Electric ratings: 220...240/380...415V, AC50/60Hz

Max. incoming current (A): 630A

- Protection degree: IP54/IP65
- Surface mounting for outdoor installation.









MCB Shield

#### MCB Shield (For eB, NH2)

#### General

Guarantee MCBs' wiring safety.

#### Technical features

• Electrical ratings: up to 63A, 230/400V, AC 50/60Hz

• Poles of mounted units: 1P, 3P

#### **Busbar for MCB & RCD**

Model	Number of poles	Cross section (mm²)	Length L (m)
Fork Type	1P, 2P, 3P, 4P	12	1
Pin Type	1P, 2P, 3P, 4P	12	1
Pin Type	1P, 2P, 3P, 4P	16	1

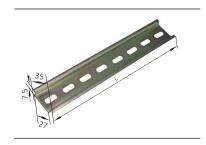


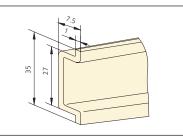
#### **Busbar for RCBO**

Model	Number of poles	Cross section (mm²)	Length L (m)
Fork Type	2P	10	1
Pin Type	3P	10	1



#### **DIN** rail





Model	L(m)
DIN rail	1





NM1



#### **Fixed type MCCB** NM1

- Rated current from 10 to 1250A
- Employing a fixed thermal and fixed magnetic trip.
- Frames made of rigid materials of engineering plastics
- Complete range of two, three and four-pole version
- 4-class breaking capacity from 10kA to 70kA
- Vertical/horizontal installation
- Circuit breakers and auxiliaries comply with the following international standard:

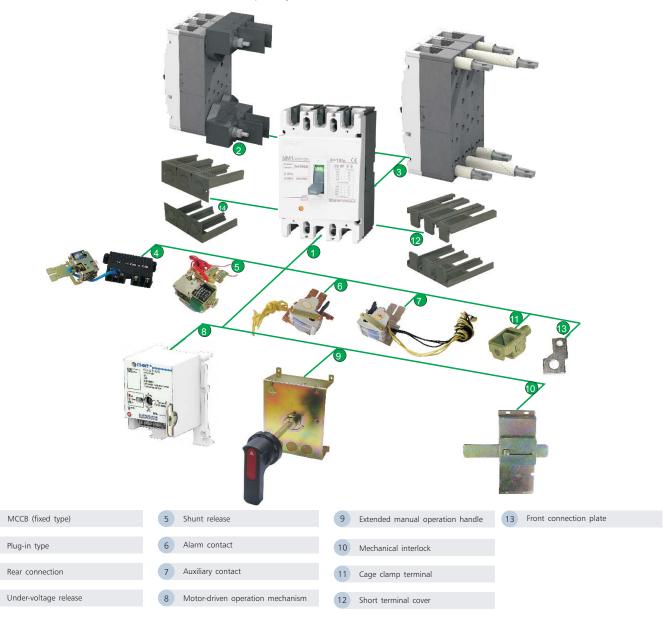
IEC/EN 60947-1: general rules

IEC/EN 60947-2: circuit breakers

IEC/EN 60947-4.1: contactor and motor starters

IEC/EN 60947-5.1: and following: control circuit devices and switching elements, automatic control components.

- Certified for operation in pollution-degree III environments as defined by IEC standard 60947 (industrial environments).
- Temperature range from  $-5^{\circ}$ C to  $+60^{\circ}$ C
- A complete system of add-on modules for NM1







NM8



# Adjustable type MCCB NM8

- Rated current from 16 to 1250A
- Thermal-magnetic type / Electronic type / Magnetic-only type
- Adjustable thermal & adjustable magnetic trip
- 2P 3P 4P available
- AC/DC applicable
- 5-class breaking capacity from 25kA to 150kA
- $lcs=100\%lcu(ln \le 630A)$ , lcs=50%lcu(ln > 630A)
- Circuit breakers and auxiliaries comply with the following international standard: IEC/EN 60947-1: general rules

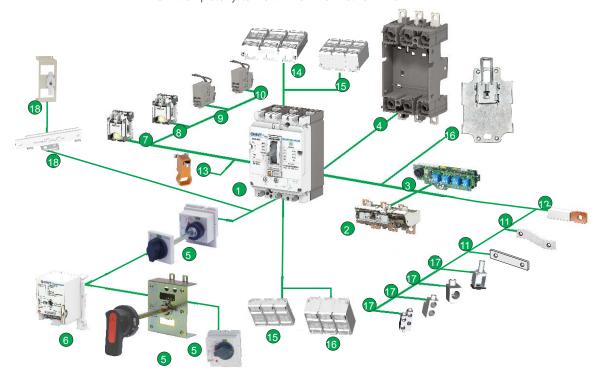
IEC/EN 60947-2: circuit breakers

IEC/EN 60947-3: switches, disconnectors, switch-disconnectors, etc.

IEC/EN 60947-4: contactor and motor starters

IEC/EN 60947-5.1 and following: control circuit devices and switching elements, automatic control components. NM8 also comply with the specifications of the marine classification companies.

- Certified for operation in pollution-degree III environments as defined by IEC standard 60947 (industrial environments).
- Wide temperature range from -40°C to +70°C
- A complete system of add-on modules for NM8



1 Body	6 Motor driven operating mechanism	11 Front connection plate
2 Thermo magnetic release	7 Under-voltage release	12 Rear connection plate
3 Electronic release	8 Shunt release	13 Locking system(padlock)
4 Plug-in base	9 Alarm contact	14 Short terminal cover
5 Rotary manual operating handle	10 Auxiliary contact	15 Extended terminal cover
Notary manual operating namide	Advillary contact	15 Extended terminal cover



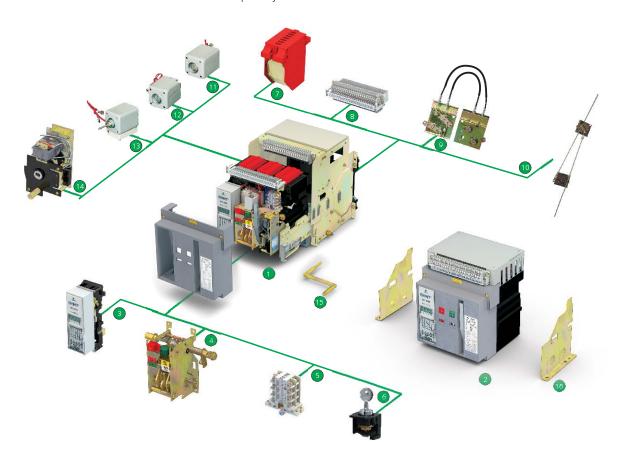






#### **ACB** NA<sub>1</sub>

- Rated current from 200 to 6300A
- Modulized mechanical part and accessories
- The terminal of the control circuit on the front enables easy handling
- Minimized arc space
- 3P 4P available
- Max. breaking capacity up to 120kA@400V
- Drawout type / fixed type
- Power supplied from either top or bottom does no reduction in performance
- Circuit breakers comply with IEC/EN 60947-2
- Certified for operation in pollution-degree III environments as defined by IEC standard 60947 (industrial environments).
- A complete system of add-on modules for NA1

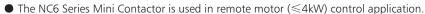


1 Drawout type	5 Auxiliary contact	9 Wire-cable mechanical interlock	13 Under-voltage release
2 Fixed type	6 Locking-device	10 Connecting-rod type mechanical interlock	14 Motor-driven energy-storage mechanism
3 Intelligent controller	7 Arcing chamber	11 Shunt release	15 Rotary handle
4 Operating mechanism	8 Secondary connecting part	12 Closing electromagnet	16 Fixed plate





#### **NC6 Mini Contactor**



- Rating up to 690V, 9A (AC3). ---- (06A, 09A)
- Standard: IEC/EN 60947-4-1
- Two kinds of mounting available: Normal type (without pins); Pin type (with pins)
- Ambient temp: -5 ~ 40 °C
- Coil voltage (AC): 24V, 36V, 48V, 110V, 127V, 220V, 230V, 380V, 400V;
- Auxiliary contacts: NCF6-20 & NCF6-02 (2NO or 2NC) NCF6-13 & NCF6-31 (1NO & 3NC or 3NO & 1NC) NCF6-40 & NCF6-04 (4NO or 4NC)
- Assemble with Thermal overload Relay NR2-11.5 to be a DOL Starter.

















- Rating up to 690V, 95A (AC3). ---- (09A, 12A, 18A, 25A, 32A, 40A, 50A, 65A, 80A, 95A)
- Standard: IEC/EN 60947-4-1
- lacktriangle Ambient temp: -5  $\sim$  40  $^{\circ}\mathrm{C}$
- Coil voltage (AC): 24V, 36V, 48V, 110V, 127V, 220V, 230V,
  - 380V, 415V, 440V, 480V, 500V, 600V, 660V
- Coil voltage (DC): 24V, 36V, 48V, 110V, 220;
- Side mounting auxiliary contacts: NCF1-11C (1NO & 1NC)
- Top mounting auxiliary contacts: F4-20 & F4-02 (2NO & 2NC)

F4-13 &F4-31 (1NO & 3NC or 3NO & 1NC)

F4-40 & F4-04 (4NO or 4NC)

• Top mounting time delay block: F5-T (making time delay);

F5-D (breaking time delay)

- Assemble with Thermal overload Relay NR2 (or NRE8) to be a DOL Starter.
- Assemble with another one & F4 & F5 & NR2 (or NRE8) to be a Star-Delta Starter called QJX2;
- Assemble with a current limiting block to be a Capacitor Contactor.
- Assemble with another one to be a reversing contactor.



NC1















- The NC2 Series Contactor is used in remote motor (\$450kW) control application.
- Rating up to 690V, 630A (AC3).
  - ---- (115A, 150A, 185A, 225A, 265A, 330A, 400A, 500A, 630A)
- Standard: IEC/EN 60947-4-1
- Ambient temp: -5 ~ 40 °C
- Coil voltage (AC): 110V, 127V, 220V, 230V, 380V, 400V;
- Top mounting auxiliary contacts: F4-20 & F4-02 (2NO & 2NC)

F4-13 & F4-31 (1NO & 3NC or 3NO & 1NC)

F4-40 & F4-04 (4NO or 4NC)

Top mounting time delay block: F5-T (making time delay);

F5-D (breaking time delay)

- Assemble with Thermal overload Relay NR2 to be a DOL Starter.
- Assemble with another one to be a reversing contactor.



NC2







NC1-N

NC2-N

CJ19



#### **NC1-N Changeover & Reversal Contactor**

- The NC1-N Series Changeover & Reversal Contactor is used in remote motor (≤45kW) control application.
- Rating up to 690V, 95A (AC3). ----- (09A, 12A, 18A, 25A, 32A, 40A, 50A, 65A, 80A, 95A)
- Standard: IEC/EN 60947-4-1
- Ambient temp: -5 ~ 40 °C
- Coil voltage (AC): 24V, 36V, 48V, 110V, 127V, 220V, 230V, 380V, 415V, 440V, 480V, 500V, 600V, 660V





#### NC2-N Changeover & Reversal Contactor

- The NC2-N Series Changeover & Reversal Contactor is used in remote motor (≤45kW) control application.
- Rating up to 690V, 630A (AC3). ---- (115A, 150A, 185A, 225A, 265A, 330A, 400A, 500A, 630A)
- Standard: IEC/EN 60947-4-1
- Ambient temp: -5 ~ 40 °C
- Coil voltage (AC): 110V, 127V, 220V, 230V, 380V, 400V





- The CJ19 Series Contactor is used in remote capacitor (≤50kvar) switch application.
- Rating up to 400V, 95A (AC3). ---- (25A, 32A, 43A, 63A, 95A)
- Standard: IEC/EN 60947-4-1
- Ambient temp: -5 ~ 40 °C
- Coil voltage (AC): 24V, 36V, 48V, 110V, 127V, 220V, 230V, 380V, 415V, 440V, 480V, 500V, 600V, 660V
  - CJ19-25: Rating current 25A (AC3/400V);

Power of controlled capacitor≤12kvar.

CJ19-32: Rating current 32A (AC3/400V);,

Power of controlled capacitor≤18kvar.

CJ19-43: Rating current 43A (AC3/400V);

Power of controlled capacitor≤20kvar.

CJ19-63: Rating current 63A (AC3/400V);

Power of controlled capacitor≤30kvar.

CJ19-95: Rating current 95A (AC3/400V);

Power of controlled capacitor≤50kvar.



NCK2



#### **NCK2 DP Contactor**

- The NCK2 Series DP Contactor is used in remote motor of air-conditioner (<15HP-600V) control application.
- Rating up to 600V, 40A (AC7a). ---- (30A, 40A)
- Standard: IEC/EN 60947-4-1
- Poles: 3P
- Ambient temp: -5~40 °C
- Coil voltage (AC): 24V, 110/120V, 220/240V.







#### **NCK3 DP Contactor**

- The NCK3 Series DP Contactor is used in remote motor of air-conditioner (<60HP) control application.</li>
- Rating up to 690V, 90A (AC3). ---- (25A, 30A, 32A, 40A, 50A, 60A, 75A, 90A)
- Standard: IEC/EN 60947-4-1
- Poles: 1P, 1P+N, 2P, 3P
- lacktriangle Ambient temp: -5  $\sim$  40  $^{\circ}\mathrm{C}$
- Coil voltage (AC): 24V, 110/120V, 220/240V.



NC9

# CE

#### **NC9 Vacuum Contactor**

- The NC9 Series Contactor is used in remote motor (≤850kW) control application.
- Rating up to 690V, 630A (AC3). ---- (160A, 250A, 400A, 630A, 800A, 1000A)
- Standard: IEC/EN 60947-4-1
- lacktriangle Ambient temp: -5  $\sim$  40  $^{\circ}$ C
- Coil voltage (AC): 110V, 220/230V, 380/400V.







## **NRE8 Electronic Overload Relay**

- The NRE8 Series Electronic Overload Relay is used in remote motor control application for overload function.
- Rating up to 690V, 630A (AC3). ---- (25A, 40A, 100A, 200A, 630A)
- Standard: IEC/EN 60947-5-1
- lacktriangle Ambient temp: -5  $\sim$  40  $^{\circ}$ C
- Assemble with Contactor NC1, NC2 to be a DOL Starter.



NR2



#### **NR2 Thermal Overload Relay**

- The NR2 Series Thermal Overload Relay is used in remote motor control application for overload function.
- Rating up to 690V, 630A (AC3). ---- (11.5A, 25A, 36A, 93A, 150A, 200A, 630A)
- Standard: IEC/EN 60947-5-1
- lacktriangle Ambient temp: -5  $\sim$  40  $^{\circ}\mathrm{C}$
- Assemble with Contactor NC1, NC2 to be a DOL Starter.





NS2



#### **NS2 Manual Motor Starter**

- The NS2 Series Manual Motor Starter is used in remote motor control application for overload, short circuit & phase failure.
- Rating up to 690V, 80A(AC3). ---- (0.1~1.16A, 0.16~0.25A, 0.25~0.4A, 0.4~0.63A, 0.63~1A, 1~1.6A, 1.6~2.5A, 2.5~4A, 4~6.3A, 6~10A, 9~14A, 13~18A, 17~23A, 20~25A, 16~25A, 25~40A, 40~63A, 56~80A)
- Standard: IEC/EN 60947-5-1
- Ambient temp: -5 ~ 40 °C
- Side mounting auxiliary contacts: NS2-AU20(2NO)

NS2-AU11(1NO & 1NC)

● Front mounting auxiliary contacts: NS2-AE20(2NO)

NS2-AE11(1NO & 1NC)

- Under-voltage release: NS2-UV110, NS2-UV220, NS2-UV380;
- Shunt release: NS2-SH110, NS2-SH220, NS2-SH380;
- Fault signal contact & instantaneous auxiliary contact: NS2-FA0110 (1NC &1NO)
   NS2-FA0101 (1NC & 1NC)

NS2-FA1010 (1NO & 1NO) NS2-FA1001 (1NO & 1NC)



#### **NQ2 DOL Motor Starter**

- The NQ2 Series DOL Motor Starter is used in remote motor (≤15kW) start & control application.
- Rating up to 400V, 32A (AC3).---- (12A, 18A, 25A, 32A)
- Standard: IEC/EN 60947-4-1
- Ambient temp: -5 ~ 40 °C
- Coil voltage (AC): 110V, 127V, 220V, 230V, 380V, 400V;

NQ2-15/1(P, N, NB): Rating current 12A (AC3),

Motor power (start & control)≤5.5kW

NQ2-15/2(P, N, NB): Rating current 18A (AC3),

Motor power (start & control)≤7.5kW

NQ2-15/3(P, N, NB): Rating current 25A (AC3),

Motor power (start & control)≤11kW

NQ2-15/4(P, N, NB): Rating current 32A (AC3),

Motor power (start & control)≤15kW

Note: P (with pushbutton), N (reversing), NB (reversing but without thermal relay)





NQ3

#### **NQ3 DOL Motor Starter**

- The NQ3 Series DOL Motor Starter is used in remote motor (<11kW) start & control application.
- Rating up to 400V, 22A (AC3). ---- (12A, 32A)
- Standard: IEC/EN 60947-4-1
- lacktriangle Ambient temp: -5  $\sim$  40  $^{\circ}$ C
- Coil voltage (AC): 110V, 127V, 220V, 230V, 380V, 400V;

NQ2-5.5P: Rating current 12A (AC3),

Motor power (start & control) < 5.5kW (400V)

NQ2-11P: Rating current 32A (AC3),

Motor power (start & control) < 11kW (400V)

Note: P (with pushbutton)







- QJX2 Star-delta Motor Starer
- The QJX2 Series Star-delta Motor Starter is used in remote motor (≤80kW) start & control application.
- Rating up to 400V, 95A (AC3).---- (9A, 12A, 18A, 25A, 32A, 40A, 50A, 65A, 80A, 95A)
- Standard: IEC/EN 60947-4-1
- Ambient temp: -5 ~ 40 °C
- Coil voltage (AC): 110V, 127V, 220V, 230V, 380V, 400V; QJX2-09: Rated setting current 7~10A(AC3),

Motor power (start & control)≤7.5kW (@400V)

- QJX2-12: Rated setting current 9~13A(AC3), Motor power (start & control)≤10kW (@400V)
- QJX2-18: Rated setting current 12~18A(AC3), Motor power (start & control)≤15kW (@400V)
- QJX2-25: Rated setting current 17~25A(AC3), Motor power (start & control)≤18.5kW (@400V)
- QJX2-32: Rated setting current 23~32A(AC3), Motor power (start & control)≤25kW (@400V)
- QJX2-40: Rated setting current 30~40A(AC3), Motor power (start & control)≤33kW (@400V)
- QJX2-50: Rated setting current 37~50A(AC3), Motor power (start & control)≤45kW (@400V)
- QJX2-65: Rated setting current 48~65A(AC3), Motor power (start & control)≤55kW (@400V)
- QJX2-80: Rated setting current 63~80A(AC3), Motor power (start & control)≤63kW (@400V)
- QJX2-95: Rated setting current 80~93A(AC3), Motor power (start & control)≤80kW (@400V)







NP2



#### **NP2 Pilot Device**

- The NP2 Series Pilot Device is used in remote circuit control and indication.
- Rating up to 230V, 4.5A (AC-15) or 110V, 0.6A (DC-13)
- Standard: IEC/EN 60947-5-1
- IP40;
- Drill plan: Ф22mm
- Electrical endurance: 500×10<sup>3</sup> circles for Flush & mushroom head type; 100×10<sup>3</sup> circles for Flush & mushroom other head type;
- lacktriangle Ambient temp: -5  $\sim$  40  $^{\circ}\mathrm{C}$
- Contact blocks: 2pcs (max);
- Illuminated: Either illuminated or Non-illuminated available.
- Button: Either Momentary or Maintained type available
- Holder: Either metal or plastic available
- Head available: Flush head, Mushroom head, selector switch, double-head switch, indicator
- Head colors available: Red Black Green Blue Yellow.



# NP8 Pilot Device

- The NP8 Series Pilot Device is used in remote circuit control and indication.
- Rating up to 415V, 1.9A (AC-15) or 250V, 0.27A (DC-13)
- Standard: IEC/EN 60947-5-1
- IP54;
- Drill plan: Ф22mmm
- $\bullet$  Electrical endurance: 100  $\times$ 10<sup>3</sup> circles for Flush & mushroom head type;
  - $1000 \times 10^3$  circles for Flush & mushroom other head type;
- $\bullet$  Ambient temp: -5  $\sim$  40  $^{\circ}\mathrm{C}$
- Contact blocks: 3pcs (max);
- Illuminated: Either illuminated or Non-illuminated available.
- Button: Either Momentary or Maintained type available
- Holder: Plastic available
- Head available: Flush head, Mushroom head, selector switch, double-head switch, indicator
- Head colors available: Red Black Green Blue Yellow.



#### **NPH1 Pushbutton Enclosure**

- The NPH1 Series Pushbutton enclosure is designed for NP8 Series Pushbutton.
- Rating up to 400V or DC230V;
- Standard: IEC/EN 60947-5-1
- IP54/40;
- Electrical endurance: 500×10³ circles for Flush & mushroom head type;
  - $1000 \times 10^3$  circles for Flush & mushroom other head type;
- Ambient temp: -5 ~ 40 °C
- Electrical endurance: 100×10<sup>3</sup> circles for Flush & mushroom head type;
  - $1000 \times 10^3$  circles for Flush & mushroom other head type.



NP8

NPH1

NP3





## **NP3 Pendant Station**

- The NP3 Series Pilot Device is used in remote circuit control.
- Rating up to 400V (AC) or 230V (DC)
- Standard: IEC/EN 60947-5-1
- IP65
- Electrical endurance: 500 ×10<sup>3</sup> circles for Flush & mushroom head type;
- Ambient temp: -5~40 °C
- Button: Momentary type available

NP3-1A (ON/OFF, ↑, ↓)

NP3-1K (ON/Emergency Stop ,↑, ↓);

NP3-2 (
$$\uparrow$$
,  $\downarrow$ ,  $\leftarrow$ ,  $\rightarrow$ );

NP3-2A (ON/OFF,  $\uparrow$ ,  $\downarrow \leftarrow$ ,  $\rightarrow$ )

NP3-2K (ON,/Emergency Stop,  $\uparrow$ ,  $\downarrow \leftarrow$ ,  $\rightarrow$ );

NP3-3 (
$$\uparrow$$
,  $\downarrow$ ,  $\leftarrow$ ,  $\rightarrow$ ,  $\not<$ ,  $\Rightarrow$ );

NP3-3A (ON/OFF,  $\uparrow$ ,  $\downarrow \leftarrow$ ,  $\rightarrow$ ,  $\checkmark$ , $\Rightarrow$ )

NP3-3K (ON/Emergency Stop,  $\uparrow$ ,  $\downarrow$ ,  $\leftarrow$ ,  $\rightarrow$ ,  $\not<$ ,  $\Rightarrow$ );

NP3-4 (
$$\uparrow$$
,  $\downarrow$ ,  $\leftarrow$ ,  $\rightarrow$ ,  $\not<$ ,  $\rightarrow$ ,  $\cap$ ,  $\cup$ );

NP3-4A (ON/OFF,  $\uparrow$ ,  $\downarrow \leftarrow$ ,  $\rightarrow$ ,  $\uparrow$ ,  $\uparrow$ ,  $\cap$ ,  $\cup$ )

NP3-4K (ON/Emergency Stop ,↑, ↓,

NP3-4 ( $\uparrow$ ,  $\downarrow$ ,  $\leftarrow$ ,  $\rightarrow$ ,  $\checkmark$ ,  $\nearrow$ ,  $\cap$ ,  $\cup$ ,  $\backsim$ ,  $\cong$ )

1	Up	<b>↓</b>	Down
<b>←</b>	Left	$\rightarrow$	Right
≮	Front	*	Back
Λ	Clock-wise	U	Anti-clock wise
~	Slow	SII	Fast



#### **NP6 Pilot Device**

- The NP6 Series Pilot Device is used in remote circuit control and indication.
- Rating up to 110V, 0.7A (AC-15) or 24V, 0.7A (DC-13)
- Standard: IEC/EN 60947-5-1
- IP40;
- Drill plan: Ф16mm
- Electrical endurance:  $500 \times 10^3$  circles for Flush & mushroom head type;  $100 \times 10^3$  circles for Flush & mushroom other head type;
- lacktriangle Ambient temp: -5  $\sim$  40  $^{\circ}\mathrm{C}$
- Button: Either Momentary or Maintained type available
- Head available: Flush head, Mushroom head, selector switch, indicator
- Head colors available: Red Black Green Blue Yellow.



NP6





#### **ND16 Indicator**



- Rating up to 400V (AC/DC)
- Standard: IEC/EN 60947-5-1

IP65:

● Drill plan: Ф22mm

■ Electrical endurance: 30×10³ Hours

■ Ambient temp: -5~40 °C

Head colors available: Red Black Green Blue Yellow;

ND16-22A(S)/2: For AC/DC application, Flat-platform lampshade; ND16-22A(S)/4: For AC application, Flat-platform lampshade;

ND16-22B(S)/2: For AC/DC application, Flat-round platform lampshade; ND16-22B(S)/4: For AC application, Flat-round platform lampshade; ND16-22C(S)/2: For AC/DC application, Arc-surface ripple lampshade; ND16-22C(S)/4: For AC application, Arc-surface ripple lampshade; ND16-22D(S)/2: For AC/DC application, Arc-surface round lampshade; ND16-22D(S)/4: For AC application, Arc-surface round lampshade;

Note: (S) for compact type.



ND16

#### **NFM1 Buzzer**



Rating up to 400V (AC) Standard: IEC/EN 60947-5-1

IP20;

● Drill plan: Ф22mm ● Ambient temp: -5~40 °C

Rated operational voltage: AC110V, 230V, 400V; AC/DC: 24V,36V,48V,110V;

4 types of sound available: Interrupted type, Interrupted & flush type,

Continuous type, Continuous & lit type;

NFM1-22/F: Interrupted type;

NFM1-22/FS: Interrupted & flush type;

NFM1-22/L: Continuous type; NFM1-22/FC: Continuous & lit type.



NFM1





NIO1



#### **NIO1 Inverter**

- Standard: IEC/EN 61800-2 and IEC/EN 61800-3
- With the application of space vector PWM (SVPWM) and dead zone compensation technique;
- Equipped with RS232 and 485 communication interfaces;
- It could be widely applied to electric drive and automatic control fields, including metallurgy, petroleum, mechanism, food processing, spinning, chemical industry, metalwork, paper making, printing, packing, fan, and water pump, etc.



NIOG1S

# NIOG1S Energy-saving Inverter Switchgear for Constant Pressure Water Supply

- The product is designed and produced on the basis of water consumption in practical working conditions of high-rise buildings and dwelling houses in communities.
- The product controls the rotate speed of the water using built-in PID adjuster of the transducer by collecting water consumption (pressure).
- This forms closed loop control to make consumption (pressure).
- This forms closed loop control to make automatic adjusting and to supply water at constant pressure.
- Precision of pressure setting: 0.01MPa;
- $\bullet$  Pump delivery:  $(10\sim1000)$ m/h;
- Pump lift: 12.5m~225m.



NIOG1K

# NIOG1K Energy-saving Inverter Switchgear Cabinet of Center Air-conditioning

- Closed loop control is built by adopting timing function of the transducer and PI function.
- Setting temperature of inlet and outlet water according to permitted requirements of air condition system.
- Output power changes by the change of ambient temperature.



NIOG1Z

# NIOG1Z Inverter Switchgear for Energy Saving of Casting Machine

 By adapting inverter to form closed loop control, rotate speed of the oil pump can be adjusted automatically by inspecting the signal of pressure and flow of the plastic casting machine and the state of idle operation of the motor in heat insulation mode can be changed to achieve the effect of energy saving.





### NIOG1Y Energy-saving Inverter of Oil Field Pumping Unit

• The product can reduce energy wastage of K. E. exchange of running gear according to periodical change of loading operating condition of beam-pumping unit using inverter control and adopting mode of up rapidness and low slowness to improve the function transfer efficiency of the equipment and device to meet the object of energy saving.



## NIOG1 ☐ Industrial Control Inverter Switchgear

- NIOG1 series industrial control transducer cabinet is designed and manufactured for convenience to the user by adding other control units on the basis of transducer.
- The product is mainly equipped to occasions with motor timing in enterprises and works like spinning, paper making, metallurgy, mechanism, oil field and coal mine and etc.
- Power supply: three-phase AC 400V±10%, **50**Hz;
- Capacity: 5.5kW~160kW;
- Range of output frequency: 1Hz~400Hz,
- Set maximum frequency between 25Hz~400Hz at random



ו אראו

#### **NJR1 Soft Starter**

- NJR1 series soft-starter is used for controlling motor automatically.
- It adopts intelligentized digital control mode and use SCMC (single chip Microcomputer) techniques as the core to control silicon controlled module. It is suitable for all kind of load drived by squirrel cage asynchronous motor.
- NJR1 can make motor start softly in any conditions, protect the drive system, cut down the damage to the power line caused by start current and ensure the motor start-up stably.

Initial current: 1~4.5 In
Ramp up time: 1~240s
Ramp down time: 1~120s



NJR1D

## **NJR1D Soft Starter (Control Unit)**

- NJR1D soft starter device adopts 16 bits MPU as the core to control high power controllable silicon module, and to realize soft starting and soft stopping of three-phase AC asynchronous motor (Squirrel cage motor), In addition, it supplies a few optional protection function like overload protection, phase-failure protection, over current of process protection, under current of process protection, over-voltage, under-voltage.
- Initial current: 1~4.5 In
  Ramp up time: 1~240s
  Ramp down time: 1~120s





NJR1

## NJR1 Soft Start Control Switchgear (One soft starter starts multi motors)

 NJR1 soft start control switchgear (one soft starter starts multi motors) is designed and produced for lowering production cost, device investment, and etticient utilization of the space. It is designed on side of controlled device or in the switching room, to realize field control or remote control.

● Initial current: 1~4.5 In ■ Ramp up time: 1~240s ■ Ramp down time: 1~120s



# NJR1 Soft Start Control Switchgear of Motor (One motor operation, the other back up)

• NJR1 soft start control switchgear of motor (one motor operation, the other reserve) is applied to the occasion that one motor is running, another motor is reserved (The reserve motor isoptional), when fault occurs on any device that cause stopping operation, the other reserved will run automatically, so it can make sure the reserve device can work under the special condition.

● Initial current: 1~4.5 In ■ Ramp up time: 1~240s ■ Ramp down time: 1~120s



NJR1

# NJR1 Soft Start Control Switchgear of Motor (Two motors operation, another back up)

 NJR1 soft start control switchgear of motor is applied in the occasion that two motors are running, another motor is back up (The reserve motor can be chosen), when any one device occurs fault that causesstopping operating, another reserved will run automatically, so it can make sure the reserve device can work in time under the special condition.

● Initial current: 1~4.5 In ● Ramp up time: 1~240s ■ Ramp down time: 1~120s





## **NJX-13FW Miniature Power Relay**

- 3A, 5A, 10A switching capacity
- Max. switching voltage VAC 250, VDC 125
- Fully sealed
- Contact arrangement: 2Z=2C(10A); 2ZS=2C(5A); 3ZS=3C; 4ZS=4C





# JQC-3F Sub-miniature Power Relay

- 7A,10A switching current
- Max. switching voltage VAC 250, VDC 30
- Sealed type
- Dimension:19mm×15.5mm×15.5mm





## **JQX-10F Miniature Power Relay**

- 10A switching current
- Max. switching voltage VAC 250, VDC 125
- Various sockets available
- Wide range of coil ratings



JQX-10F



## **JQX-13F Miniature Power Relay**

- 10A switching capacity
- Max. switching voltage VAC 250, VDC 125
- Choice of PCB and plug-in types
- Various sockets available;
- With indicator to be selected;
- Wide range of coil ratings.



JQX-13F





# JZX-22F Miniature Power Relay

- 3A, 5A, 10A switching capacity
- Max. switching voltage VAC 250, VDC 125
- Various sockets available
- With indicator to be selected
- Full range of AC and DC coil
- Contact configuration: 2P=2C;3P=3C;4P=4C



JZX-22F



# **JTX Miniature Power Relay**

- 10A switching current
- Various sockets available
- Full range of AC and DC coil



JTX

Contact configuration: 2C;3C



# **MK Miniature Power Relay**



- Max. switching voltage VAC 250, VDC 125
- With indicator to be selected
- Full range of AC and DC coil
- Contact configuration: 2C; 3C



MK





## **BZMJ Series Self-healing Shunt Capacitor**

■ Electric ratings: 

AC1000V;

Application: For improvement of power factor and power quality;

• Standards: IEC/EN 60831-1:1996

Rated capacity: 1~60kvar
Capacity error: -5~+10%
Filling with innoxious substance



### **NWC1 Series Self-healing Shunt Capacitor**

● Electric ratings: ≤AC1000V;

Application: For improvement of power factor and power quality;

• Standards: IEC/EN 60831-1: 1996

Rated capacity: 5~40kvarCapacity error: -5~+10%;

• Filling with innoxious substance



NWC5

# **NWC5 Series Self-healing Shunt Capacitor**

■ Electric ratings: 

AC1000V;

 Application: Newly developed energy-saving product for improvement of power factor and power quality;

Standards: IEC/EN 60831-1: 1996
Rated capacity: 10~25kvar
Capacity error: -5~+10%

• Filling with innoxious substance



JKF8

# JKF8 Intelligent Low-voltage Reactive Power Compensation Controller

- JKF8 Intelligent Low-Voltage Reactive Power Compensation Controller (hereinafter referred to as "controller") is a dedicated controller which can make compensations for the reactive power of low voltage distribution system.
- Operation voltage: 400±10%







#### **NDK Control Transformer**

- Electric ratings: AC 50Hz/60Hz;
- Application: for control power supply of apparatus, partial illumination and indicator light of machine tool and other mechanic equipments.
- Standards: IEC/EN 61558. Maximum capacity: 5kVA





#### **JBK5 Series Control Transformer**

- Application: JBK5 series control transformers are suitable for AC circuit of 50Hz/60Hz, used as control sources for various mechanical equipment and general electrical appliances, and used as power supplies for work lighting and signal lamps.
- Standards: IEC/EN 61558.
- Maximum capacity: 2500VA







- Application: JBK6 series control transformers are suitable for AC circuit of 50Hz/60Hz, used as control sources for various mechanical equipment and general electrical appliances, and used as power supplies for work lighting and signal lamps.
- Standards: IEC/EN 61558.
- Maximum capacity: 3000VA



JBK5

JBK6



BH-0.66 I

CE

#### **BH-0.66** ☐ Current Transformer

- For busbar and cable
- To be used in combination, with measurement instruments: ammeters, watt-hour meters, measurement units, control relays, etc.
- Max. voltage rating Ue: 660 V
- Secondary current Isn: 5A
- Degree of protection: IP20
- Safety factor (fs):10
- Standards: IEC/EN 60044-1





#### **BH-0.66** II Current Transformer



BH-0.66 II

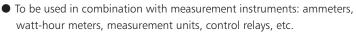
- For busbar
- To be used in combination with measurement instruments: ammeters, watt-hour meters, measurement units, control relays, etc.
- Max. voltage rating Ue: 660 V
  Secondary current Isn: 5A
  Degree of protection: IP20
- Standards: IEC/EN 60044-1

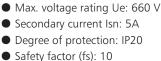
Safety factor (fs): 10



#### BH-0.66 III Current Transformer







Standards: IEC/EN 60044-1



BH-0.66III



RCT

#### **RCT Current Transformer**

 To be used in combination with measurement instruments: ammeters, watt-hour meters, measurement units, control relays, etc.

Max. voltage rating Ue: 660 V
Secondary current Isn: 5A
Degree of protection: IP20
Safety factor (fs): 10
Standards: IEC/EN 60044-1

#### **MES Current Transformer**



MES

- To be used in combination with measurement instruments: ammeters, watt-hour meters, measurement units, control relays, etc.
- Max. voltage rating Ue: 660 V
  Secondary current Isn: 5A
  Degree of protection: IP20

Safety factor (fs): 10Standards: IEC/EN 60044-1





### **JDZ Potential Transformer**

- Adopting the value of voltage on the primary to the characteristics of metering or protection devices by supplying a secondary voltage that is proportional and lower;
- Used in combination with measurement instruments: ammeters, watt-hour meters, measurement units, control relays, etc.
- Max. voltage rating Ue: 1.14kV
- Standards: IEC/EN 60044-2

#### **JDG4-0.5 Potential Transformer**



JDG4-0.5

- Adopting the value of voltage on the primary to the characteristics of metering or protection devices by supplying a secondary voltage that is proportional and lower;
- Used in combination with measurement instruments: ammeters, watt-hour meters, measurement units, control relays, etc.
- Max. voltage rating Ue: 0.5kV
- Standards: IEC/EN 60044-2





TDGC2, TDGC2J TSGC2, TSGC2J

# TDGC2, TDGC2J Single-phase Contact Voltage Regulator TSGC2, TSGC2J Three-phase Contact Voltage Regulator

- TDGC2, TDGC2J, TSGC2, TSGC2J type contact voltage regulators are of dry type and self-cooling automatic coupling mode, can be widely applied to industries (metallurgy, chemical, instruments and meters, electromechanical manufacturing, light industry, etc.), scientific experiments, public facilities, household electrical appliances and so on to realize voltage regulation, temperature control, light adjustment, powercontrol, etc.
- Standards: IEC/EN 61558.
  Rated capacity: 0.2 KVA-60KVA
  Rated output current: 0.8A-80A



TND/TNS(SVC)

# TND (SVC) Single-phase Automatic Voltage Regulator TNS (SVC) Three-phase Automatic Voltage Regulator

- TND/TNS(SVC) series full-automatic AC voltage regulator collects sample and amplifies it and automaticly control circuit, and drives the servomotor to rotate the rocker arm and brush in required direction, and finally adjusts the output voltage to the rated value, finally reaches the aim of stabilizing the voltage.
- Elegant appearance, compact structure, light weight, low power waste, complete protection functions, stable and reliable, low output waveform distortion and so on.
- Rated capacity: 0.5 kVA~60kVA



TND2

# **TND2 Series Single-phase Automatic Voltage Regulator**

- When the main voltage is unstable or when the load changes, the AVR will automatically sample and amplify the control circuit.
- This type of voltage stabilizer has advantages of elegant appearance, compact structure, thin thickness, light weight, low power waste, stable and reliable, low output waveform distortion and so on.
- Rated capacity: 0.5 kVA~5kVA





DBW/SBW

# DBW Single-phase Automatic Voltage Regulator SBW Three-phase Automatic Voltage Regulator

- Used in the application requiring stable voltage, such as telecommunication, broadcasting & TV, elevator, silicone controlled apparatus, numerical control machine tool, and various production lines, etc.
- Rated capacity: 20 kVA~1600kVA

## **TSD Wall-hung Type AC Automatic Voltage Regulator**



TSD

- TSD series wall-mounted AC voltage regulator supply power for equipment such as computers, duplicating machines, industrial precision equipment, medical apparatuses, household electrical appliances, etc.
- Rated capacity: 3, 5, 7 kVA





HH15-QA/QP

NH40



### HH15-QA/QP Switch Disconnector

- Mainly used in the distributing and motor circuit which has high short-circuit current, and acted as main switch or master switch infrequently operated by hand, it is particularly suitable in the relative high class with drawable low voltage complete equipment.
- They provide safety isolation and protection against overcurrent for any low voltage electrical circuit.
- Standard: IEC/EN 60947-3Rated current: 125~3150A



#### **NH40 Switch Disconnector**

- NH40 series switch-disconnector is applicable for AC 50Hz, rated voltage AC 690V and below, DC 440V and below, rated current up to 3150A.
- It can be applied for manually infrequent making & breaking and disconnecting of the circuit. Products with Ith under 1000A can be used as load break switch. They provide safety isolation for any Low voltage circuit.
- Standard: IEC/EN60947-3.
- Rated current: 16~630A



## **HH15-QSA Fuse-switch Disconnector**

NHR17 Fuse-switch Disconnector

- Mainly used in the distributing and motor circuit which has high short-circuit current, and acted as main switch or master switch infrequently operated by hand, it is particularly suitable in the relative high class with drawable low voltage complete equipment.
- They provide safety isolation and protection against overcurrent for any low voltage electrical circuit.
- Standard: IEC/EN 60947-3.
- Rated current: 63~630A



### 005



HH15-QSA

NHR17

- NHR17 series fuse-swith disconnector is a new product developed by our company.
- Rated insulation voltage up to 800V, rated operational voltage up to 690V.
- Rated operational current up to 630A, rated frequency 50Hz, in the distribution circuit
  and motor circuit which has high short-circuit current as the power switch,
  isolating switch, emergency switch as well as circuit protection,
  but normally it is not used to make and break a single motor directly.
- Standard: IEC/EN 60947-3.
- Rated current: 160~630A

# Switch Disconnector





NHR40



NHRT40



HH15/QAS/QPS/QSS



NH40SZ



#### NHR40 Fuse-switch Disconnector

- NHR40 series switch-disconnector with fuse is applicable in the circuit of AC50Hz, rated voltage AC690V and below, DC440V and below, rated current up to 630A.
- NHR40 series are infrequently manually operated multipolar fuse combination switches,
- They break or switch off on load and provide safely isolation and protection against overcurrent for any voltage electrical circuit.
- Standard: IEC/EN 60947-3. ■ Rated current: 160~630A



#### NHRT40 Vertical Fuse-switch Disconnector

- NHRT40 series are infrequently manually operated multipolar fuse combination switches,
- They break or switch off on load and provide safely isolation and protection against overcurrent for any voltage electrical circuit.
- Standard: IEC/EN 60947-3. ■ Rated current: 160~630A



## HH15/QAS/QPS/QSS Changeover Switch

- Mainly used in the distributing and motor circuit which has high short-circuit current, and acted as main switch or master switch infrequently operated by hand, it is particularly suitable in the relative high class with drawable low voltage complete equipment.
- They provide safety isolation and protection against overcurrent for any low voltage electrical circuit.
- Standard: IEC/EN 60947-3. ■ Rated current: 125~3150A



# **NH40S Changeover Switch**

- Mainly used in the distributing and motor circuit which has high short-circuit current, and acted as main switch or master switch infrequently operated by hand, it is particularly suitable in the relative high class with drawable low voltage complete equipment.
- They provide safety isolation and protection against overcurrent for any low voltage electrical circuit.
- Standard: IEC/EN 60947-3. ■ Rated current: 160~630A



# NH40SZ Automatic Changeover Switch

- NH40SZ automatic changeover switch disconnector can realize automatic and manual changeover between normal and back up power supply power, and stop power supplying to load when changeover process of power supply is carried out.
- The switch is applicable for two circuits power supply and in the condition which requires high quality power supply.
- Standard: IEC/EN 60947-3. 60947-6
- Rated current: 16~1600A



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