

DELIXI
ELECTRIC
德力西电气

NAVIGATOR
Series



CDW3 Air Circuit Breaker

Intelligence Future Win the World

By cooperating with the Schneider Electric - the world's top 500 company, Delixi introduces a new international platform; by considering the important cost performance and refined needs of domestic users, the domestic platform products are included together and fully improved, forming navigator series frame circuit breaker products.

Now, on the basis of dual platforms, the product has been comprehensively upgraded and improved. In addition to the characteristics of traditional circuit breakers (drawer type, selectivity, and low maintenance), they have more advantages of higher parameters, multiple selection of shell frames, and more complete accessories.

Advanced technology platform

The product platform with advanced technology has 1000AF, 1600AF and 4000AF frame sizes, the rated current is ranged from 400A to 4000A and the minimum current can be set to 160A, fully suitable for various applications such as higher circuit breaker breaking capacity, small size, and convertible horizontally and vertically terminal block and fully applicable to various applications of the same types of products in overseas domestic markets.

Domestic Innovative Technology Platform

As a cutting-edge technology platform committed to scientific and technological innovation, there are four 2000AF, 2500AF, 3200AF, and 6300AF shell frame sizes; the rated current is fully ranged 630A to 6300A, and the minimum current can be set to 250A and the breaking performance is comprehensively improved on the original basis; furthermore, the same platform products are widely used in China, and can be fully applied to various applications with higher cost-effective requirements.

Good Performance

Good Shape, Low Price, Good Quality



1000AF



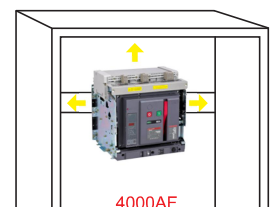
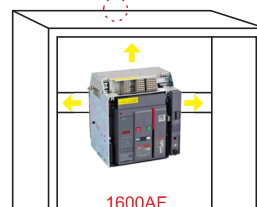
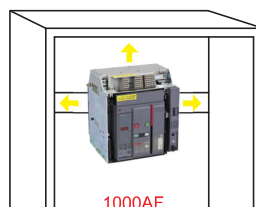
1600AF



4000AF

- Rated current: 1000AF - 400A, 630A, 800A, 1000A
1600AF-400A, 630A, 800A, 1000A, 1250A, 1600A
4000AF-630A, 800A, 1000A, 1250A, 1600A, 2000A,
2500A, 3200A, 4000A
- Current range 400A~4000A, three frame sizes, 10 rated current options
- Wiring method: horizontal + vertical + mixed connection (1600AF, 4000AF)

1000AF, 1600AF, and 4000AF has small volume increased up to 20% compared with the similar products, and the plate cabinet has more excellent expansion space.



NAVIGATOR | CDW3

Series | Air circuit breaker

Intelligent Manufacturing and Ingenuity Quality

 Innovative platform,
stable performance



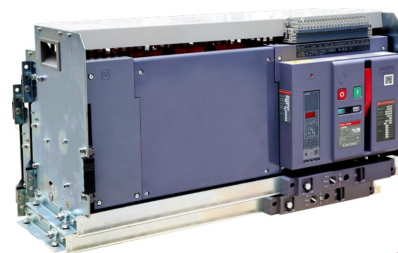
2000AF



2500AF



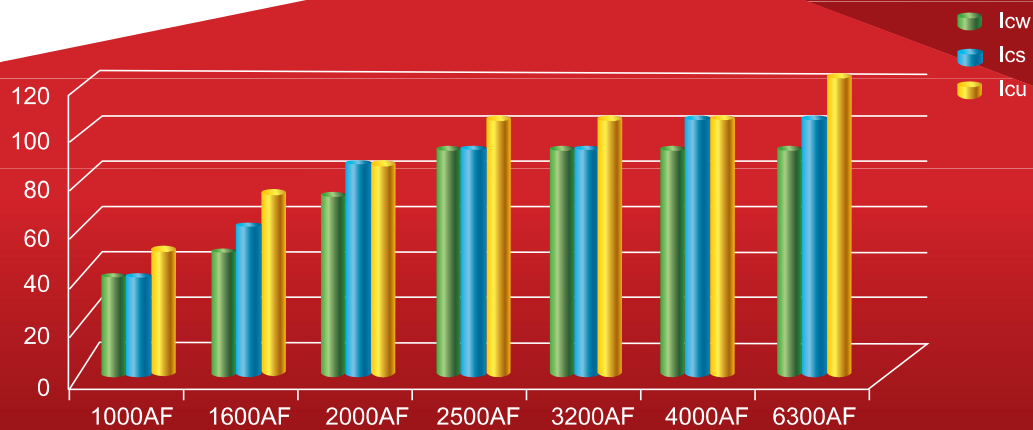
3200AF



6300AF

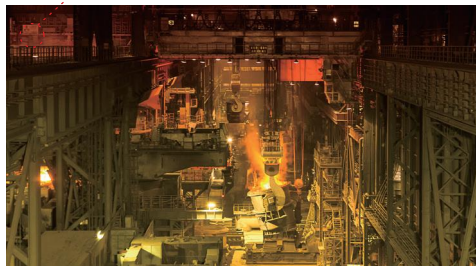
- Rated current: 2000AF-630A, 800A, 1000A, 1250A, 1600A, 2000A
2500AF-630A, 800A, 1000A, 1250A, 1600A, 2000A, 2500A
3200AF-2000A, 2500A, 3200A
6300AF-4000A, 5000A, 6300A
- Full current range 630A~6300A, four frame sizes, 11 rated current options
- Connection method: Horizontal connection

Improved Performance, Safe and Reliable



Full coverage of rated voltage

The 13 rated working voltages are fully covered to meet the needs of power supply systems in various industries.



Product Overview

■ Main parameters

Frame size	1000AF, 1600AF, 2000AF, 2500AF, 3200AF, 4000AF, 6300AF
Breaking grade	N&H
Rated current I_n (A)	400~6300
Rated voltage AC U_e (V)	220V/230V/240V/380V/400V/415V/440V/480V/500V/525V/ 550V/660V/ 690V
Number of poles	3 & 4
Installation method	Fixed & drawer type
Wiring method	Horizontal rear connection, vertical rear connection



■ Intelligent release

iTR326 type (Basic type)	Basic function: Protection function (L, S, I & G)
iTR326A type (Standard type)	Basic protection function Basic measurement functions Auxiliary function
iTR326H type (Advanced type)	Basic + Advanced protection functions Multiple measurement functions Auxiliary functions Special functions Communication functions



iTR326

iTR326A

iTR326H

■ Accessories

- Locks, interlocks and protection accessories: ON/OFF button covers, mechanical interlock, key lock, door interlock, and safety shield lock
- Indication accessories: Ready ON contact, three-position signal contacts, fault indication contacts, auxiliary contacts
- Operation accessories: Opening and closing coil, undervoltage coil, motor mechanism, electrical reset
- Circuit protection accessories: N phase external transformer, earthed transformer, leakage transformer
- Connection accessories: Horizontal, vertical, expanded terminal, extended terminal



1000AF



1600AF



2000AF



2500AF



3200AF



4000AF



6300AF

■ Scope of Application

The CDW3 series air circuit breaker has the rated current ranged from 400A to 6300A, and its rated AC voltage is 220V/230V/240V/380V/400V/415V/440V/480V/500V/525V/550V/660V/690V, and primarily used in AC 50/60Hz power distribution networks for electric energy distribution, line and power equipment protection to prevent hazard caused by faults such as undervoltage, short circuit, and single-phase grounding.

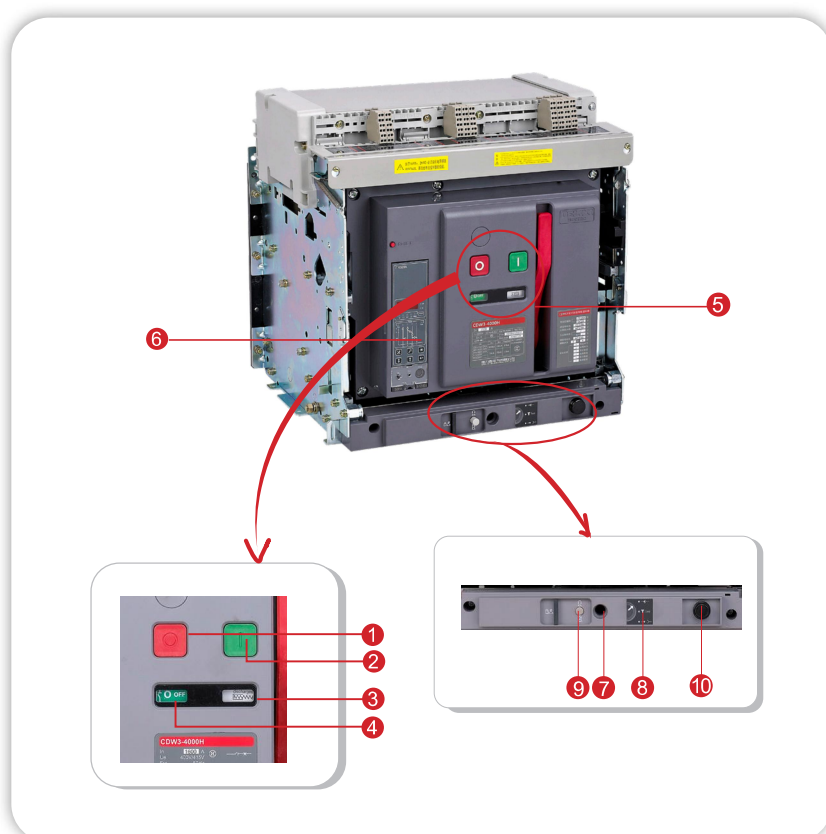
The circuit breaker can be widely used in power distribution systems in power stations, factories, mines and modern high-rise buildings, especially in intelligent buildings.

Applied standard: GB/T14048.2 IEC/EN 60947-2

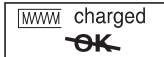
■ Normal Working Conditions

Ambient temperature	The ambient air temperature is $-5^{\circ}\text{C} \sim +40^{\circ}\text{C}$ (certified); The average value within 24h does not exceed $+35^{\circ}\text{C}$. Also used in limit temperature $-40^{\circ}\text{C} \sim +70^{\circ}\text{C}$ (iTR326, iTR326A type controller).
Altitude	4000m
Electromagnetic interference	Suitable for environment A
Pollution level	Pollution level 3 The installation position should be vertical, and the inclination angle in all directions does not exceed 5°
Installation level	Main circuit of circuit breaker, undervoltage release coil, and primary coil of power transformer: Level IV; auxiliary circuit and control circuit: Level III
Transportation conditions	Handled gently, and do not upside it down to avoid harsh corrosion as much as possible

■ About front side



- ① OFF button (O)
- ② ON button (I)
- ③ Charging mechanism status indicator
 - Charged, closing allowed

 - Charged, closing not allowed

 - Discharged

- ④ Main contact position indicator
 - OFF

 - ON

- ⑤ Mechanical charging handle
- ⑥ Controller
- ⑦ Shake-in (out) device
- ⑧ Connection, test and separation position indicator
- ⑨ Connection, test and separation position limiter
- ⑩ Rocker rod storage



Product Selection

■ Body encoding

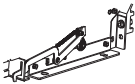
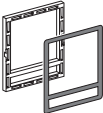
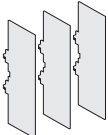
Product name	Frame current grade	Breaking capacity	Rated current	Number of poles	Installation method
W3	16	H	06	3	DH
	10:1000A(04~10) 16:1600A(04~16) 20:2000A(06~20) 25:2500A(06~25) 32:3200A(20~32) 40:4000A(06~40) 63:6300A(40~63)	N: H type breaking H: H type breaking 1000AF/6300AF, only N type breaking available	04:400A 06:630A 08:800A 10:1000A 12:1250A 16:1600A 20:2000A 25:2500A 32:3200A 40:4000A 50:5000A 63:6300A	3: 3-pole 4: 4-pole	DH: Drawer type, horizontal FH: Fixed type, horizontal DV: Drawer type, vertical (only for 1600AF/4000AF) FV: Fixed type, vertical (only for 1600AF/4000AF)

Default standard configuration accessories for CDW3: Shunt, closing, motor mechanism, 4-open and 4-closed auxiliary contact, door frame, phase partition, power module, iTR326A

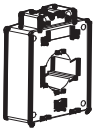
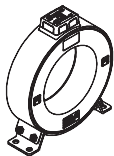
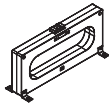
No fixed type for 6300AF, only 3P drawer type for 6300AF-6300A

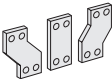
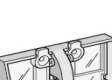
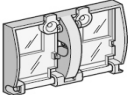
■ Accessories encoding

	Accessory code	Accessory name
Controller		
	CDW3TUL	Controller iTR326
	CDW3TUM	Controller iTR326A
	CDW3TUH	Controller iTR326H
Remote operation		
Shunt coil		
	W3MXS2A	Opening coil AC220V/AC230V (CDW3-1000AF/1600AF/4000AF)
	W3MXS3A	Opening coil AC380V/AC400V (CDW3-1000AF/1600AF/4000AF)
	W3MXS1D	Opening coil DC220V (CDW3-1000AF/1600AF/4000AF)
	W3MXS2D	Opening coil DC110V (CDW3-1000AF/1600AF/4000AF)
	W3MXD2A	Opening coil AC220V/AC230V (CDW3-2000/2500/3200/6300AF)
	W3MXD3A	Opening coil AC380V/AC400V (CDW3-2000/2500/3200/6300AF)
	W3MXD1D	Opening coil DC220V (CDW3-2000/2500/3200/6300AF)
	W3MXD2D	Opening coil DC110V (CDW3-2000/2500/3200/6300AF)
Closing coil		
	W3XFS2A	Closing coil AC220V/AC230V (CDW3-1000AF/1600AF/4000AF)
	W3XFS3A	Closing coil AC380V/AC400V (CDW3-1000AF/1600AF/4000AF)
	W3XFS1D	Closing coil DC220V (CDW3-1000AF/1600AF/4000AF)
	W3XFS2D	Closing coil DC110V (CDW3-1000AF/1600AF/4000AF)
	W3XFD2A	Closing coil AC220V/AC230V (CDW3-2000/2500/3200/6300AF)
	W3XFD3A	Closing coil AC380V/AC400V (CDW3-2000/2500/3200/6300AF)
	W3XFD1D	Closing coil DC220V (CDW3-2000/2500/3200/6300AF)
	W3XFD2D	Closing coil DC110V (CDW3-2000/2500/3200/6300AF)
Undervoltage coil		
	W3MNS2A	Undervoltage coil AC220V/AC230V (CDW3-1000AF/1600AF/4000AF)
	W3MNS3A	Undervoltage coil AC380V/AC400V (CDW3-1000AF/1600AF/4000AF)
	W3MND2A	Undervoltage coil AC230V (CDW3-2000AF/2500AF/3200AF) Suction-assisted type
	W3MND3A	Undervoltage coil AC400V (CDW3-2000AF/2500AF/3200AF) Suction-assisted type
	W3MNS2A63	Undervoltage coil AC230V (CDW3-2000AF/2500AF/3200AF/6300AF) Self-suction type
	W3MNS3A63	Undervoltage coil AC400V (CDW3-2000AF/2500AF/3200AF/6300AF) Self-suction type
Undervoltage delay coil		
	W3MNRS2A	Undervoltage delay release AC220V/AC230V (CDW3-1000AF/1600AF/4000AF)
	W3MNRS3A	Undervoltage delay release AC380V/AC400V (CDW3-1000AF/1600AF/4000AF)
	W3MNRD2A	Undervoltage delay release AC220V/AC230V (CDW3-2000/2500/3200/6300AF)
	W3MNRD3A	Undervoltage delay release AC380V/AC400V (CDW3-2000/2500/3200/6300AF)

Accessory code		Accessory code
Lock		
Key lock 	W3L1S16	One lock and one key CDW3-1000AF/1600AF
	W3L1S40	One lock and one key CDW3-4000AF
	W3L2S16	Two locks and one key CDW3-1000AF/1600AF
	W3L2S40	Two locks and one key CDW3-4000AF
	W3L3S16	Three locks and two keys CDW3-1000AF/1600AF
	W3L3S40	Three locks and two keys CDW3-4000AF
	W3L1D	One lock and one key CDW3-2000AF/2500AF/3200AF/6300AF
	W3L2D	Two locks and one key CDW3-2000AF/2500AF/3200AF/6300AF
	W3L3D	Three locks and two keys CDW3-2000AF/2500AF/3200AF/6300AF
Door interlock 	W320DLR	Drawer type right door interlock CDW3-2000AF
	W325DLR	Drawer type right door interlock CDW3-2500AF
	W332DLR	Drawer type right door interlock CDW3-3200AF
	W363DLR	Drawer type right door interlock CDW3-6300AF
	W316DLR	Drawer type right door interlock CDW3-1000AF/1600AF
	W340DLR	Drawer type right door interlock CDW3-4000AF
	W320DLL	Drawer type left door interlock CDW3-2000AF
	W325DLL	Drawer type left door interlock CDW3-2500AF
	W332DLL	Drawer type left door interlock CDW3-3200AF
	W316DLL	Drawer type left door interlock CDW3-1000AF/1600AF
	W363DLL	Drawer type left door interlock CDW3-6300AF
	W340DLL	Drawer type left door interlock CDW3-4000AF
Operation and Protection		
Door frame 	W3DCDPS16	Drawer type door frame CDW3-1000AF/1600AF
	W3FCDPS16	Fixed type door frame CDW3-1000AF/1600AF
	W3DCDPS40	Drawer type door frame CDW3-4000AF
	W3FCDPS40	Fixed type door frame CDW3-4000AF
	W3DCDPD20	Drawer type door frame CDW3-2000AF
	W3FCDPD20	Fixed type door frame CDW3-2000AF
	W3DCDPD32	Drawer type door frame CDW3-2500/3200/6300AF
	W3FCDPD32	Fixed type door frame CDW3-2500/3200AF
Phase partition 	W3FDS103	Fixed phase partition 3PCDW3-1000AF
	W3DDS103	Drawer type phase partition 3PCDW3-1000AF
	W3FDS163	Fixed phase partition 3PCDW3-1600AF
	W3DDS163	Drawer type phase partition 3PCDW3-1600AF
	W3FDS403	Fixed phase partition 3PCDW3-4000AF (4000A None)
	W3DDS403	Drawer type phase partition 3PCDW3-4000AF (4000A None)
	W3FDS104	Fixed phase partition 4PCDW3-1000AF
	W3DDS104	Drawer type phase partition 4PCDW3-1000AF
	W3FDS164	Fixed phase partition 4PCDW3-1600AF
	W3DDS164	Drawer type phase partition 4PCDW3-1600AF
	W3FDS404	Fixed phase partition 4PCDW3-4000AF (4000A None)
	W3DDS404	Drawer type phase partition 4PCDW3-4000AF (4000A None)
	W3FDD253	Drawer type phase partition 3PCDW3-2000/2500/3200/6300AF
	W3DDD253	Fixed phase partition 3PCDW3-2000/2500/3200AF
	W3FDD254	Fixed phase partition 4PCDW3-2000/2500/3200AF
	W3DDD254	Drawer type phase partition 4PCDW3-2000/2500/3200/6300AF



	Accessory code	Accessory name
Intelligent controller accessories		
Phase N external transformer 	CDW31604NCT	Phase N external transformer CDW3-1000AF/1600AF/400A
	CDW3160616NCT	Phase N external transformer CDW3-1000AF/1600AF/630-1600A
	CDW3200608NCT	Phase N external transformer CDW3-2000AF/630-800A
	CDW3201020NCT	Phase N external transformer CDW3-2000AF/1000-2000A
	CDW3250620NCT	Phase N external transformer CDW3-2500AF/630-1250A
	CDW32525NCT	Phase N external transformer CDW3-2500AF/1600-2500A
	CDW332NCT	Phase N external transformer CDW3-3200AF/2000-3200A
	CDW34012NCT	Phase N external transformer CDW3-4000AF/630-1250A
	CDW340NCT	Phase N external transformer CDW3-4000AF/1600-4000A
	CDW363NCT	Phase N external transformer CDW3-6300AF/4000-6300A
Earthed transformer 	W3ZT100400A	Earthed transformer CDW3-400A (only for H type controller)
	W3ZT100630A	Earthed transformer CDW3-630A (only for H type controller)
	W3ZT100800A	Earthed transformer CDW3-800A (only for H type controller)
	W3ZT1001000A	Earthed transformer CDW3-1000A (only for H type controller)
	W3ZT1001250A	Earthed transformer CDW3-1250A (only for H type controller)
	W3ZT1001600A	Earthed transformer CDW3-1600A (only for H type controller)
	W3ZT1002000A	Earthed transformer CDW3-2000A (only for H type controller)
	W3ZT1002500A	Earthed transformer CDW3-2500A (only for H type controller)
	W3ZT1003200A	Earthed transformer CDW3-3200A (only for H type controller)
	W3ZT1004000A	Earthed transformer CDW3-4000A (only for H type controller)
	W3ZT1005000A	Earthed transformer CDW3-5000A (only for H type controller)
	W3ZT1006300A	Earthed transformer CDW3-6300A (only for H type controller)
Leakage current transformer 	W3ZCT1	Leakage current transformer CDW3 (only for H type controller)
Signal conversion module 	W3TR	CDW3 Signal conversion module (H type communication, area interlock, four-remote)
Power module 	W3AP	CDW3 AC power module (input AC230/400V, output DC24V)
	WDP3	CDW3 DC power module (input AC230/110V, output DC24V)
Mechanical interlock		
Cable interlock	W3FL2S16	Fixed type cable interlock (two units) CDW3-1000AF/1600AF
	W3DL2S16	Drawer type cable interlock (two units) CDW3-1000AF/1600AF
	W3FL2S40	Fixed type cable interlock (two units) CDW3-4000AF
	W3DL2S40	Drawer type cable interlock (two units) CDW3-4000AF
	W3FL2D	Fixed type cable interlock (two units) CDW3-2000AF/2500AF/3200AF
	W3DL2D	Drawer type cable interlock (two units) CDW3-2000AF/2500AF/3200AF/6300AF

	Accessory code	Accessory name
Mechanical interlock		
Lever interlock	W3DG2S40	Drawer type lever interlock (two units) CDW3-4000AF
	W3DG2S16	Fixed type lever interlock (two units) CDW3-1600AF
	W3DG2D	Drawer type lever interlock (two units) CDW3-2000AF/2500AF/3200AF/6300AF
	W3FG2S16	Fixed type lever interlock (two units) CDW3-1600AF
	W3FG2S40	Fixed type lever interlock (two units) CDW3-4000AF
	W3FG2D	Fixed type lever interlock (two units) CDW3-2000AF/2500AF/3200AF
Connecting accessories		
	W3V2030608	CDW3 Vertical L type adapter 3PW3-2000/630-800A
	W3V2031016	CDW3 Vertical L type adapter 3PW3-2000/1000-1600A
	W3V20320	CDW3 Vertical L type adapter 3PW3-2000/2000A
	W3V2040608	CDW3 Vertical L type adapter 4PW3-2000/630-800A
	W3V2041016	CDW3 Vertical L type adapter 4PW3-2000/1000-1600A
	W3V20420	CDW3 Vertical L type adapter 4PW3-2000/2000A
	W310S3	CDW3 extended terminal 3P (1000AF)
	W310S4	CDW3 extended terminal 4P (1000AF)
	W3S3	CDW3 extended terminal 3P (1600AF)
	W3S4	CDW3 extended terminal 4P (1600AF)
	CDW3ATSEC2	CDW3 dual power controller (LCD type)
	CDW3ATSECM	CDW3 bus type controller (LCD type)
ON/OFF button cover		
	W3VBPD16	CDW3 ON/OFF button cover 1000AF/1600AF
	W3VBPD40	CDW3 ON/OFF button cover 4000AF
	W3VBPD20	CDW3 ON/OFF button 2000AF/2500/3200/6300AF
Secondary terminal dust cover		
	W3CBD163	Drawer type secondary wiring terminal protective cover 3P CDW3-1600AF
	W3CBD203	Drawer type secondary wiring terminal protective cover 3P CDW3-2000AF 47 circuit
	W3CBD3	Drawer type secondary wiring terminal protective cover 3P CDW3-2500/3200/6300AF 47 circuit
	W3CBD403	Drawer type secondary wiring terminal protective cover 3P CDW3-4000AF
	W3CBD163	Drawer type secondary wiring terminal protective cover 4P CDW3-1600AF
	W3CBD204	Drawer type secondary wiring terminal protective cover 4P CDW3-2000AF 47 circuit
	W3CBD4	Drawer type secondary wiring terminal protective cover 4P CDW3-2500/3200/6300AF 47 circuit
	W3CBD404	Drawer type secondary wiring terminal protective cover 4P CDW3-4000AF

Note: For CDW3ATSEC2, the wire has a standard length of 2m; for CDW3ATSECM, the wire has a standard length of 4m (suitable for three-phase four-wire product, control circuit voltage AC230V/AC380V). Extra fees shall be paired for each additional meter. To customize three mechanical interlocks, please contact the manufacturer.



■ Configuration table

Standard configuration	1000AF		1600AF		2000AF		2500AF		3200AF		4000AF		6300AF	
	Drawer type	Fixed type	Drawer type	Fixed type	Drawer type	Fixed type	Drawer type	Fixed type	Drawer type	Fixed type	Drawer type	Fixed type	Drawer type	Fixed type
Circuit breaker body	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Drawer base	■		■		■		■		■		■		■	
ITR326A controller	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Shunt coil MX	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Closing coil XF	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Motor mechanism MCH	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Aux. switch 4-ON 4-OFF OF4	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Fault indicating contact SWT	■	■	■	■	■	■	■	■	■	■	■	■	■	■
AC power module AP	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Drawer position locking mechanism	■		■		■		■		■		■		■	
Door frame CDP	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Phase partition DD/PD	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Horizontal installation H	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Safety shield	■		■		■		■		■		■		■	
Optional configuration	1000AF		1600AF		2000AF		2500AF		3200AF		4000AF		6300AF	
	Drawer type	Fixed type	Drawer type	Fixed type	Drawer type	Fixed type	Drawer type	Fixed type	Drawer type	Fixed type	Drawer type	Fixed type	Drawer type	Fixed type
ITR326 controller	■	■	■	■	■	■	■	■	■	■	■	■	■	■
ITR326H controller	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Undervoltage coil MN	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Undervoltage delay coil MNR	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Aux. switch 6-ON 6-OFF OF6					■	■	■	■	■	■	■	■	■	■
Aux. switch 8-ON 8-OFF OF8											■	■		
Aux. switch 12-ON 12-OFF OF12											■	■		
Ready O	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Three-position indicating contact PI	■		■		■		■		■		■		■	
Fault indicating contact SWT2	■	■	■	■							■	■		
Remote reset contact Res	■	■	■	■							■	■		
Drawer frame padlock (1*)	■		■		■		■		■		■		■	
Safety shield plate lock (1*)	■		■								■			
ON/OFF button lock (1*)	■	■	■	■	■	■	■	■	■	■	■	■	■	■
OFF lock L1	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Door interlock (1*)	■		■		■		■		■		■		■	
Mechanical interlock (1*)	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Secondary wiring terminal protective cover (2*)	■		■		■		■		■		■		■	
DC power supply DP	■	■	■	■	■	■	■	■	■	■	■	■	■	■
External N phase transformer NCT	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Earthed transformer ZT100	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Leakage current transformer ZCT1	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Signal conversion module TR	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Dual power – two-in and one-out (1*)			■	■	■	■	■	■	■	■	■	■	■	■
Dual power – two-in and one-bus (1*)			■	■	■	■	■	■	■	■	■	■	■	■
Dual power – three-in - (1*)			■	■	■	■	■	■	■	■	■	■	■	■
Back-panel extended terminal – horizontal S3/4	■	■	■	■										
Secondary wiring terminal connecting part	■	■	■	■							■	■		
Vertical installation V			■	■							■	■		
Counter	■	■	■	■	■	■	■	■	■	■	■	■	■	■

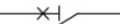
Note (1*): When purchasing the optional accessories by client, please contact the manufacturer for this.

Note (2*): The 2000AF/2500AF/3200AF/6300AF secondary wiring terminal protective cover shall be used together with the secondary terminal block 47 circuit; if used together with 51 circuit, please contact the manufacturer.

NAVIGATOR

Series

Technical parameters

Number of poles	3, 4
Rated voltage AC U _e (V)	220V/230V/240V/380V/400V/415V/440V/480V/500V/525V/550V/660V/690V
Rated insulation voltage U _i (V)	1000
Rated impulse withstand voltage U _{imp} (kV)	12
Rated frequency (Hz)	50/60
Suitable for isolation	
Standards	GB/T14048.2, IEC 60947-2
Certification	CCC

■ Frame current

Rated current In (A)		1000	1600	2000	2500	3200	4000	6300					
400		•	•	•									
630		•	•	•	•	•	•						
800		•	•	•	•	•	•						
1000		•	•	•	•	•	•						
1250			•	•	•	•	•						
1600			•	•	•	•	•						
2000				•	•	•	•						
2500					•	•	•						
3200						•	•						
4000							•	•					
5000								•					
6300								•					
Breaking capacity													
Breaking grade		N	N	H	N	H	N	H	N	H	N	H	N
Rated limit short circuit breaking capacity Icu (kA)	220V/230V/240V/380V/400V/415V	42	50	66	80	80	80	100	80	100	100	100	120
	440V/480V/500V/525V/550V/660V/690V	25	36	42	50	55	65	70	65	70	65	75	85
Rated run short circuit breaking capacity Ics (kA)	220V/230V/240V/380V/400V/415V	30	50	55	80	80	65	85	80	85	85	100	100
	440V/480V/500V/525V/550V/660V/690V	25	36	42	50	55	65	70	65	70	65	75	75
Rated short-time withstand current Icw (kA)	220V/230V/240V/380V/400V/415V	30	42	42	50	65	65	85	65	85	85	85	85
	440V/480V/500V/525V/550V/660V/690V	20	36	36	50	55	65	70	65	70	65	75	75
Rated short circuit making capacity Icm (kA)	220V/230V/240V/380V/400V/415V	88.2	110	145	176	176	176	220	176	220	220	220	264
	440V/480V/500V/525V/550V/660V/690V	52.5	79	92	110	121	143	154	143	154	143	165	187
Operation time													
Operation time	Full breaking time (ms)	≤25											
	Closing time (ms)	≤70											
Service life													
Service life	Electrical life	6500	8000	8000	7000	7000	6000	800					
	Mechanical life (with maintenance)	15000	15000	15000	10000	10000	10000	2500					
	Mechanical life (without maintenance)	30000	30000	30000	20000	20000	20000	5000					
Dimensions													
Outline dimensions (mm) H*W*D	Drawer type 3P	322×288×329	322×288×330	436×405×425	436×465×425	436×465×425	439×441×428.6	432×843×498					
	Drawer type 4P	322×358×329	322×358×330	436×500×425	436×580×425	436×580×425	439×556×428.6	432×958×498					
	Fixed type 3P	301×276×235	301×276×229	397×364×327	397×428×327	397×428×327	352×422×329.5	—					
	Fixed type 4P	301×346×235	301×346×229	397×459×327	397×543×327	397×543×327	352×537×329.5	—					

Note: 1) 6300A of 6300N has only 3P drawer type.



■ Derating table under different temperature for CDW3

Frame	Current/Temp.	-5°C~+40°C	+45°C	+50°C	+55°C	+60°C	+70°C
CDW3-1000N	400	400	400	400	400	400	400
	630	630	630	630	630	550	500
	800	800	800	800	800	700	630
	1000	1000	1000	1000	950	900	820
CDW3-1600N&H	400	400	400	400	400	400	400
	630	630	630	630	630	550	500
	800	800	800	800	800	700	630
	1000	1000	1000	1000	950	900	850
	1250	1250	1200	1200	1150	1050	950
	1600	1600	1550	1500	1450	1350	1150
CDW3-2000N&H	630	630	630	630	630	630	630
	800	800	800	800	800	700	650
	1000	1000	1000	1000	1000	1000	900
	1250	1250	1250	1250	1250	1150	1000
	1600	1600	1600	1500	1500	1300	1200
	2000	2000	1900	1900	1800	1700	1500
CDW3-2500N&H	630	630	630	630	630	630	630
	800	800	800	800	800	800	800
	1000	1000	1000	1000	1000	1000	1000
	1250	1250	1250	1250	1250	1250	1250
	1600	1600	1600	1600	1600	1600	1600
	2000	2000	2000	2000	2000	2000	1900
	2500	2500	2400	2300	2200	2200	2000
CDW3-3200N&H	2000	2000	2000	2000	2000	2000	1900
	2500	2500	2400	2300	2200	2200	2000
	3200	3200	3000	3000	2800	2800	2500
CDW3-4000N&H	1600	1600	1600	1600	1600	1600	1500
	2000	2000	2000	2000	2000	2000	1700
	2500	2500	2500	2500	2500	2200	2000
	3200	3200	3200	3200	3000	2500	2200
	4000	4000	4000	3600	3400	3200	3000
CDW3-6300N	4000	4000	4000	4000	4000	4000	3600
	5000	5000	5000	5000	4800	4800	4200
	6300	6300	6000	5600	5400	5200	4600

Note: Technical parameters listed in the derating coefficient and derating table are calculated from the experiment and theory, and they are only used as general selection guidance.

■ High altitude derating coefficient

The performance of circuit breaker will not be affected when the altitude height is 2000m or below. If this height exceeds, the reduction factors of air insulation characteristics and cooling capacity must be considered; the correction factors given in the table below are for installation altitude height greater than 2000m:

Altitude (m)	2000	2500	3000	3500	4000	4500	5000
Insulation voltage U_i (V)	1000	910	910	830	830	770	770
Impulse withstand voltage U_{imp} (kV)	12	10.5	10.5	9.5	9.5	9	9
Maximum operating voltage U_e (V)	690	690	690	660	600	600	550
Thermal rated value at 40°C I_n (A)	1In	0.98In	0.93In	0.91In	0.87In	0.84In	0.81In

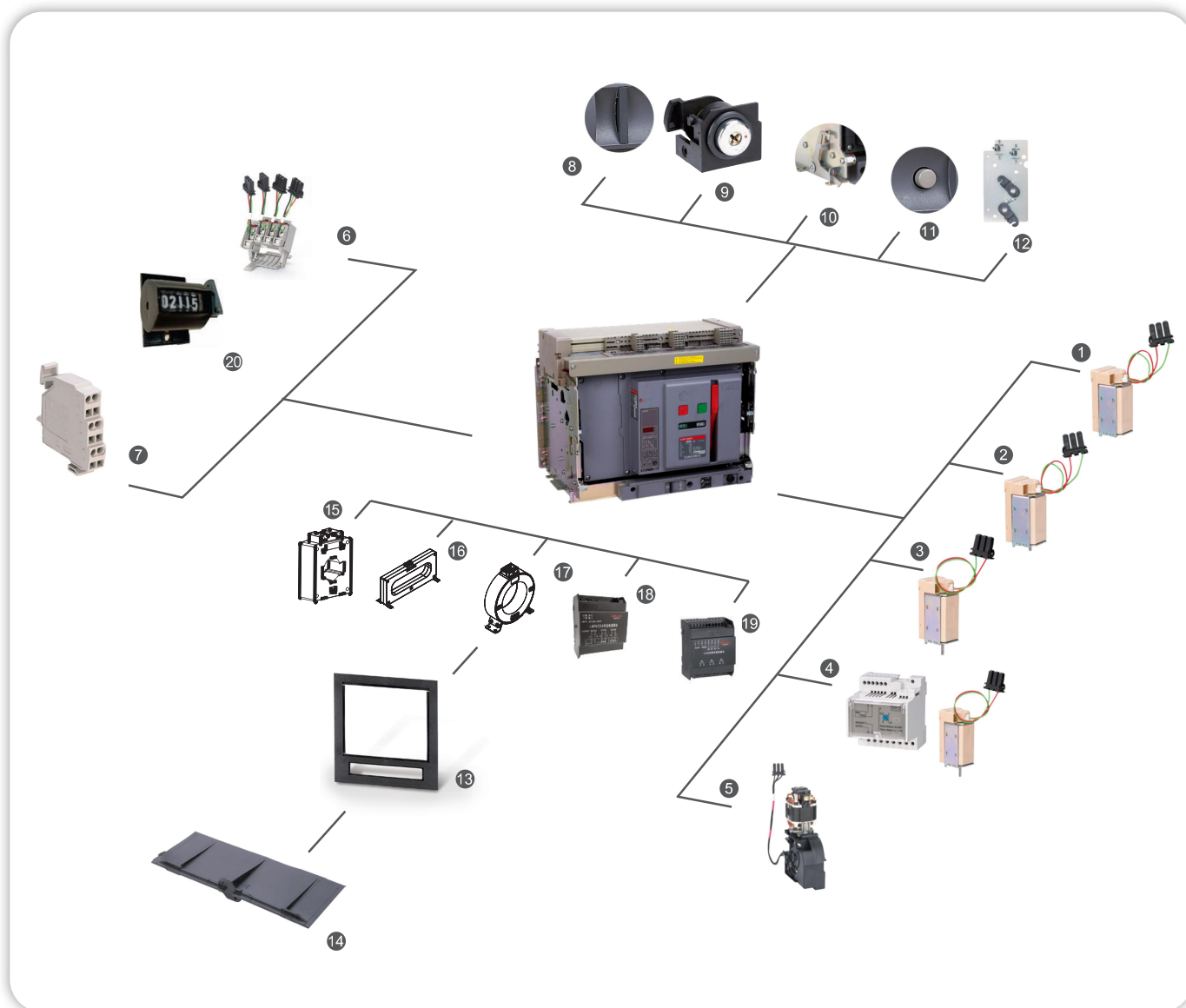
Note: In the plateau environment, the breaking capacity shall be derated according to the corresponding rated operating voltage, generally 75%~50% is selected, which is inversely proportional to the altitude. For details, please contact the Delixi Electric Technical Department. Refer to the GB/T 20645 Special environmental conditions - Technical requirements of low-voltage appliances for plateaus.

NAVIGATOR

Series

Accessories

■ Accessories indicating diagram



Remote operation	Indicating contact	Lock and connections	Operation and protection	Controller accessories
1 Shunt coil	6 Aux. switch OF	8 Padlock	13 Door frame	15 External N phase transformer
2 Closing coil	7 Secondary wiring terminal	9 Key lock	14 Phase partition	16 Leakage current transformer
3 Undervoltage coil	20 Counter	10 Door interlock		17 Earthed transformer
4 Undervoltage delay coil		11 Connect, disconnect, test position locking mechanism		18 Power module
5 Motor mechanism		12 Mechanical interlock		19 Signal conversion module

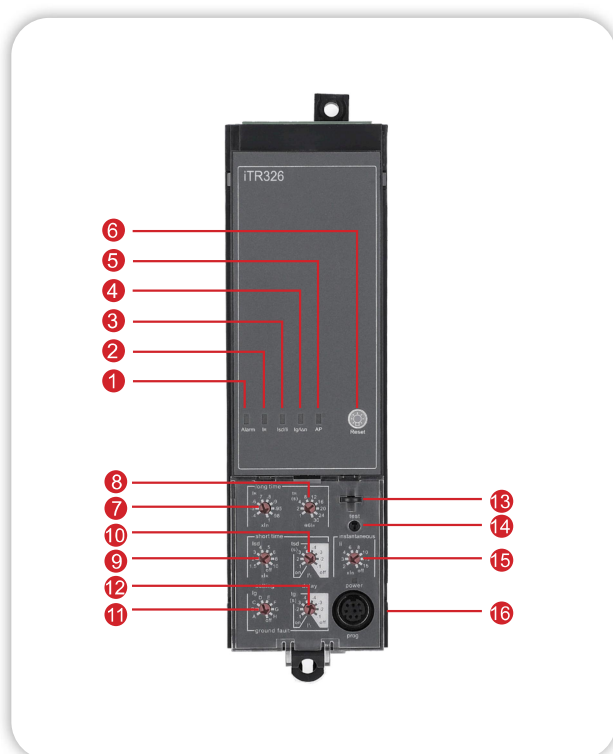


■ Key description



- ① Top fixed
- ② LED indicator light
- ③ Controller label
- ④ Bottom fixed
- ⑤ External wiring terminal
- ⑥ Transformer connector
- ⑦ Flux/micro-connector

L type (basic type)



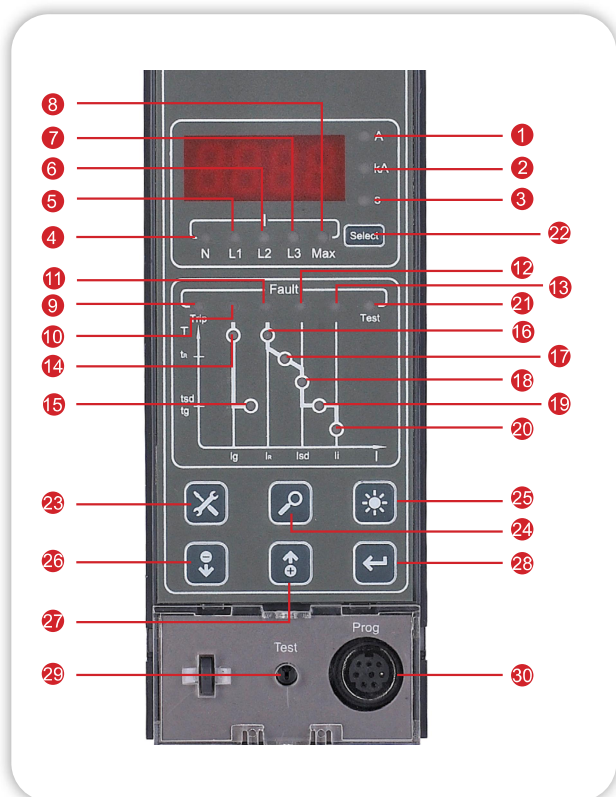
Key description

- ① Alarm indicator
- ② Long delay trip indicator
- ③ Short delay or instantaneous trip indicator
- ④ Ground or electric leakage fault trip indicator
- ⑤ Advanced protection
- ⑥ Reset button

Key description adjusting panel

- ⑦ Long delay current setting I_R
- ⑧ Long delay trip delay t_R
- ⑨ Short delay trip I_{sd}
- ⑩ Short delay trip delay t_{sd}
- ⑪ Ground fault trip I_g
- ⑫ Ground fault trip delay t_g
- ⑬ Padlock position
- ⑭ Test key
- ⑮ Instantaneous trip current
- ⑯ Test connector

M type (standard type)



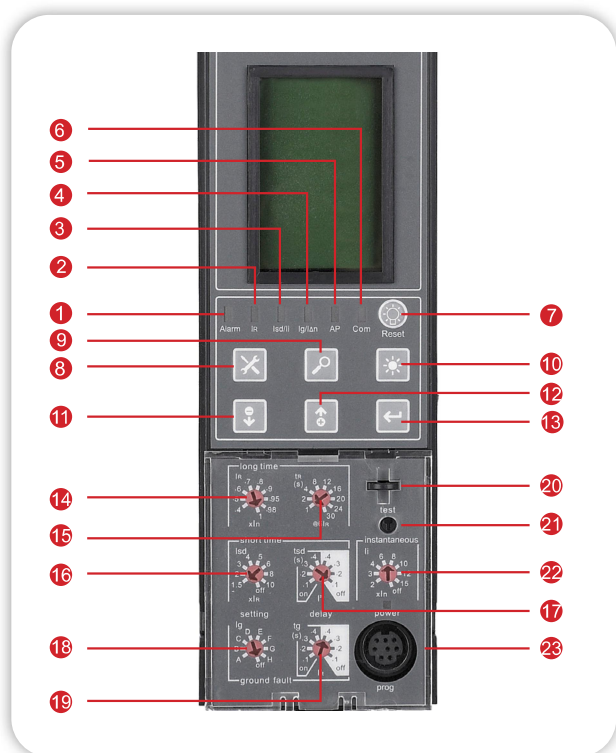
Indicator description

- | | | |
|--------------------------|------------------------------------|-------------------------|
| 1 Current unit A | 12 Short delay protection | 22 Switch key |
| 2 Current unit kA | 13 Instantaneous protection | 23 Set key |
| 3 Time unit S | 14 Ground current set value | 24 Query key |
| 4 N phase current | 15 Ground time set value | 25 Return / clear light |
| 5 A phase current | 16 Long delay current set value | 26 -/ pagedown |
| 6 B phase current | 17 Long delay time set value | 27 +/pageup |
| 7 C phase current | 18 Short delay current set value | 28 OK key |
| 8 Max. current | 19 Short delay time set value | 29 TEST key |
| 9 Trip indicator | 20 Instantaneous current set value | 30 Debugging port |
| 10 Ground protection | 21 Test action state | |
| 11 Long delay protection | | |

Navigation key description

- 22 Switch key
- 23 Set key
- 24 Query key
- 25 Return / clear light
- e 26 -/ pagedown
- 27 +/pageup
- e 28 OK key
- 29 TEST key
- e 30 Debugging port

H type (advanced type)



Key description

- | | |
|---|------------------------------------|
| 1 Alarm indicator | 14 Long delay current setting |
| 2 Long delay trip indicator | 15 Long delay trip delay t_R |
| 3 Short delay or instantaneous trip indicator | 16 Short delay trip I_{sd} |
| 4 Ground or electric leakage fault trip indicator | 17 Short delay trip delay t_{sd} |
| 5 Advanced protection | 18 Ground fault trip I_g |
| 6 Communication function | 19 Ground fault trip delay t_g |
| 7 Reset button | 20 Padlock position |
| Navigation key description | |
| 8 Set key | 21 Test key |
| 9 Query key | 22 Instantaneous trip current |
| 10 Return / clear light | 23 Test connector |
| 11 -/ pagedown | |
| 12 +/pageup | |
| 13 OK key | |

Key description adjusting panel

- 14 Long delay current setting I_R
- 15 Long delay trip delay t_R
- 16 Short delay trip I_{sd}
- 17 Short delay trip delay t_{sd}
- 18 Ground fault trip I_g
- 19 Ground fault trip delay t_g
- 20 Padlock position
- 21 Test key
- 22 Instantaneous trip current
- 23 Test connector

Navigation key description

- 8 Set key
- 9 Query key
- 10 Return / clear light
- 11 -/ pagedown
- 12 +/pageup
- 13 OK key
- 22 Instantaneous trip current
- 23 Test connector



■ Function description

	iTR326	iTR326A	iTR326H
			
	L	M	H
Protection function	Long delay protection L	Long delay protection L	Long delay protection L
	Short delay protection S	Short delay protection S	Short delay protection S
	Instantaneous protection I	Instantaneous protection I	Instantaneous protection I
	Ground protection G	Ground protection G	Ground protection G
	MCR protection	MCR protection	MCR protection
	HSISC protection	HSISC protection	HSISC protection
			Low voltage protection / alarm
			Over voltage protection / alarm
			Voltage unbalance (phase loss) protection / alarm
			Phase sequence protection / alarm
			Low frequency protection / alarm
Measurement function		Current measurement	Current measurement
			Voltage measurement
			Power measurement
			Frequency measurement
			Harmonic wave measurement
Aux. function	Prealarm	Prealarm	Prealarm
	Fault history record	Self-diagnosis function	Self-diagnosis function
	Test function	Fault history record	Fault history record
		Test function	Test function
Display function		LED digital display	LCD liquid crystal display
Special function			Load monitoring
			Area interlock
Communication function			Modbus

■ Product features

Protection characteristics of intelligent controller

- There are inverse time limit and definite time limit for protection characteristics of the intelligent controller. When the fault current exceeds the inverse time limit set value, the controller will provide the delay protection according to the definite time limit.
- The inverse time limit curve shall comply with the characteristic curve I^2t

Overload long delay protection characteristics

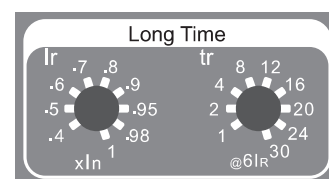
- Overload long delay protection action threshold

$< 1.05 I_R$: $> 2h$ no action;

$> 1.2 I_R$: $< 1h$ action;

$\geq 1.2 I_R$: delay action

I_R current setting value range: $0.4I_n, 0.5I_n, 0.6I_n, 0.7I_n, 0.8I_n, 0.9I_n, 0.95I_n, 0.98I_n, 1.0I_n$



Inverse time limit action characteristics $I^2t: t=(6/N)^2 \times t^R$									
Set current multiple	Action time s								
$1.5 I_R$	16s	32s	64s	128s	192s	256s	320s	384s	480s
$2 I_R$	9s	18s	36s	72s	108s	144s	180s	216s	270s
$6 I_R$	1s	2s	4s	8s	12s	16s	20s	24s	30s

Notes: N-Fault current divided by the set current multiple I/I_R

t ---Fault action delay time

t_R ---Long delay time set value

Permissible error of action time $\pm 10\%$

Short circuit short delay protection characteristics

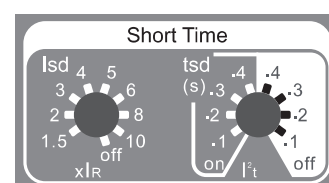
- Short circuit short delay protection action threshold

$< 0.9 I_{sd}$: no action;

$> 1.1 I_{sd}$: action;

$\geq 1.1 I_{sd}$: delay action

I_{sd} current setting value range: $1.5 I_R, 2 I_R, 3 I_R, 4 I_R, 5 I_R, 6 I_R, 8 I_R, 10 I_R + OFF$



Current	Action time				
$I_{sd} < I \leq 8I_R$	Inverse time limit	Action characteristics	$I^2t = (8I_R)^2 t_{sd}$		
		Setting time s	0.1, 0.2, 0.3, 0.4		
$I \geq 1.1 I_{sd}$	Definite time limit; minimum time is return time	Setting time s	0.1	0.2	0.3
		Min. time s	0.08	0.14	0.23
		Max. time s	0.14	0.2	0.32

Notes: I_{sd} ---Short delay current setting value I --- Fault current value I_R ---Long delay set value t ---Fault action delay time

t_{sd} ---Short delay inverse time limit set value

Permissible error of action time $\pm 20\%$



Short circuit instantaneous protection characteristics

Short circuit instantaneous protection action threshold

< 0.85 I_i : no action;

> 1.15 I_i : action;

Current setting value of instantaneous action: 2 I_n , 3 I_n , 4 I_n , 6 I_n , 8 I_n , 10 I_n , 12 I_n , 15 I_n + OFF

Note: Action time error $\leq 50\text{ms}$



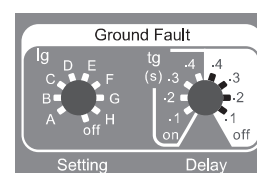
Ground fault protection action characteristics

Ground fault protection action threshold

< 0.9 I_g : no action;

> 1.1 I_g : action;

$\geq 1.1 I_g$: delay action;



Current setting value	A	B	C	D	E	F	G	H	OFF
$I_n < 1250$	0.2 I_n	0.3 I_n	0.4 I_n	0.5 I_n	0.6 I_n	0.8 I_n	0.9 I_n	I_n	
$I_n \geq 1250$	500A	600A	700A	800A	900A	1000A	1100A	1200A	

tg(s)	Inverse time limit	Action characteristics				
$t = \frac{(I_J)^2}{I^2} \times tg$						
Definite time limit, Min. time is return time	Setting time (s)	0.1, 0.2, 0.3, 0.4				
	Setting time (s)	0.1	0.2	0.3	0.4	
	Min. time (s)	0.08	0.14	0.23	0.35	
	Max. time (s)	0.14	0.2	0.32	0.5	

Note: I_g is ground protection set value; when $I_n \geq 1250\text{A}$, $I_g = 1200\text{A}$; when $I_n < 1250\text{A}$, $I_g = I_n$

I --- Fault current value T --- Fault action delay time t_g --- Ground reverse time limit set value

Permissible error of reverse time limit action time is $\pm 20\%$

Factory set value of intelligent controller

	Long delay		Short delay		Instantaneous	Ground fault		Thermal memory
Trip curve I^2t	I_R	t_R	I_{sd}	t_s	I_i	I_g	t_g	
	1 I_n	30s	6 I_n	0.2s	10 I_n	G gear	0.4s	20min

For more information, please visit www.delixi-electric.com

■ Remote operation (left figure is suitable 1000AF/1600AF/4000AF; right figure is suitable for 2000AF/2500AF/3200AF/6300AF)

Shunt Coil MX

- After the circuit breaker is charged, the shunt coil can work to open the circuit breaker instantaneously under the specified power voltage for remote operation
- Rated control power voltage: AC220V/AC230V/AC380V/AC400V/DC110V/DC220V
- Action voltage (0.7-1.1) U_s
- Breaking time: 50 ± 10 ms

Closing Coil XF

- After the circuit breaker is charged, the closing coil can work to close the circuit breaker instantaneously under the specified power voltage for remote operation
- Rated control power voltage: AC220V/AC230V/AC380V/AC400V/DC110V/DC220V
- Action voltage (0.85-1.1) U_s
- Closing time: 55 ± 10 ms

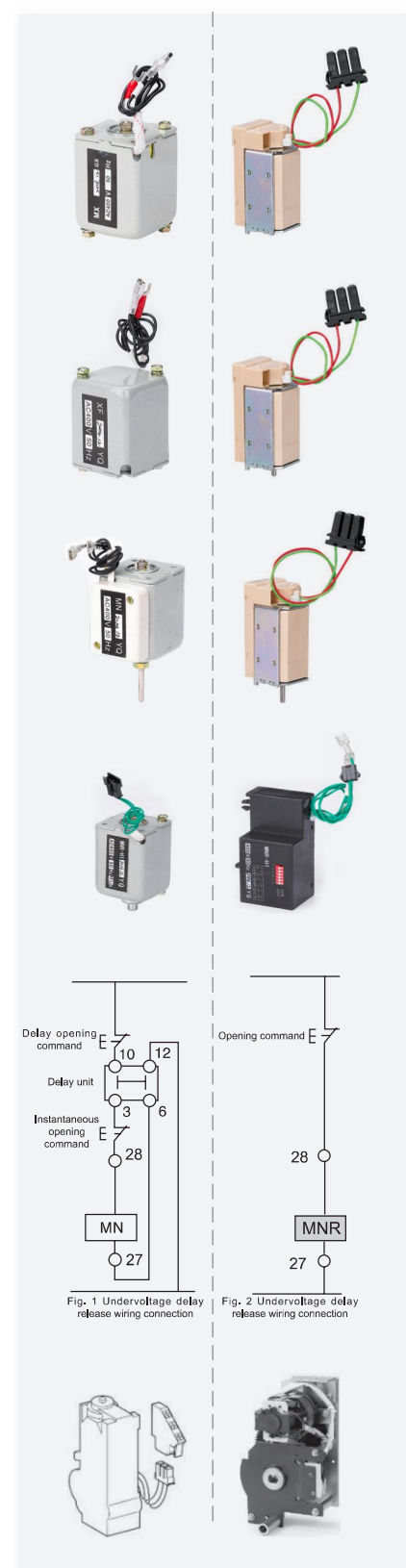
Undervoltage Coil MN

- There are undervoltage instantaneous and undervoltage delay types for undervoltage coils
- After the circuit breaker is closed, when the circuit breaker voltage drops to 70%-35% rated voltage, this coil can work to open the circuit breaker. The circuit can be closed again only when the power voltage of undervoltage coil restores to 85% rated voltage
- Rated control power voltage: AC220V/AC230V/AC380V/AC400V
- Action voltage: (0.35-0.7) U_e
- Reliable closing voltage: (0.85 – 1.1) U_e
- Unable-closing voltage: $\leq 0.35 U_e$
- Delay time: Open after 0.5s, 1s, 1.5s, and 3s (with 1000AF/1600AF/4000AF supported)
- Delay time: Open after 0.5s, 1s, 1.5s, 3s, 5s, 7.5s (with 2000AF/2500AF/3200AF/6300AF supported)

The maximum delay time is 7.5s, and the time value can be set by dial according to the actual situations

Motor Mechanism MCH

- When the circuit breaker is in the Open state and the power supply works, the motor mechanism can work to charge the circuit breaker, making the circuit open or close under the action of shunt coil, undervoltage coil and closing coil
- If no power supply works, please charge the circuit breaker manual via handle
- Rated control power voltage: AC220V/AC230V/AC380V/AC400V/DC110V/DC220V
- Action voltage (0.85-1.1) U_s
- Power consumption: 75 W/180 W (1000AF, 1600AF), 85 W (2000AF), 110 W (2500AF, 3200AF), 180 W (4000AF), 150 W (6300AF)
- Charging time: < 5
- Usage category: AC15, DC13



■ **Indicating contact:** (the left figure is suitable for 1000AF/1600AF/4000AF, and the right figure is suitable for 2000AF/2500AF/3200AF/6300AF)

Aux. switch OF

- Used to monitor the circuit breaker state, such as connecting with the circuit breaker position signal light, and opening indicator
- 4-open and 4-closed by default
- 6-open and 6-closed is available for 2000AF/2500AF/3200AF/6300AF
- 6-open and 6-closed, 8-open and 8-closed, and 12-open and 12-closed are available for 4000AF
- Rated operating current

1000AF/1600AF/4000AF: AC-12: AC250V6A, AC-15: AC380V1A, DC-12: DC250V0.3A

2000AF/2500AF/3200AF/6300AF: AC-15: AC230V 1.5A, AC400V 0.9A,

DC-13: DC110V 0.55A, DC220V 0.27A

Ready Closing Indicating Contact PF

- It consists of one mechanical indicating contact and transfer contacts to send the closing signal and indicate the conditions:

- The circuit breaker is in the open state;
- The circuit breaker has been charged;
- There no continuous opening command

Wiring diagram sees Fig. 3 (1000&1600&4000 frame), and Fig. 4 (2000&2500&3200&6300 frame); those in the dashed box are connected by user.

- Rated operating current: AC-12 AC400V 3A, DC-12 DC220V 0.15A (1000&1600&4000 frame)
- Rated operating current: AC-12 AC250V 3A (2000&2500&3200&6300 frame)

SWT Fault Trip Indicating Contact: (SWT2 only supports 1000AF/1600AF/4000AF)

- In case of electrical failure, one set of fault signal outputs are provided
- The second set of SWT2 can be installed

Res Remote Reset Contact: (Only 1000AF/1600AF/4000AF supported)

- In case of electrical failure, after the circuit breaker opens, this device can make that the circuit breaker fault locking device works to realize remote reset
- This contact is not compatible with the SWT2 fault trip contact

Connect (CE), Disconnect (CD), Test (CT) Three-Position Indicating Contact

- Optional accessories for drawer type. Two disconnection indicating contact (CD), one test indicating contact (CT), and three connection (CE) indicating contact are provided for 1000 frame and 1600 frame; three CDs, three CTs, and three CEs are provided for 4000 frame; those accessories shall be purchased separately, and their numbering sees Fig. 6.

- Three-position indicating contacts are installed on the drawer frame to indicate the position of circuit breaker in the drawer.

- When the circuit breaker is in the Connect position, its wiring diagram is illustrated in Fig. 5 (those in the dashed box are connected by user); multiple sets of three-position indicating signals are illustrated in Fig. 6.

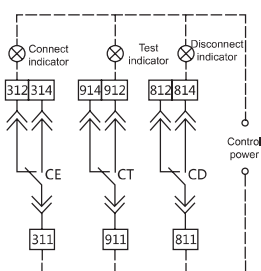


Fig. 5 Three-position indicator signal wiring diagram

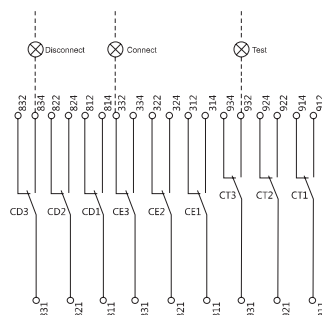


Fig. 6 Multiple sets of three-position indicator signal (only for 1000AF/1600AF/4000AF)

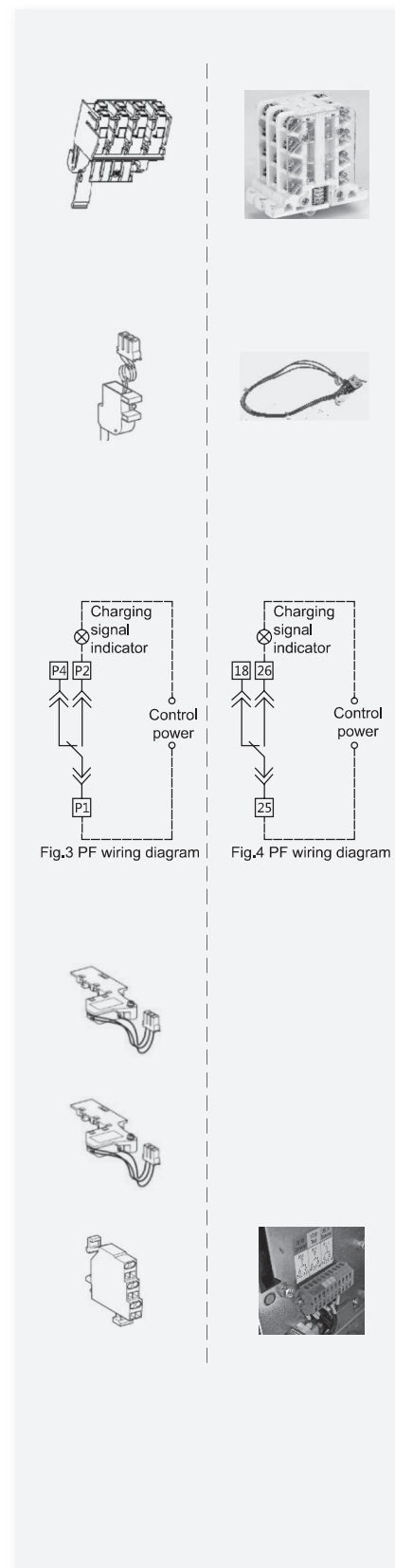


Fig.3 PF wiring diagram

Fig.4 PF wiring diagram

■ Lock (left figure is suitable for 1000AF/1600AF; right figure is suitable for 2000AF/2500AF/3200AF/4000AF/6300AF)

Drawer Frame Padlock

- If the optional padlock is selected, when the circuit breaker is in the “Disconnect” position, pull out the padlock plate for locking, so that the rocker rod cannot be inserted.
- Padlock shall be provided by users.

Opening Lock

- The opening lock can lock the circuit breaker at the “Disconnect” position, and the circuit breaker can be closed only when the lock is opened by the key without pulling out the key
- There are three common opening locks (two-lock and three-lock are used in the power distribution system with two-inlet and one-contact)
- One-lock and one-key
- Two-lock and one-key
- Three-lock and two-key
- The cross-shell frame can be locked

Drawer Position Locking Mechanism

- In the drawer type circuit breaker, there is a locking device for “Connect”, “Test”, and “Disconnect” positions of circuit breaker; three positions of circuit breaker can be displayed in the indicating window, and the forward and backward handle is located at the exact position, and locking can be released after pressing the Reset button.

Door Interlock

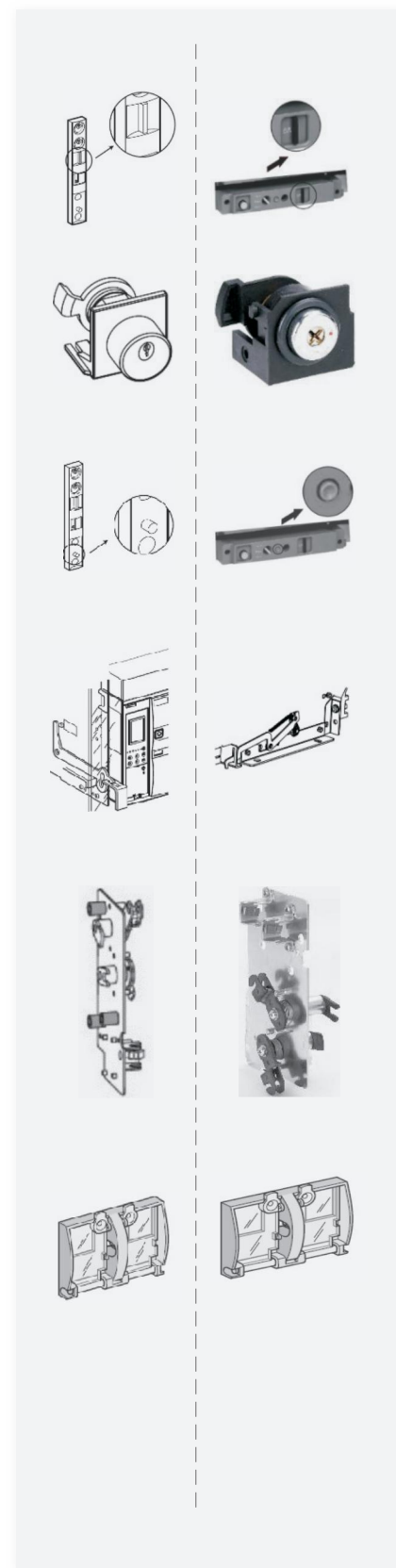
- For drawer type circuit breaker, it is installed at the side of circuit breaker, and linked with the door of power distribution cabinet; when the circuit breaker is in the “Connect” or “Test” position, it is guarantee that the cabinet door cannot be opened; when in the “Disconnect” position, the cabinet door can be opened to prevent the circuit breaker from slipping off resulting in damage;
- Left door interlock or right door interlock can be provided. However, when the right door interlock is selected for 2000&2500&3200&6300 frame, three-position indicating contact cannot be selected.

Mechanical Interlock

- There are lever interlock and cable interlock
- When the lever interlock is used, two or three circuit breakers can only be installed vertically; when the cable interlock is used, the circuit breaker can be installed horizontally or vertically
- Used in the power distribution system with two-inlet and one-contact
- Two circuit breakers can be connected for linkage; when any one is closed, the other can open under linkage
- The different frames can be interlocked
- The cross-shell frame can be lockable

Button Lock

- To prevent mis operation of the ON or OFF button
- The padlock can be provided by the user, and the diameter of lock rod is $\Phi 5 \sim \Phi 8 \text{mm}$



■ Protection (left figure is suitable for 1000AF/1600AF, right figure is suitable for 2000AF/2500AF/3200AF/4000AF/6300AF)

Door Frame

- Door frame is mounted on the door of power distribution cabinet
- The IP protection grade increases to IP40 from IP20
- It is available for drawer type and fixed type

Phase Partition

- Installed on the insulating plate located at the middle of busbar of circuit breaker
- The creepage distance can be increased, improving insulation capacity

Safety Shield: (Standard Configuration)

- Installed in the drawer frame of the drawer-type circuit breaker; when the body is in the "Disconnect" or "Test" position, it is used to protect the contact connecting bar to prevent contacting the energized part when the body moves down from the drawer frame.

Safety Shield Lock: (with 1000AF/1600AF/4000AF supported)

- Used during the inspection or maintenance by users. There is shield lock hole on the drawer baffle for 1000 frame and 1600 frame. For 4000 frame, this lock shall be purchased separately
- The shield lock shall be provided by user, and the diameter of lock rod is $\Phi 5\text{-}\Phi 8$

Secondary Wiring Terminal Protective Cover

- After connecting wires by user, foreign matters or dust shall be prevented from falling onto the secondary terminal
- Provided only for drawer type product

Counter

- It is counted 1 time after the energy storage is completed, and cannot be zero cleared and display the total number of operations
- 1600AF/4000AF is installed on the mechanism, and other frames are installed on the motor

■ Controller accessories: (Left figure is suitable for 1000AF/1600AF, and right figure is suitable for 2000AF/2500AF/3200AF/4000AF/6300AF)

External N Phase Transformer

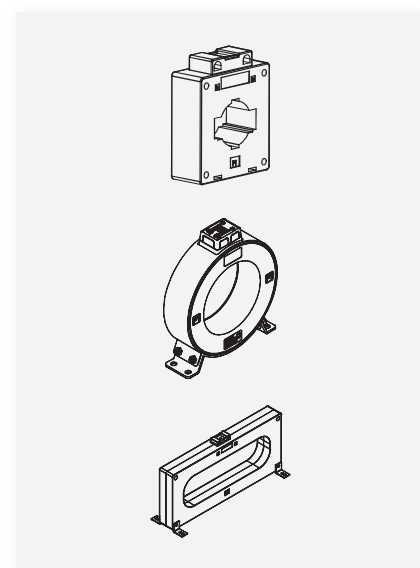
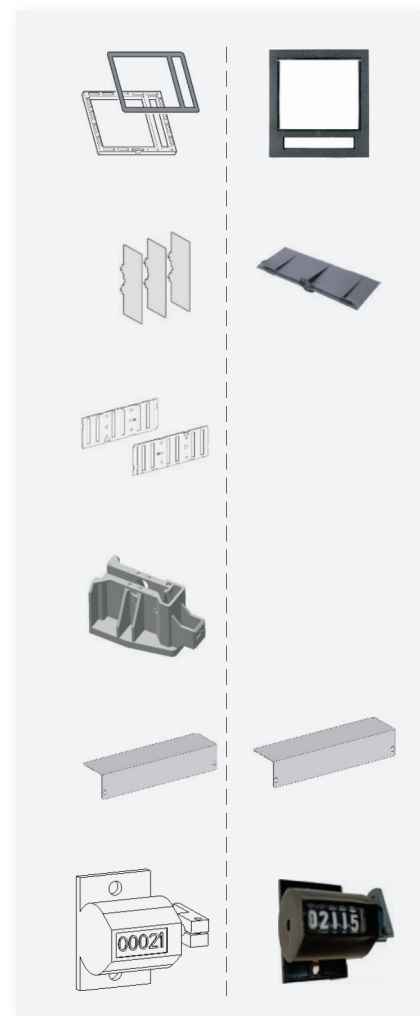
- In the 3P+N grounding mode, the external transformer used to measure the neutral phase current is assembled onto the wiring busbar by users.
- Select one from three (ground transformer, leakage current transformer)

Ground Transformer

- Special external transformer used to measure the current of neutral phase can provide the protection for superior and subordinate ground faults of circuit breaker
- Ground mode is of the earth current return type
- Only suitable for iTR326H controller
- Select one from three (external N phase transformer, leakage current transformer)

Leakage Current Transformer

- When the ground protection is of the leakage current type, the additional external special rectangular transformer is provided
- Only suitable for iTR326H controller
- Select one from three (external N phase transformer, leakage current transformer)



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Series

Power Module

- Supply the auxiliary power for intelligent controller in the AC220V/AC230V/AC380V/AC400V/DC110V/DC220V circuits
- Inputs are AC220V/AC230V/AC380V/AC400V/DC110V/DC220V, and the input fluctuation range is $\pm 20\%$
- The output is DC24V, and the output fluctuation range is $\pm 5\%$
- Output three sets of DC24V: total power is 7W
- Before conducting the power-on test of each switch, check whether the power module is connected to prevent damage to the intelligent controller after power-on

Signal Conversion Module

- The output signal unit is used for communication functions, such as area interlock, four-remote function signal processing, or for fault alarm or indication
- Only suitable for iTR326H controller

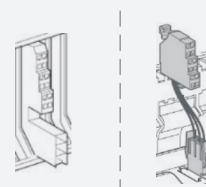
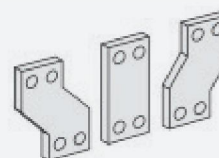
■ Connecting accessories

- Extended terminal: Only for 1600A
- L type adapter: Only for 2000A

■ Configuration accessories: (left figure is suitable for 1000AF/1600AF, and right figure is suitable for 4000AF)

Secondary wiring terminal connectors

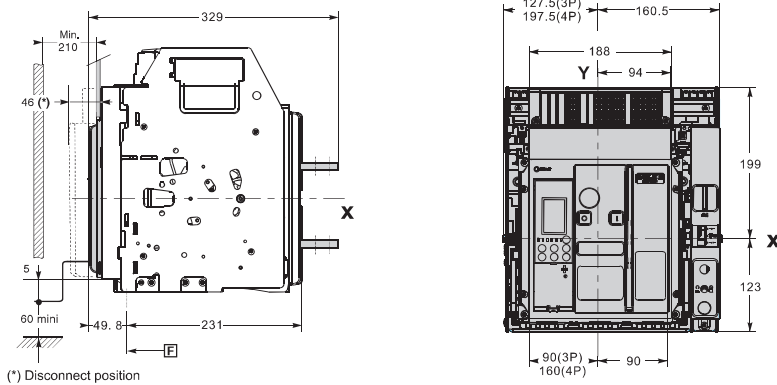
- Used to connect the internal accessories of circuit breaker with the external power supply
- Only suitable for 1000AF/1600AF/4000AF
- Drawer type: Connectors used in 1000AF/1600AF are not compatible with those used in 4000AF (see left figure and right figure)
- Fixed type: Connectors used in 1000AF/1600AF are compatible with those used in 4000AF (see figure)



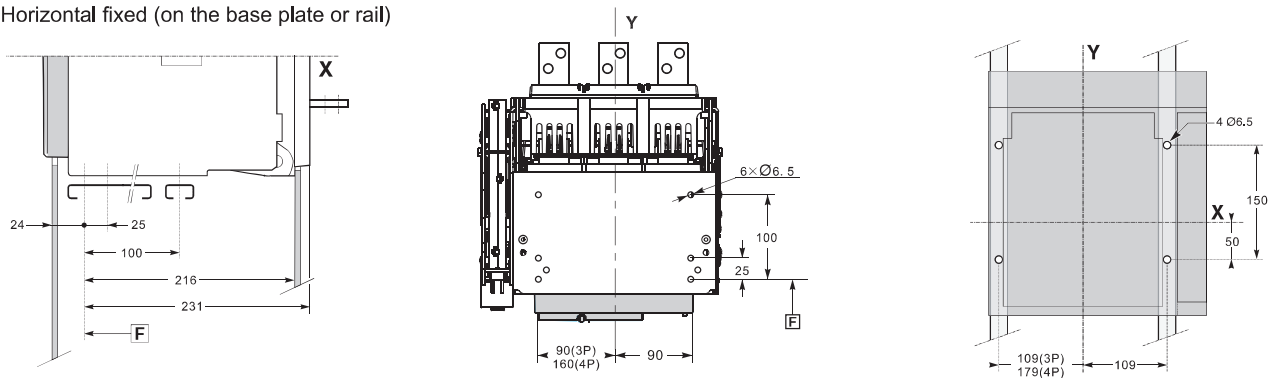
Outline and Installation Dimensions

■ CDW3-1000AF drawer type 3-pole and 4-pole

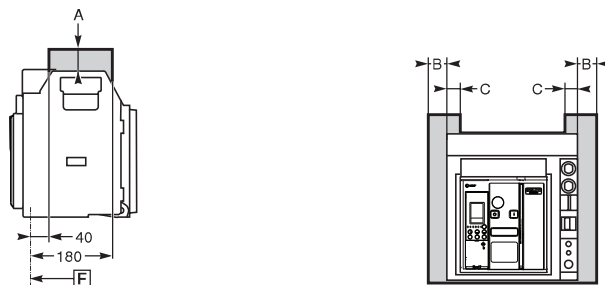
Dimensions



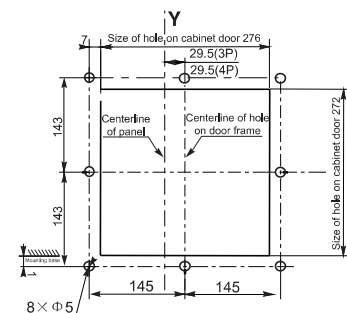
Horizontal fixed (on the base plate or rail)



Safety distance



Size of hole on door



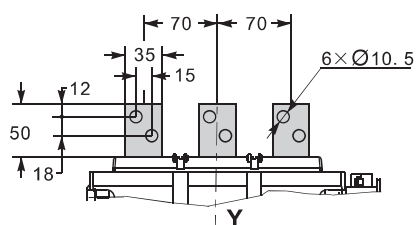
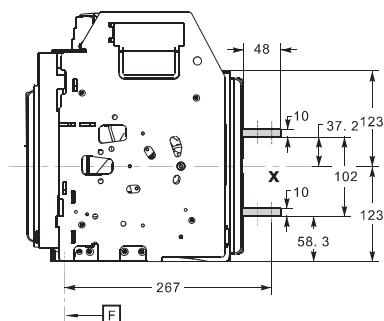
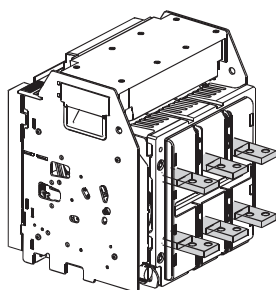
Safety distance (mm)	Drawer type		
	A	B	C
Insulation	0	10	0
Metal	0	10	0
Energized conductor	30	60	30

Note 1: The safety distance diagram is for illustration only.

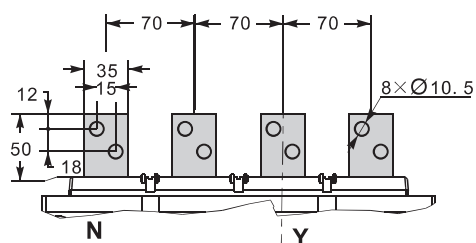
Note 2: The X-axis and Y-axis of 3-pole circuit breaker are symmetrical with the front cover of the circuit breaker body.

Connect

Horizontal rear connection

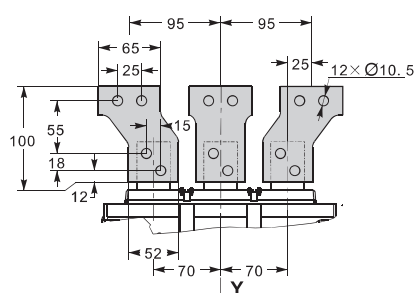
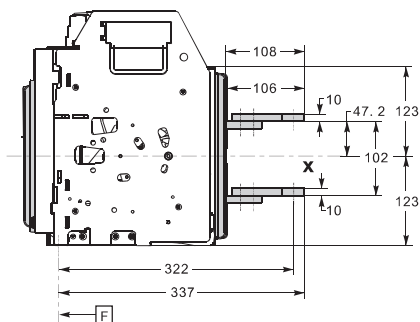
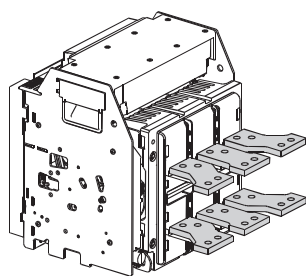


(3P)

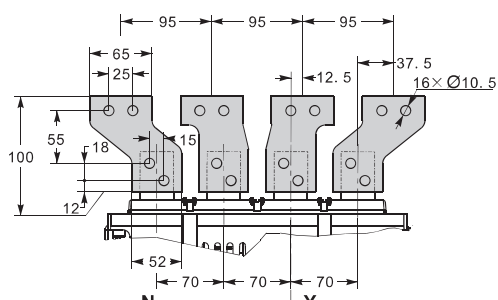


(4P)

Rear connection with extended terminal



(3P)

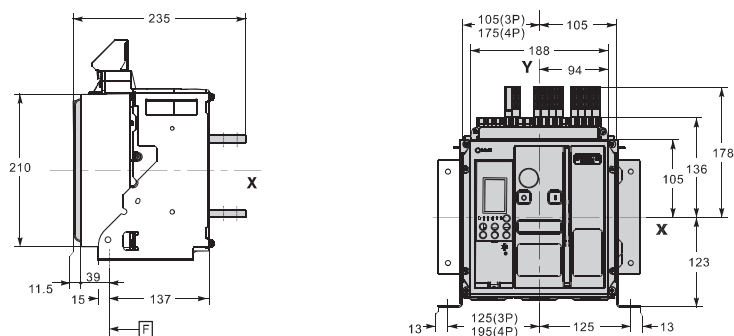


(4P)



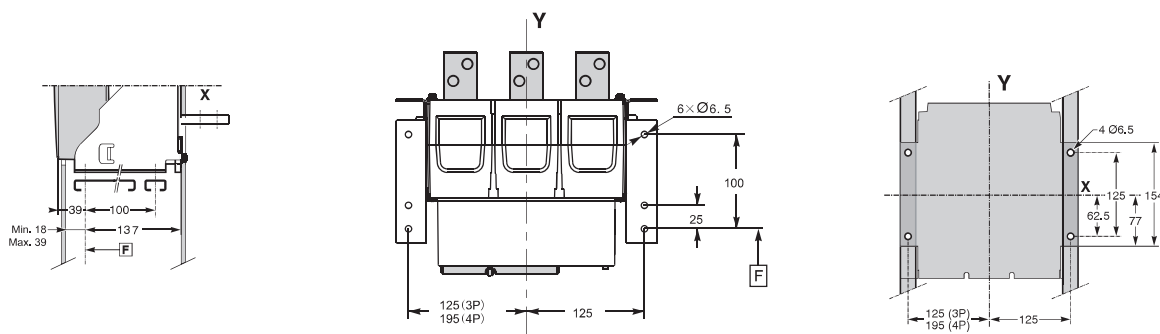
■ CDW3-1000AF Fixed Type 3-Pole and 4-Pole

Dimensions



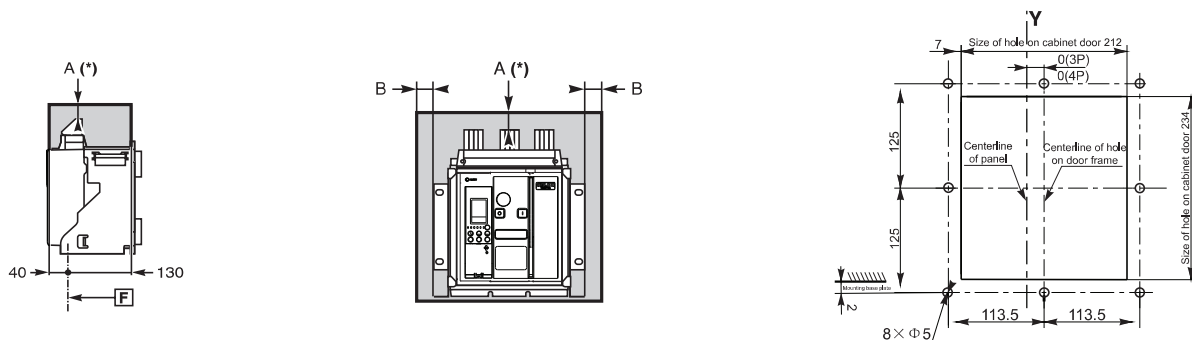
Horizontal fixed (on the base plate or rail)

Vertical fixed detailed view (on the back plate or rack)



Safety distance

Size of hole on door



Safety distance (mm)	Fixed type	
	A	B
Insulation	0	0
Metal	0	0
Energized conductor	100	60

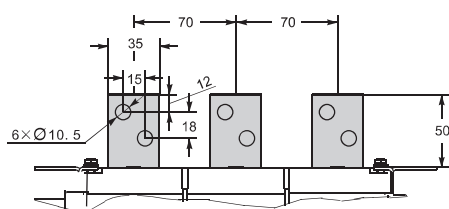
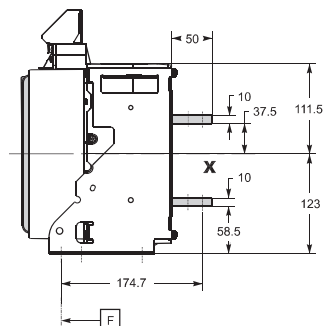
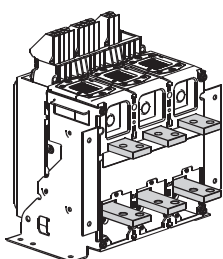
Note 1: The safety distance diagram is for illustration only, and the actual distance of circuit breaker will prevail.

Note 2: The X-axis and Y-axis of 3-pole circuit breaker are symmetrical with the front cover of the circuit breaker body.

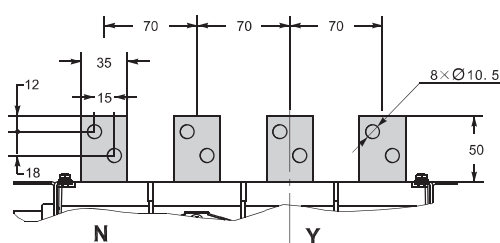
Note 3: (*) The space 50mm required for removal of the arcing shield shall be considered when determining the safety distance. The safety distance is 20mm after the removal of terminal block.

Connect

Horizontal rear connection

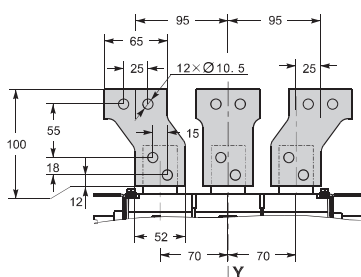
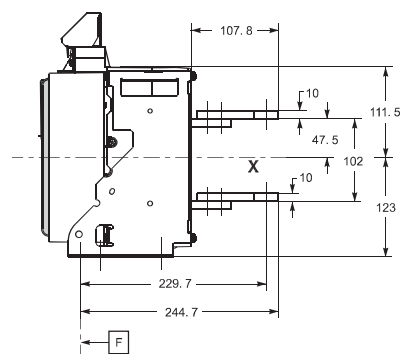
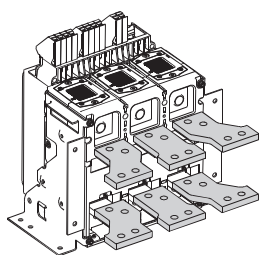


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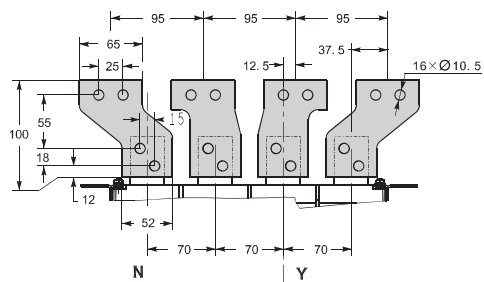


(4P)

Rear connection with extended terminal



(3P)

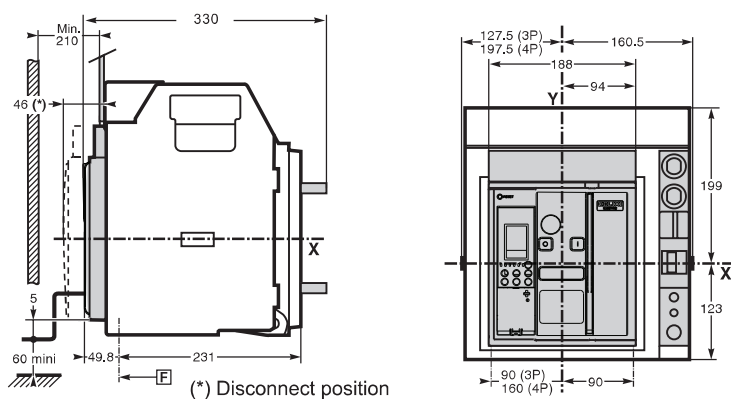


(4P)

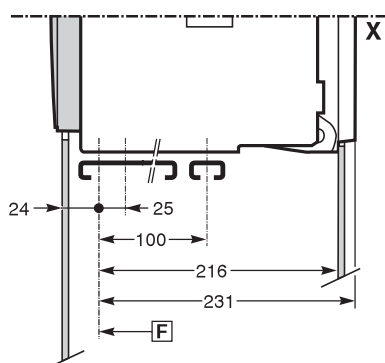


■ CDW3-1600AF Drawer Type 3-Pole and 4-Pole

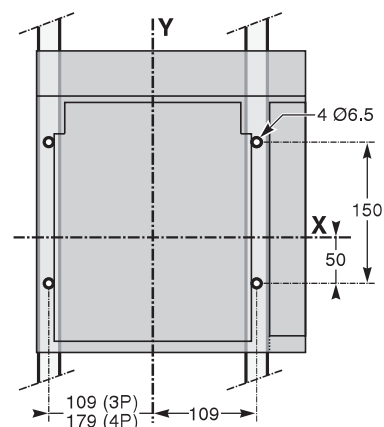
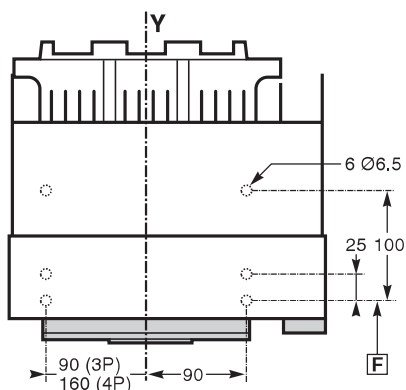
Dimensions



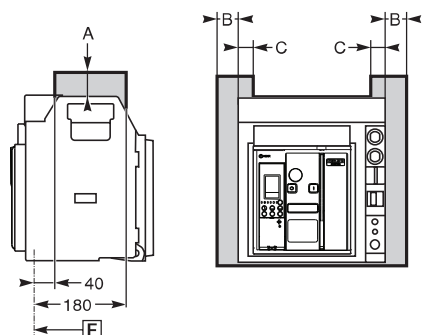
Horizontal fixed (on the base plate or rail)



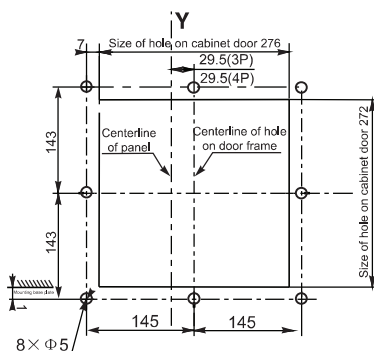
Vertical fixed detailed view (on the back plate or rack)



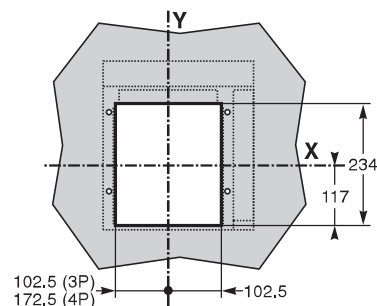
Safety distance



Safety distance



Size of hole on rear panel



Safety distance (mm)	Drawer type		
	A	B	C
Insulation	0	10	0
Metal	0	10	0
Energized conductor	30	60	30

Note 1: The safety distance diagram is for illustration only, and the actual distance of circuit breaker will prevail.

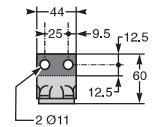
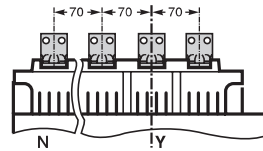
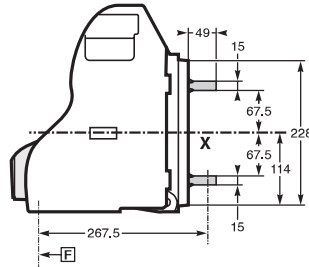
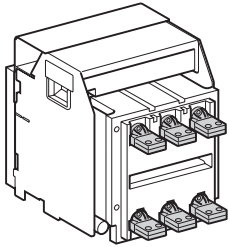
Note 2: The X-axis and Y-axis of 3-pole circuit breaker are symmetrical with the front cover of the circuit breaker body.

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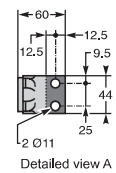
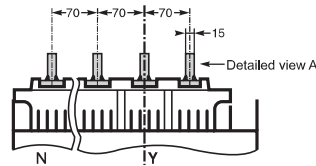
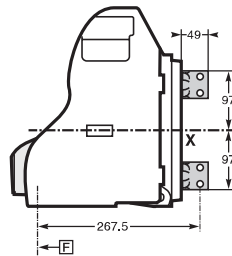
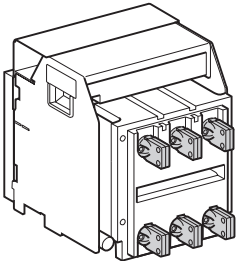
Series

Connect

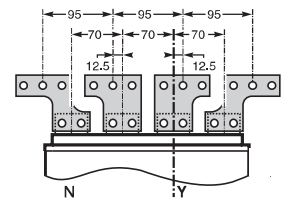
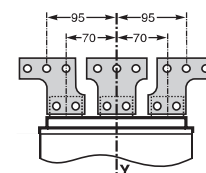
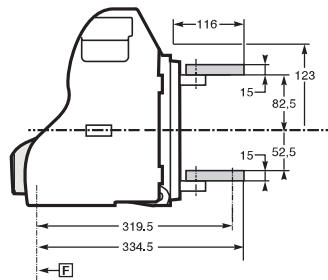
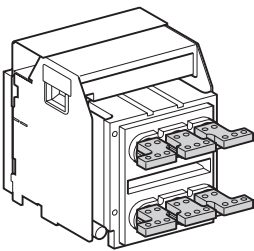
Horizontal rear connection



Vertical rear connection

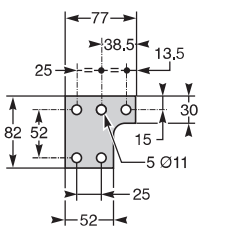


Rear connection with extended terminal

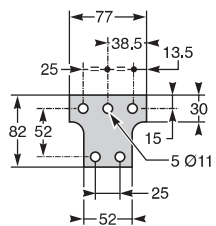


For installation, refer to the "Rear connection with extended terminal"

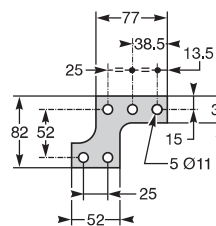
Left-center or right-center extended terminal of 4-pole



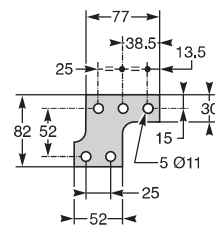
Middle extended terminal of 3-pole



Left or right extended terminal of 4-pole



Left or right extended terminal of 3-pole

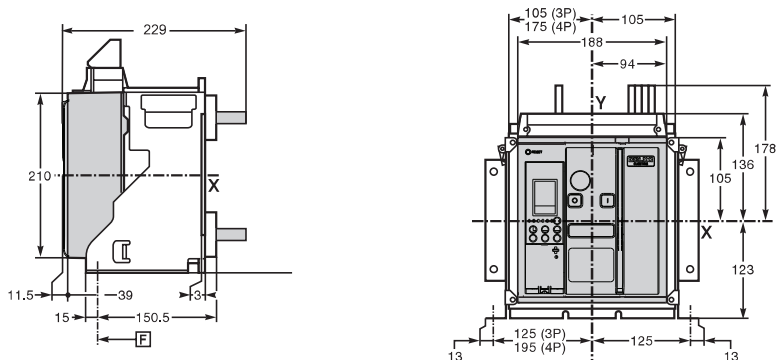


Note: The X-axis and Y-axis of 3-pole circuit breaker are symmetrical with the front cover of the circuit breaker body.



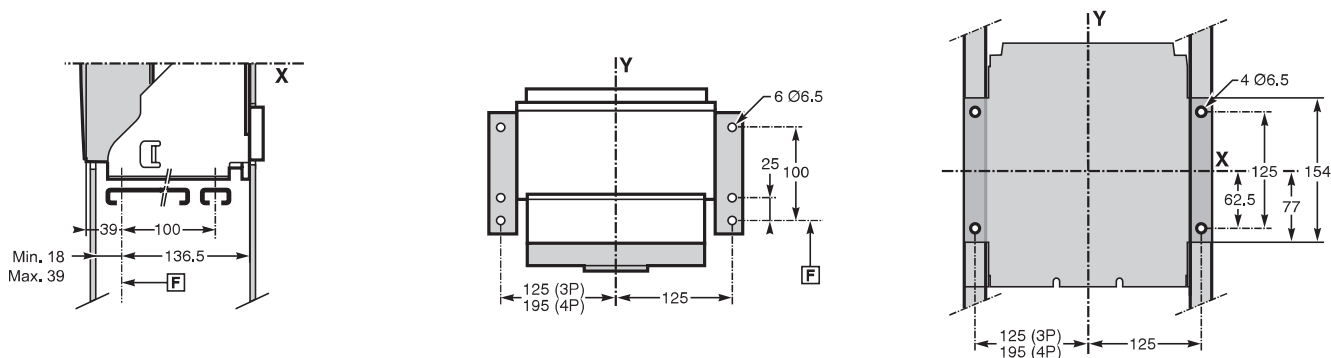
■ CDW3-1600AF Fixed Type 3-Pole and 4-Pole

Dimensions



Horizontal fixed (on the base plate or rail)

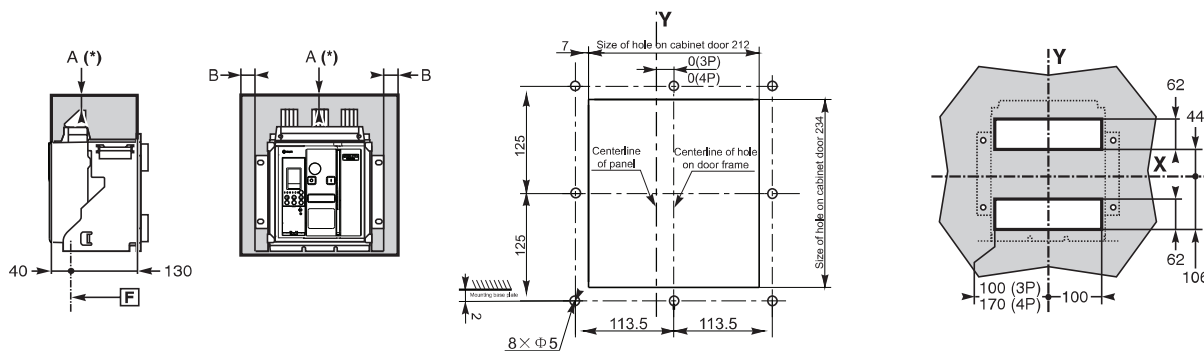
Vertical fixed detailed view (on the back plate or rack)



Safety distance

Size of hole on door

Size of hole on rear panel



Safety distance (mm)	Drawer type	
	A	B
Insulation	0	0
Metal	0	0
Energized conductor	100	60

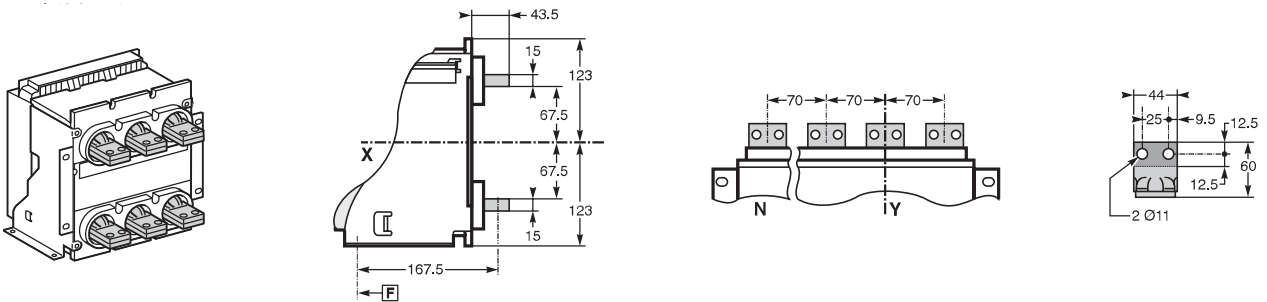
Note 1: The safety distance diagram is for illustration only, and the actual distance of circuit breaker will prevail.

Note 2: The X-axis and Y-axis of 3-pole circuit breaker are symmetrical with the front cover of the circuit breaker body.

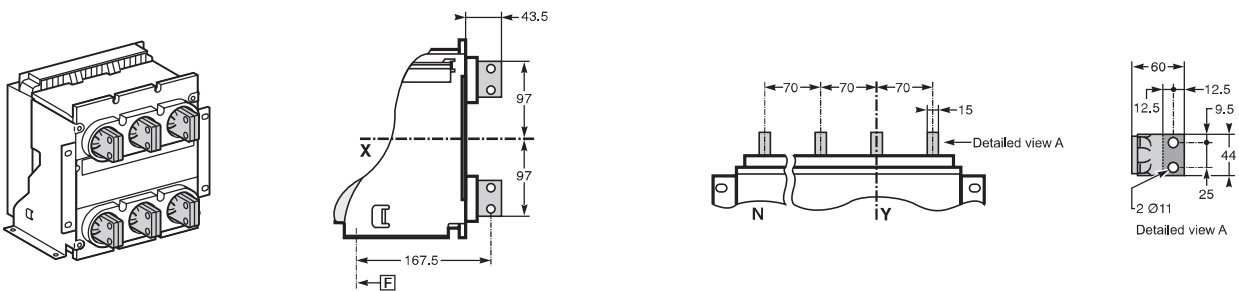
Note 3: (*) The space 50mm required for removal of the arcing shield shall be considered when determining the safety distance. The safety distance is 20mm after the removal of terminal block.

Connect

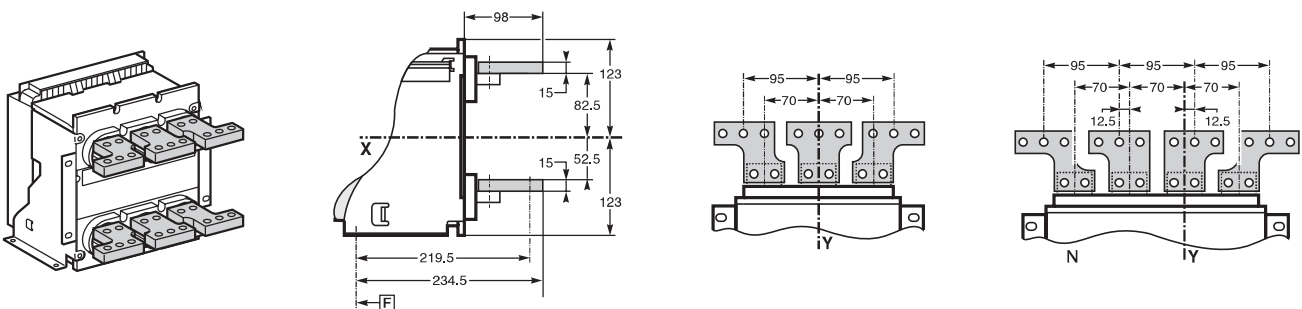
Horizontal rear connection



Vertical rear connection

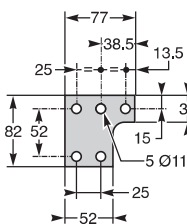


Rear connection with extended terminal

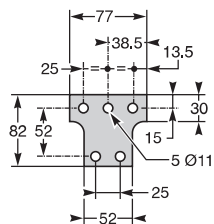


For installation, refer to the "Rear connection with extended terminal"

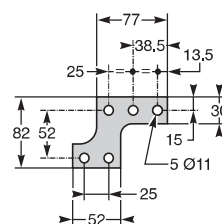
Left-center or right-center extended terminal of 4-pole



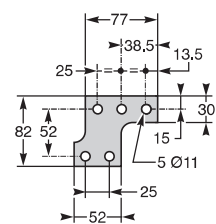
Middle extended terminal of 3-pole



Left or right extended terminal of 4-pole



Left or right extended terminal of 3-pole

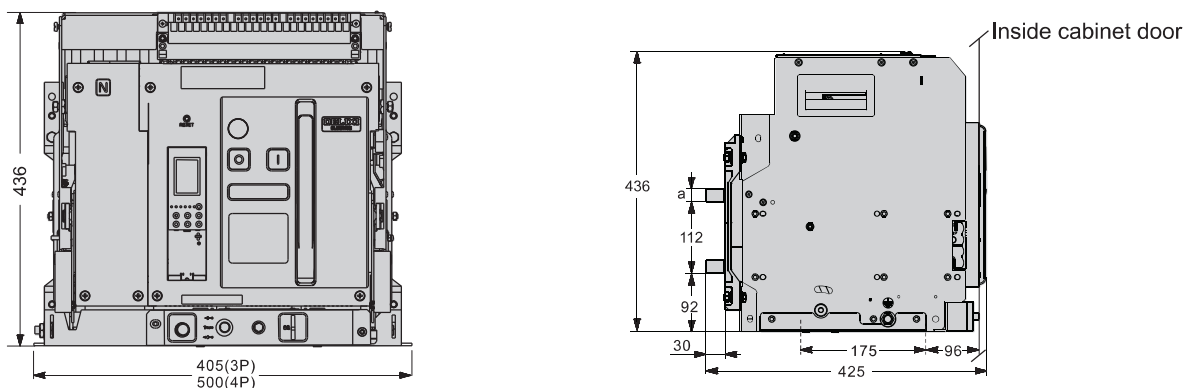


Note: The X-axis and Y-axis of 3-pole circuit breaker are symmetrical with the front cover of the circuit breaker body.

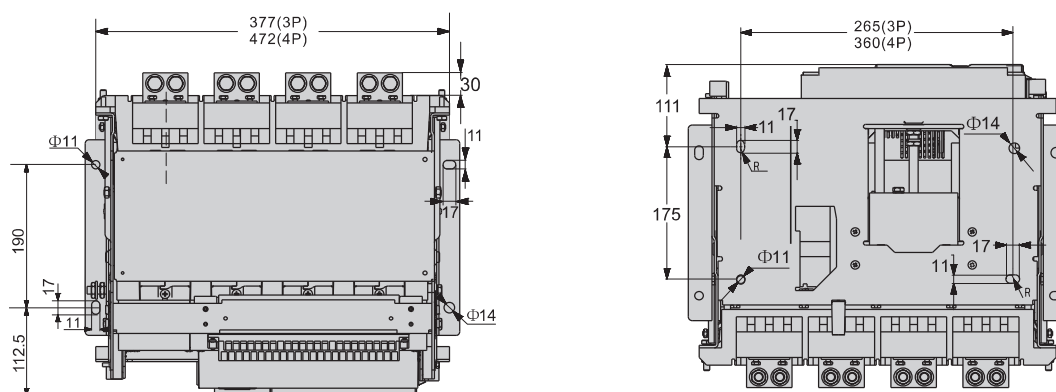


■ CDW3-2000AF Drawer Type 3-Pole and 4-Pole

Dimensions



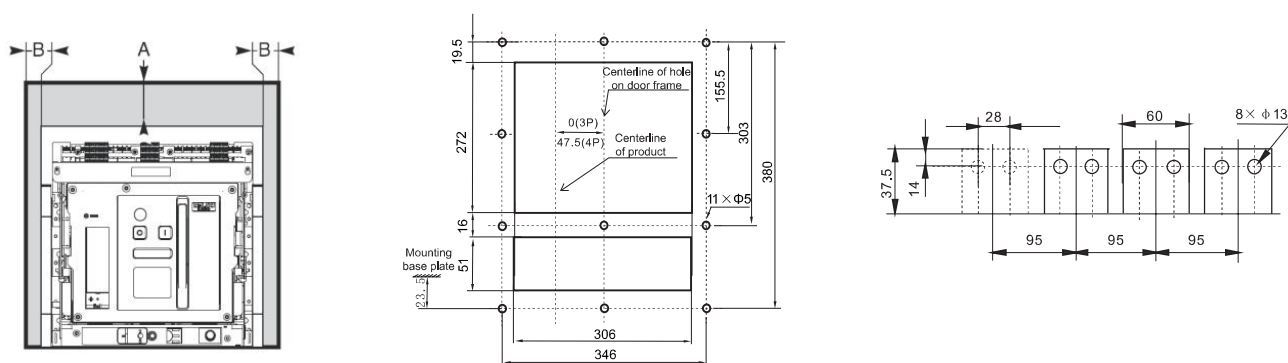
Horizontal fixed (on the base plate or rail) * It is preferred that the cover shall expose by 5mm from the door frame



Safety distance

Size of hole on door

Size of busbar



Safety distance (mm)	Drawer type	
	A	B
Insulation	0	0
Metal	0	0
Energized conductor	100	60

Note 1: The safety distance diagram is for illustration only, and the actual distance of circuit breaker will prevail.

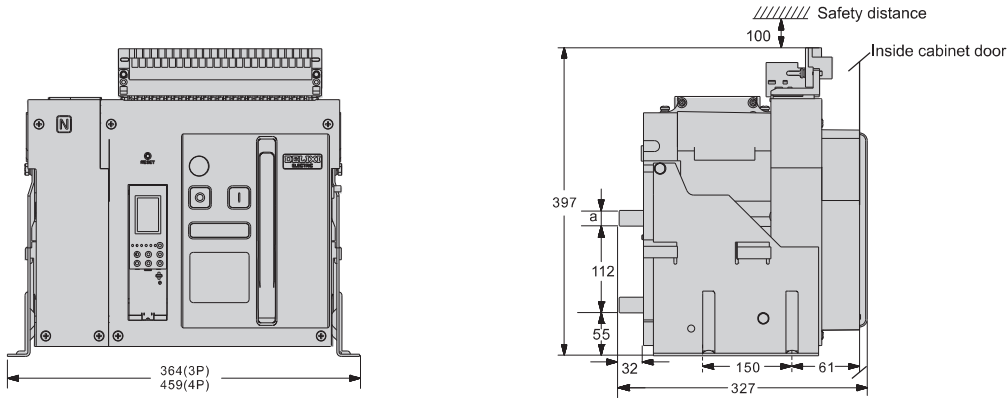
NAVIGATOR

Series

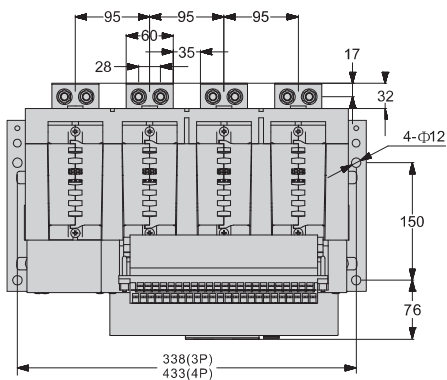
In(A)	a(mm)
630-800	10
1000-1600	15
2000	20

■ CDW3-2000AF Fixed Type 3-Pole and 4-Pole

Dimensions



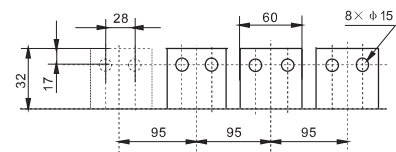
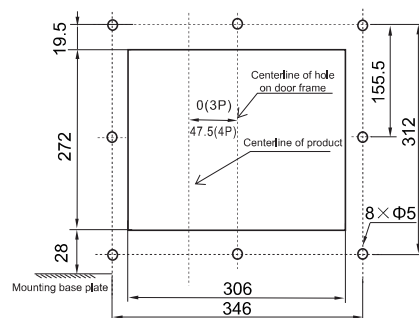
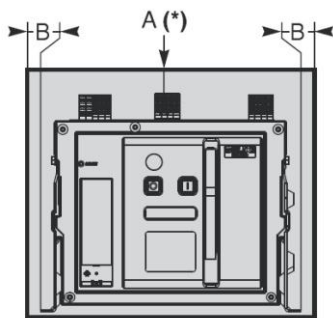
Horizontal fixed (on the base plate or rail) * It is preferred that the cover shall expose by 5mm from the door frame



Safety distance

Size of hole on door

Size of busbar



Safety distance (mm)	Drawer type	
	A	B
Insulation	0	0
Metal	0	0
Energized conductor	100	60

In(A)	a(mm)
630-800	10
1000-1600	15
2000	20

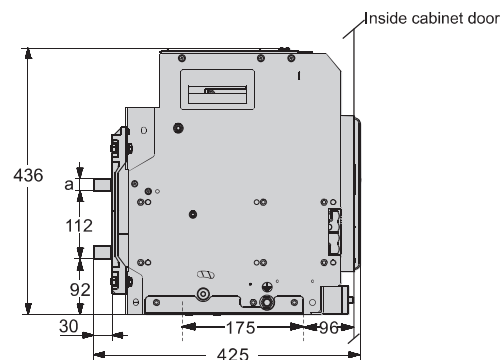
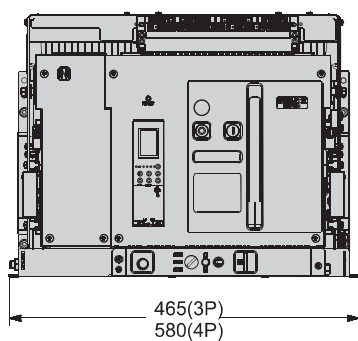
Note 1: The safety distance diagram is for illustration only, and the actual distance of circuit breaker will prevail.

Note 2: (*) The space 110mm required for removal of the arcing shield shall be considered when determining the safety distance. The safety distance is 20mm after the removal of terminal block.

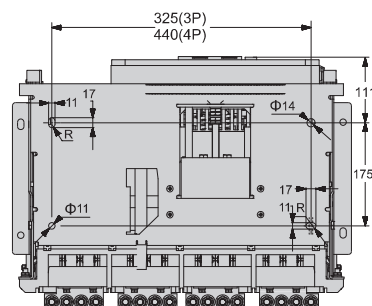
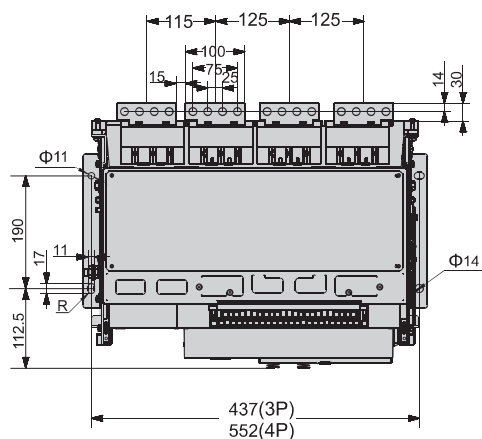


■ CDW3-2500AF Drawer Type 3-Pole and 4-Pole

Dimensions



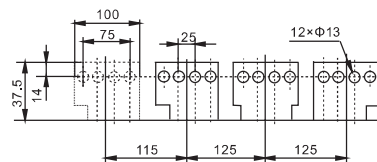
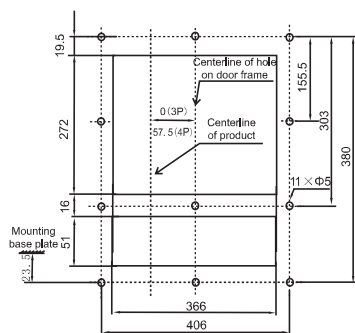
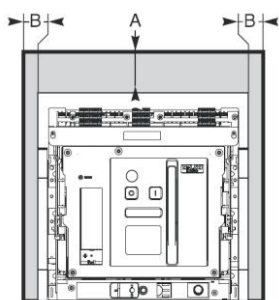
Horizontal fixed (on the base plate or rail) * It is preferred that the cover shall expose by 5mm from the door frame



Safety distance

Size of hole on door

Size of busbar



Safety distance (mm)	Drawer type	
	A	B
Insulation	0	0
Metal	0	0
Energized conductor	100	60

In(A)	a(mm)
630-2500	20

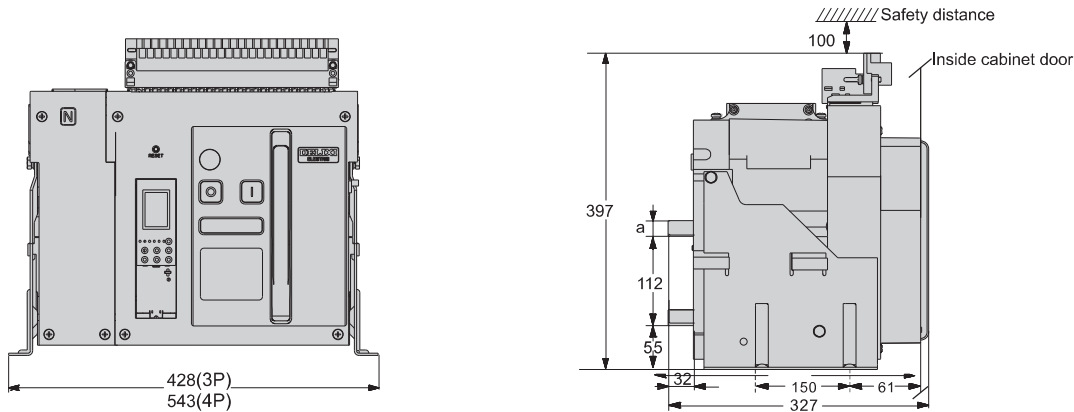
Note 1: The safety distance diagram is for illustration only, and the actual distance of circuit breaker will prevail.

NAVIGATOR

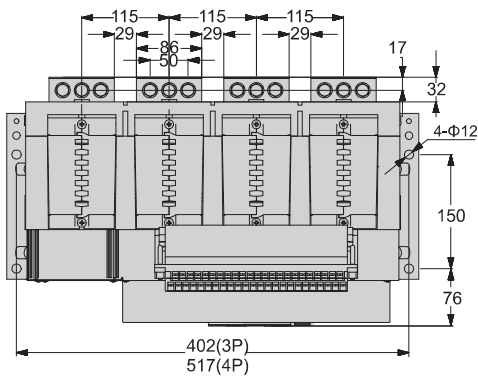
Series

■ CDW3-2500AF Fixed Type 3-Pole and 4-Pole

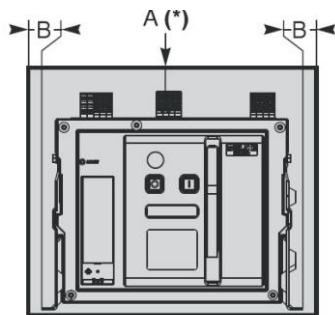
Dimensions



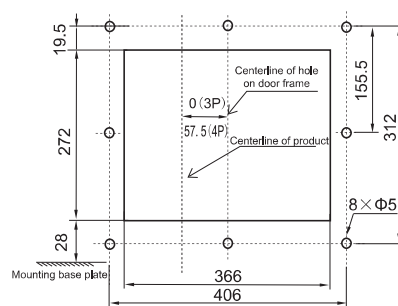
Horizontal fixed (on the base plate or rail) * It is preferred that the cover shall expose by 5mm from the door frame



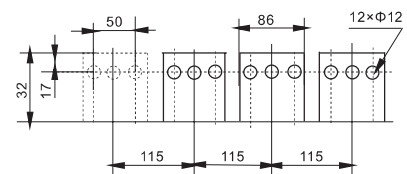
Safety distance



Size of hole on door



Size of busbar



Safety distance (mm)	Drawer type	
	A	B
Insulation	0	0
Metal	0	0
Energized conductor	100	60

In(A)	a(mm)
630-2500	20

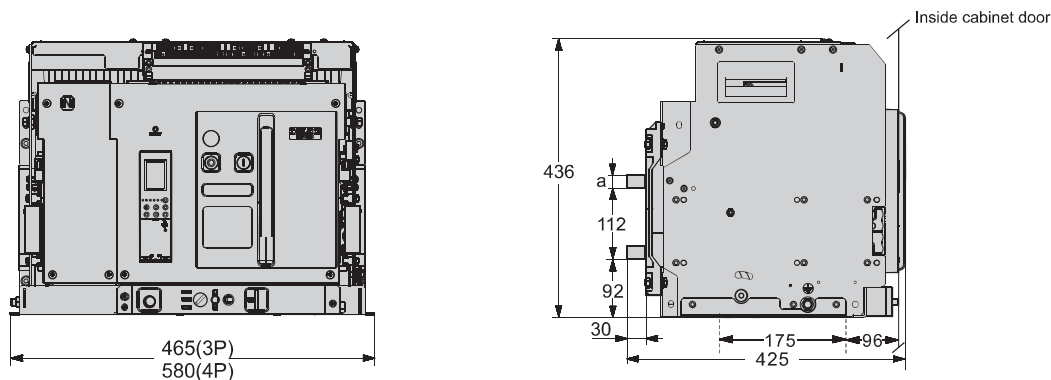
Note 1: The safety distance diagram is for illustration only, and the actual distance of circuit breaker will prevail.

Note 2: (*) The space 110mm required for removal of the arcing shield shall be considered when determining the safety distance. The safety distance is 20mm after the removal of terminal block.

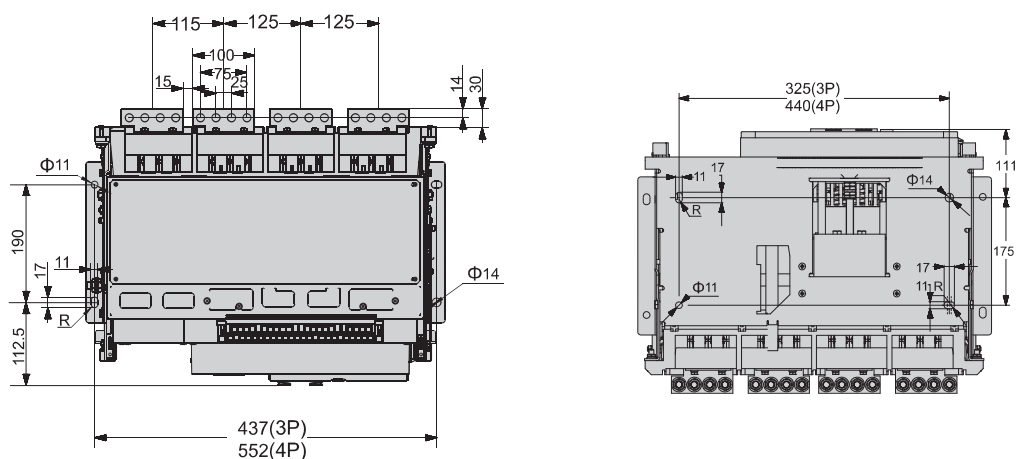


■ CDW3-3200AF Drawer Type 3-Pole and 4-Pole

Dimensions



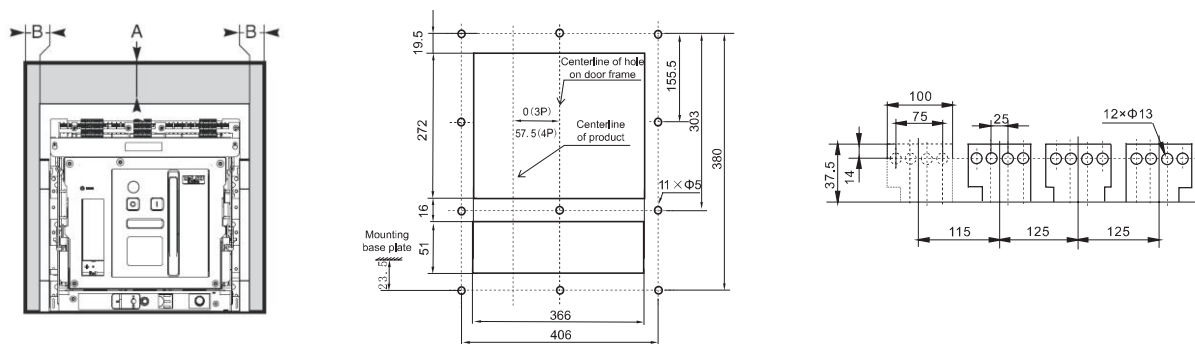
Horizontal fixed (on the base plate or rail) * It is preferred that the cover shall expose by 5mm from the door frame



Safety distance

Size of hole on door

Size of busbar



Safety distance (mm)	Drawer type	
	A	B
Insulation	0	0
Metal	0	0
Energized conductor	100	60

In(A)	a(mm)
2000-2500	20
3200	30

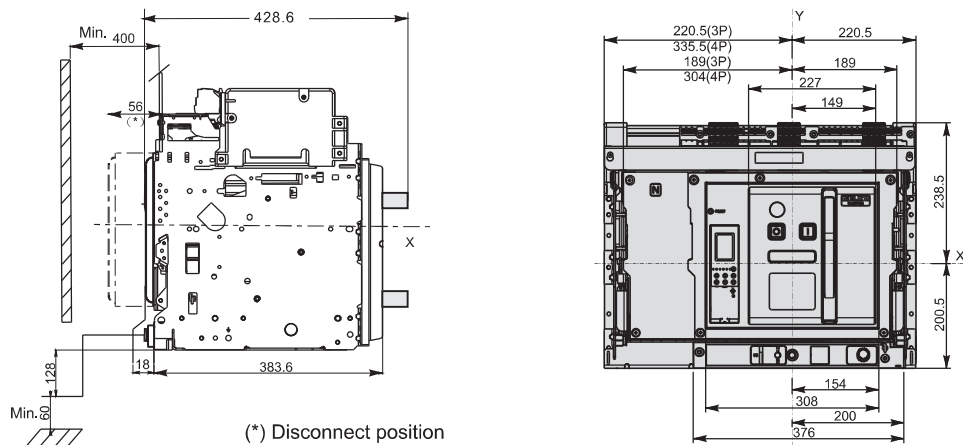
Note 1: The safety distance diagram is for illustration only, and the actual distance of circuit breaker will prevail.

NAVIGATOR

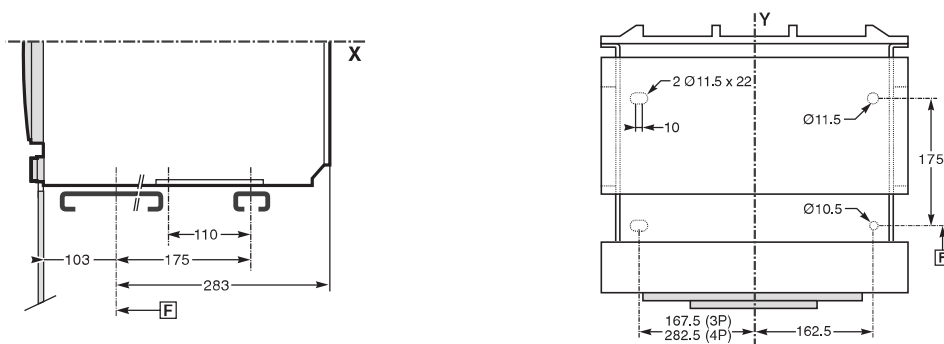
Series

■ CDW3-4000AF Drawer Type 3-Pole and 4-Pole

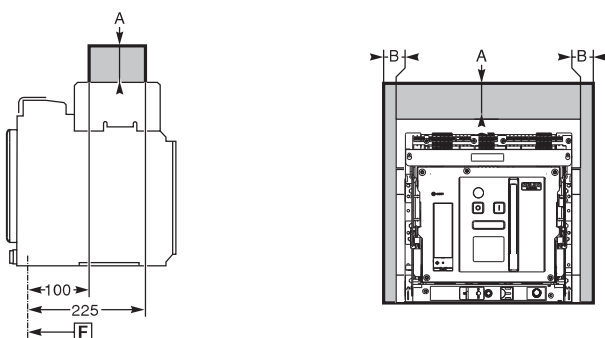
Dimensions



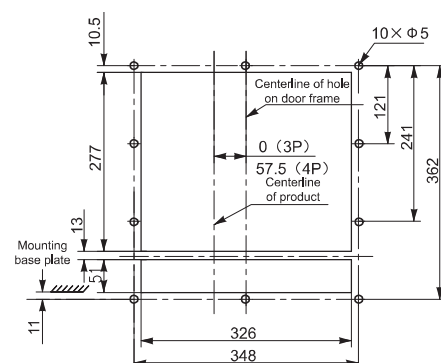
Horizontal fixed (on the base plate or rail)



Safety distance



Size of hole on door



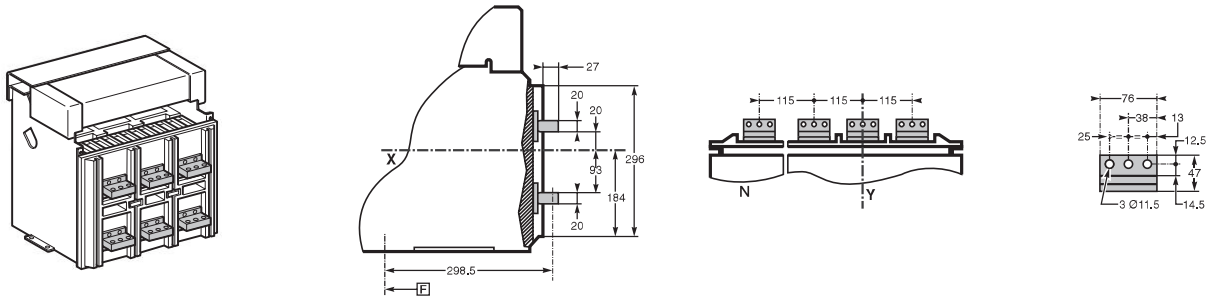
Safety distance (mm)	Drawer type	
	A	B
Insulation	0	0
Metal	0	0
Energized conductor	100	60

Note 1: The safety distance diagram is for illustration only, and the actual distance of circuit breaker will prevail.

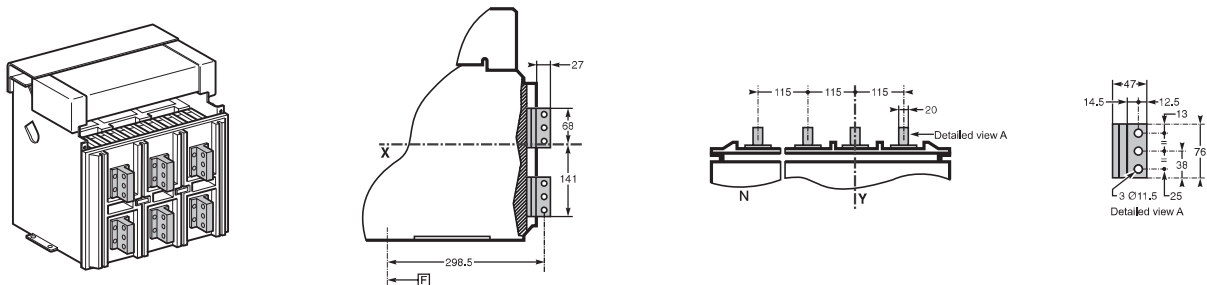
Connect

· 1600A-3200A

Horizontal rear connection

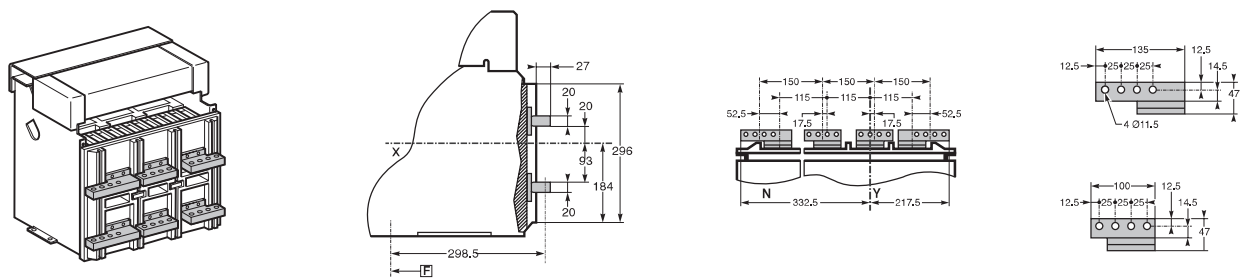


Vertical rear connection

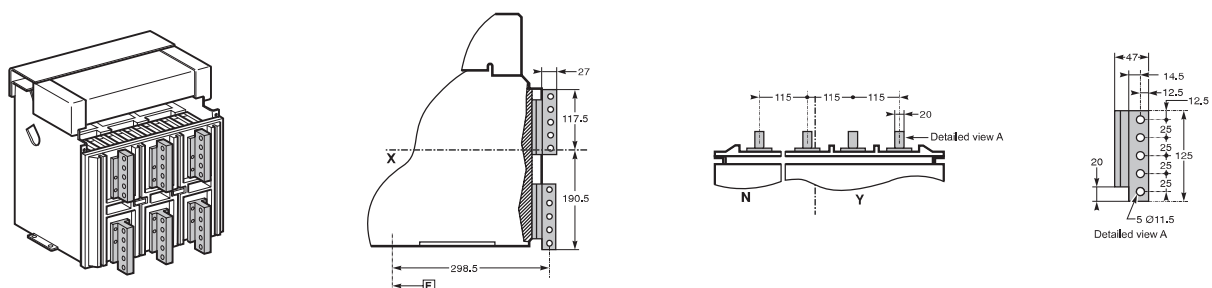


· 4000A

Horizontal rear connection



Vertical rear connection

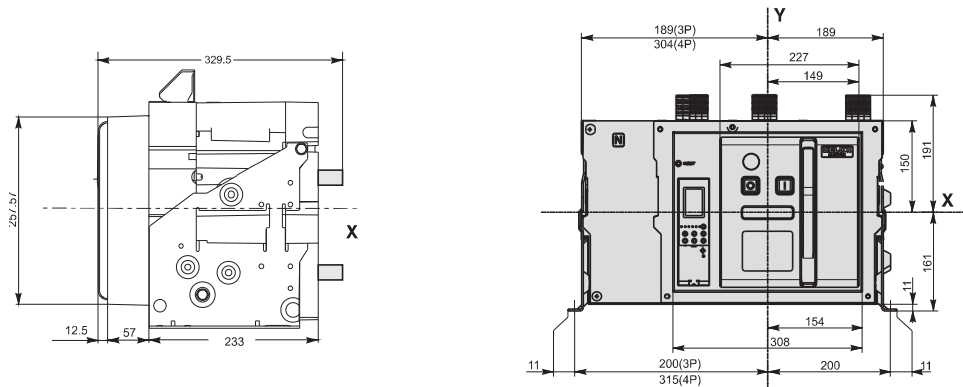


Note: The X-axis and Y-axis of 3-pole circuit breaker are symmetrical with the front cover of the circuit breaker body.

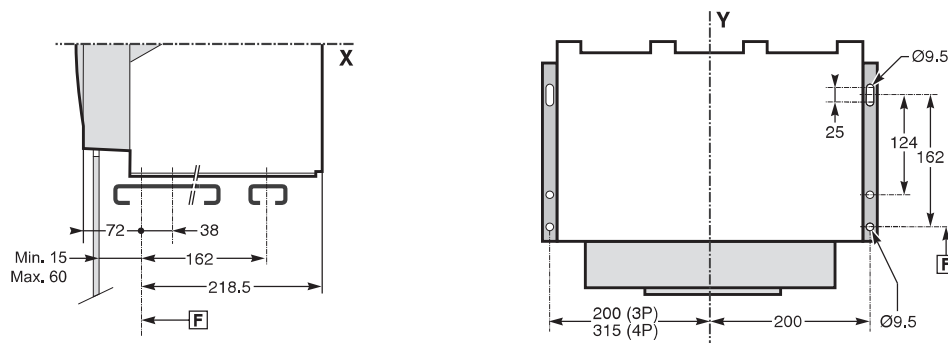


■ CDW3-4000AF Fixed Type 3-Pole and 4-Pole

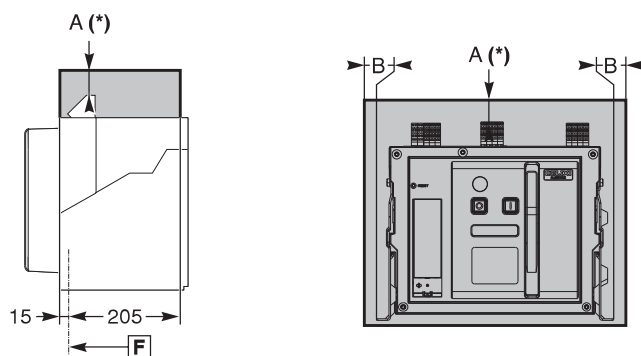
Dimensions



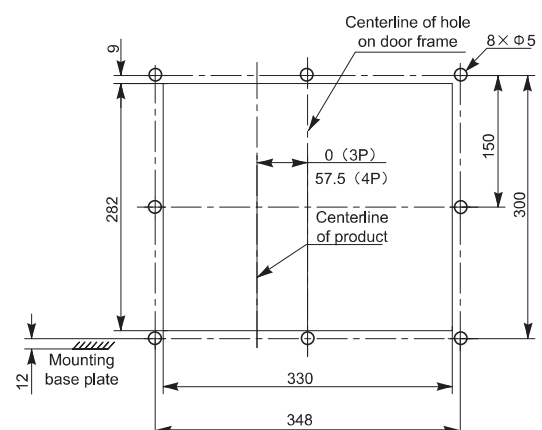
Horizontal fixed (on the base plate or rail)



Safety distance



Size of hole on door



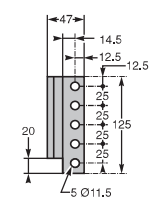
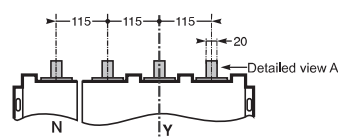
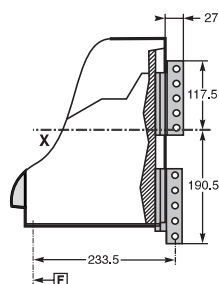
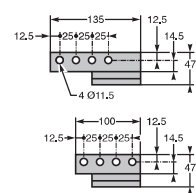
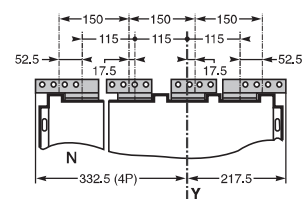
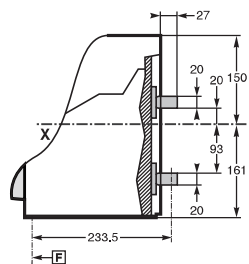
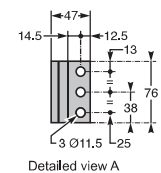
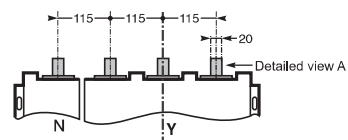
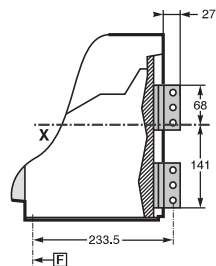
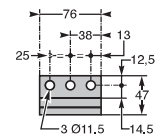
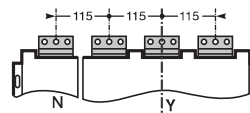
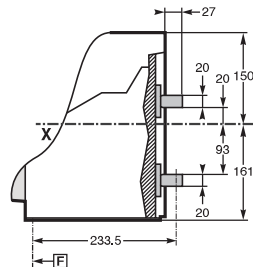
Safety distance (mm)	Drawer type	
	A	B
Insulation	0	0
Metal	0	0
Energized conductor	100	60

Note 1: The safety distance diagram is for illustration only, and the actual distance of circuit breaker will prevail.

Note 2: The X-axis and Y-axis of 3-pole circuit breaker are symmetrical with the front cover of the circuit breaker body.

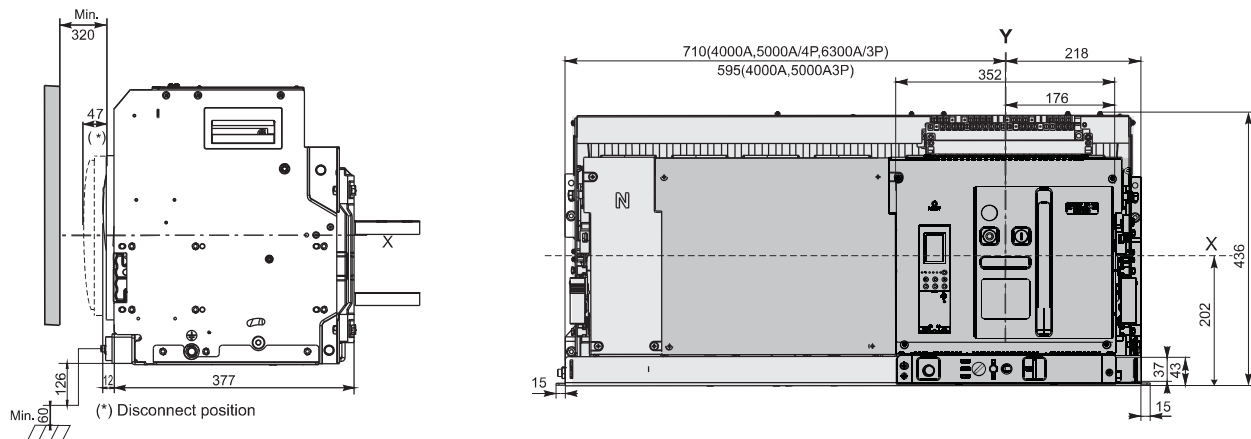
Note 3: (*) The space 110mm required for removal of the arcing shield shall be considered when determining the safety distance. The safety distance is 20mm after the removal of terminal block.

- 1600A-3200A

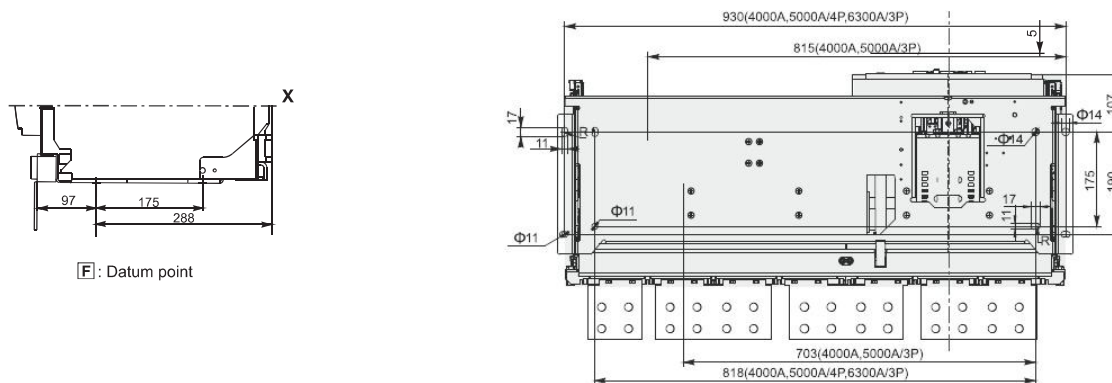


■ CDW3-6300AF Drawer Type 3-Pole and 4-Pole

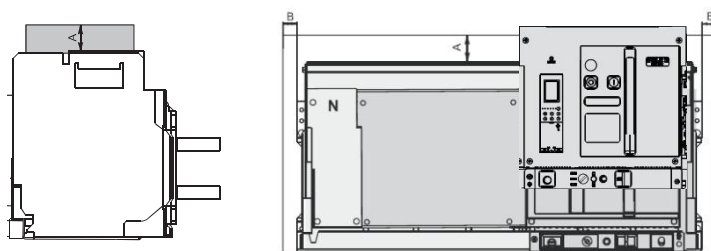
Dimensions



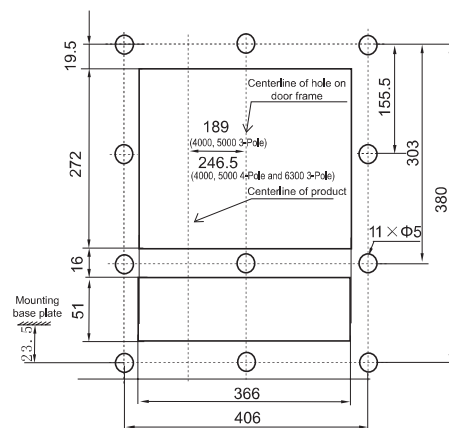
Horizontal fixed (on the base plate or rail) * It is preferred that the cover shall expose by 5mm from the door frame



Safety distance



Size of hole on door



Safety distance (mm)	Drawer type	
	A	B
Insulation	0	0
Metal	0	0
Energized conductor	100	60

Note 1: The safety distance diagram is for illustration only, and the actual distance of circuit breaker will prevail.

Note 2: The X-axis and Y-axis of 3-pole circuit breaker are symmetrical with the front cover of the circuit breaker body.

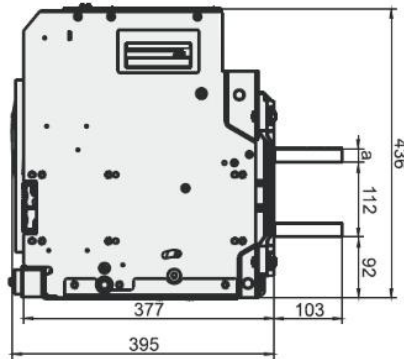
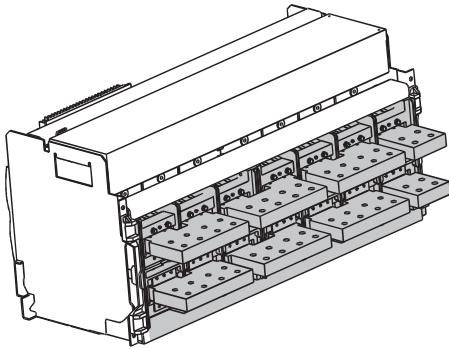
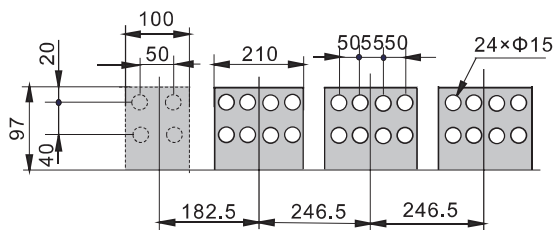
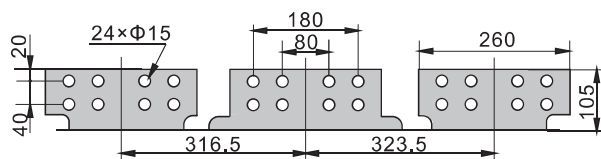
NAVIGATOR

Series

Connect

· 4000A-6300A

Horizontal rear connection

 $I_n=4000A/5000A$  $I_n=6300A$ 

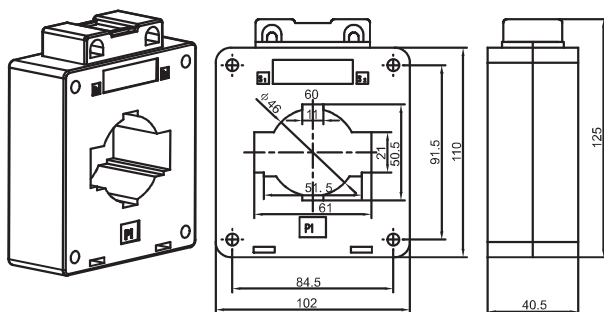
$I_n(A)$	$a(mm)$
4000	20
5000	30
6300	30

Note: The X-axis and Y-axis of 3-pole circuit breaker are symmetrical with the front cover of the circuit breaker body.

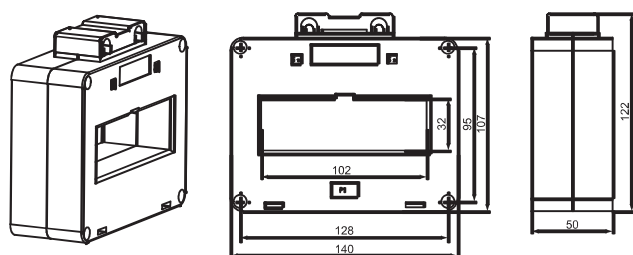
■ Installation dimensions of external transformer

External N phase transformer

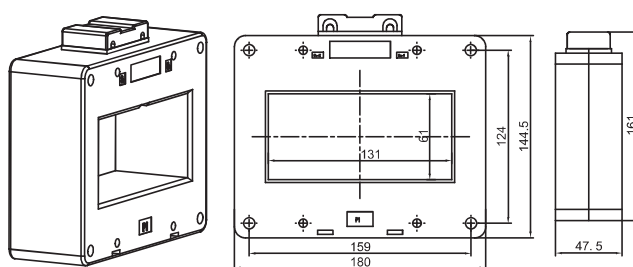
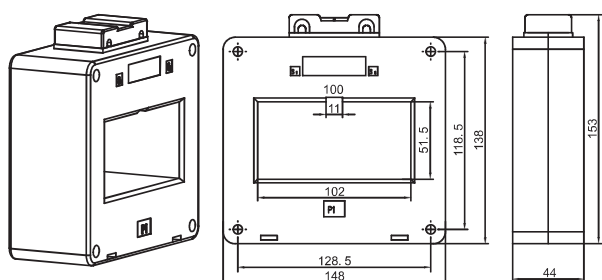
1000AF/1600AF



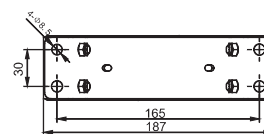
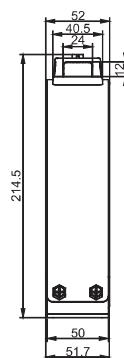
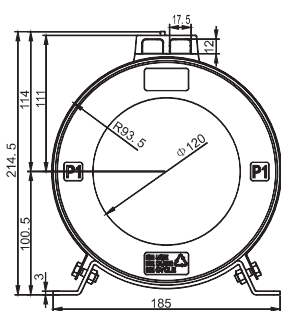
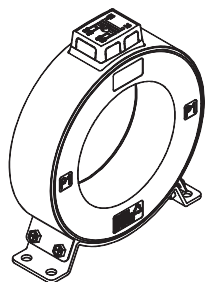
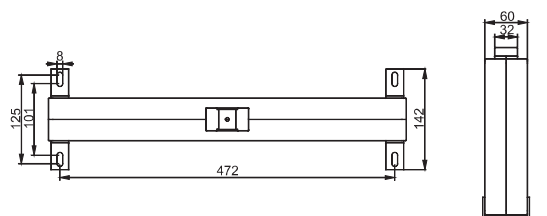
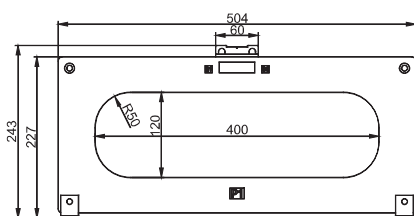
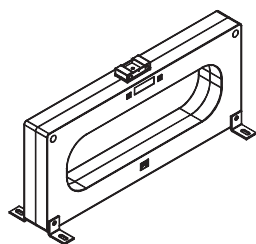
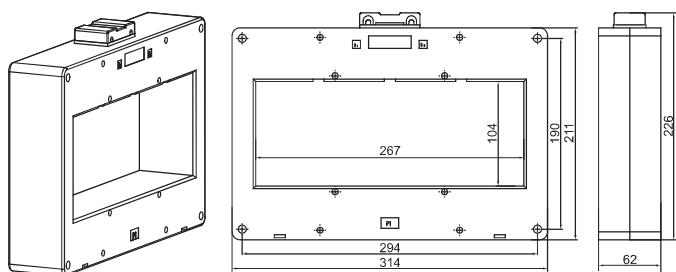
2000AF



4000AF

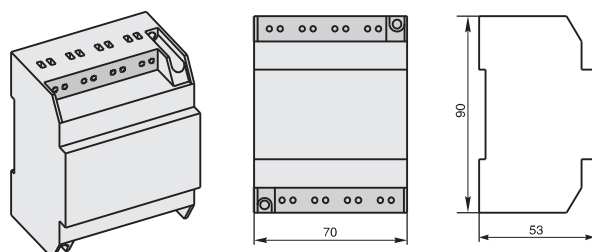


6300AF

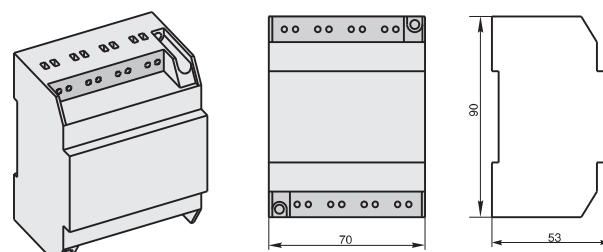


■ Dimensions of power module and signal conversion module

Power module



Signal conversion module

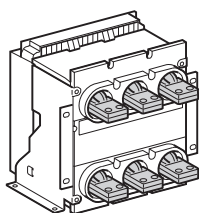


■ Size of busbar

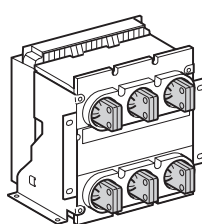
Rated current In(A)	Ti=40°C			Ti=50°C			Ti=60°C		
	Qty	Size (mm×mm)	Cross-sectional area (mm ²)	Qty	Size (mm×mm)	Cross-sectional area (mm ²)	Qty	Size (mm×mm)	Cross-sectional area (mm ²)
630	2	40×5	400	2	40×5	400	2	40×5	400
800	2	50×5	500	2	50×5	500	2	50×5	500
1000	2	60×5	600	3	50×5	750	3	60×5	900
1250	2	80×5	800	2	80×5	800	3	60×5	900
1600	2	100×5	1000	3	80×5	1200	3	80×5	1200
2000	3	100×5	1500	3	100×5	1500	3	100×5	1500
2500	4	100×5	2000	4	100×5	2000	4	100×5	2000
3200	3	100×10	3000	3	100×10	3000	4	100×10	4000
4000	5	100×10	5000	5	100×10	5000	6	100×10	6000
5000	5	120×10	6000	6	120×10	7200			
6300	5	120×10	7200	7	120×10	8400			

■ Rear connection

· Horizontal



· Vertical



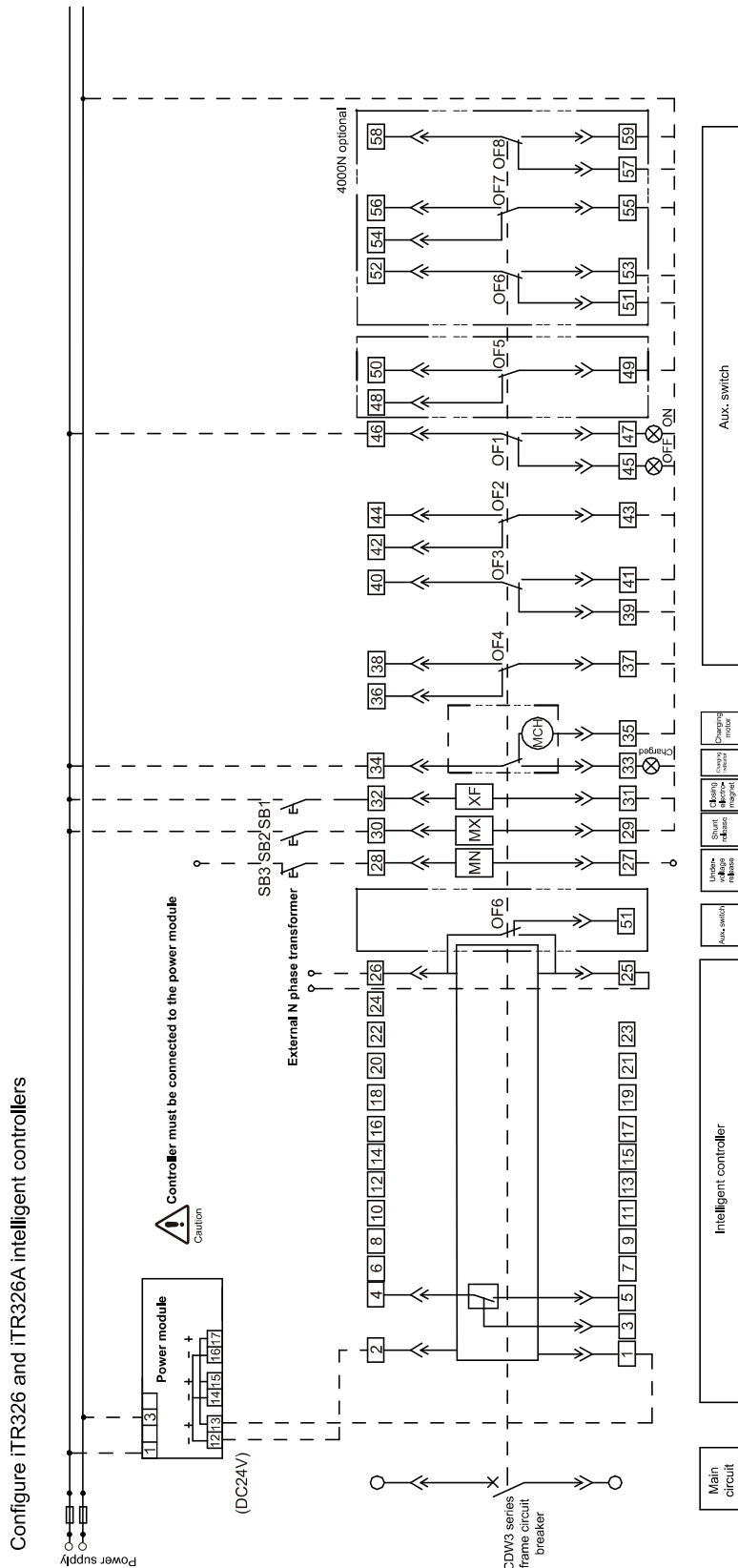
Notes:

1. The horizontal connection can be provided for all frames, and the vertical connection is provided only for 1600AF&4000AF.
2. The horizontal and vertical connections of 1600AF&4000AF can be realized by rotating busbar.
3. The optional vertical L type adapter is used to realize the vertical connection only for 2000A and below 2000AF.



Appendix

■ Secondary circuit wiring diagram



Note 1: MN undervoltage releases 27# and 28# are wired to main circuit; for wiring with an undervoltage delay unit: a, 1000/1600/4000 frame 27# and 28# are connected to the 3# and 6# of the delay unit; 10# and 12# of the delay unit are connected to main circuit; for wiring diagram, see the figure 1 shown on Page 42; b, The MNR undervoltage releases 27# and 28# of 2000/2500/3200/6300 frame are connected to main circuit; for wiring diagram, see Fig. 2 on page 42.

Note 2: If MN, MX, XF, and MCH have different control power voltage, they can be connected to the different power supply;

Note 3: 4a4b is only provided for auxiliary switch 1000/1600 frame; 4a4b and 6a6b are provided for 2000/2500/3200/6300 frame; 4a4b, 6a6b and 8a8b are provided for 4000 frame; 4a4b is used as standard configuration, and others shall be purchased by the user

Note 4: Terminal 35# can be directly connected to the power supply (automatic pre-charging), and can be connected to the normally-open button in series and then connected to the power supply (manual control pre-charging)

Note 5:  Controller must be connected to the power module

When the power voltage is AC220V-400V, IAPU334 power module is used

When the power voltage is DC110V-220V, IAPU332D power module is used

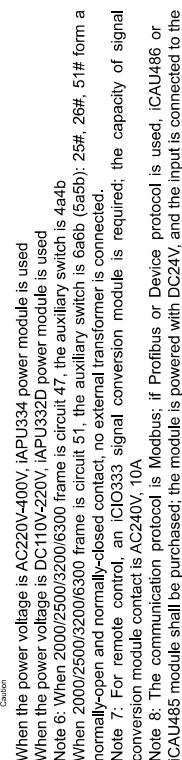
Note 6: When 2000/2500/3200/6300 frame is circuit 47, the auxiliary switch is 4a4b

When 2000/2500/3200/6300 frame is circuit 51, the auxiliary switch is 6a6b (5a5b); 25#, 26#, 51# form a normally-open and normally-closed contact, no external transformer is connected.

Note 7: Those in the dashed box are connected by user.



Secondary circuit wiring diagram of circuit breaker equipping with an iTR326H intelligent controller



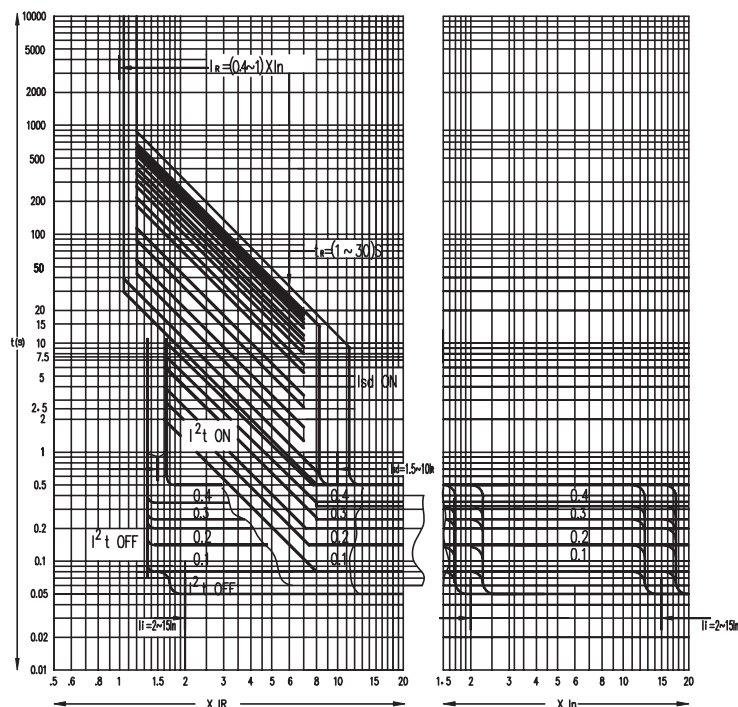
Components: MN-Undervoltage release OF1-OF8 – Aux. switch	MX-Shunt release SB1-ON button	XF-Closing magnet SB2-OFF button	MCH-Motor mechanism SB3-E-stop button
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Intelligent controllers 1# and 2# must be connected to the DC24V end of the dedicated power module of controller, otherwise it may cause the failure or damage to the controller.

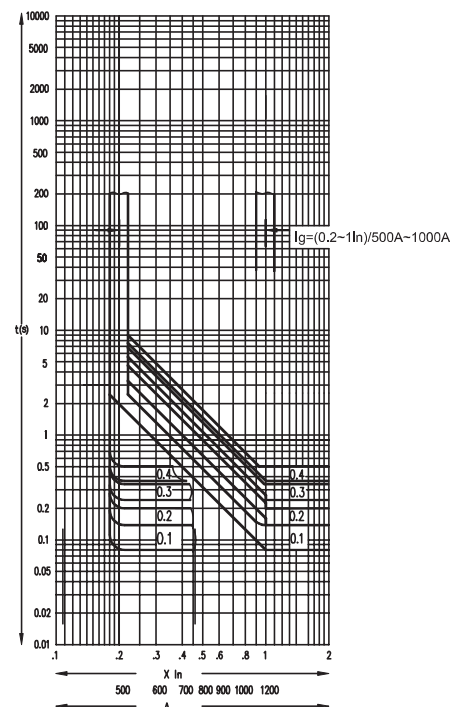


■ Trip curve

Three-segment protection



Ground protection



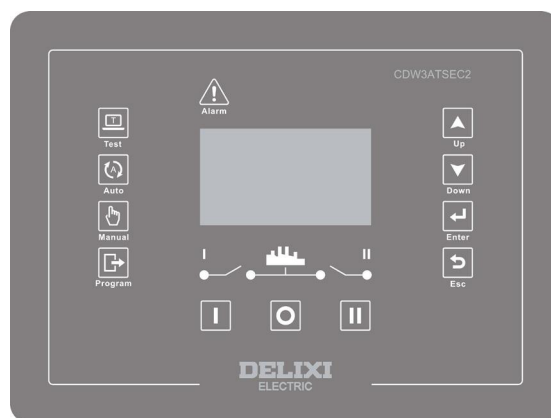
■ Overview

CDW3 frame dual power controller is an intelligent dual power changeover switch integrating with programmable function, automation measurement, LCD menu display, and digital communication to automatically realize the measurement of electrical parameters such as voltage, frequency, and phase, and it can conduct the automatic control according to the setting strategy to reduce manual operation errors. Therefore, it is an ideal product to realize the dual power switching function.

CDW3 frame dual power controller is based on the microprocessor as the core to accurately detect the two-circuit three-phase voltage, and can accurately judge the abnormal voltage (overvoltage, undervoltage, phase loss, overfrequency, and undervoltage) and output the passive control switching value. It features with compact structure, advanced circuit, simple wiring, and high reliability. This product can be widely used in the electrical device, automatic control, and two-circuit power supply systems used in many industries and departments such as power, post and telecommunications, petroleum, coal, metallurgy, railway, municipal, and intelligent building.

Available frame for dual power

1600AF/2000AF/2500AF/3200AF/4000AF/6300AF



Model of dual power controller
CDW3ATSEC2

■ Installation conditions

Two air circuit breakers with dual power system are installed horizontally in two adjacent power distribution cabinet, and the maximum distance between the left side plates of two circuit breakers does not exceed 2m; two circuit breakers are installed in the mechanical interlock way through the cable interlock. Two air circuit breakers with dual power system are installed in the upper and lower positions in a power distribution cabinet, and the maximum distance between the base plates of two circuit breakers does not exceed 0.9m, and the cable interlock or lever interlock can be selected for two circuit breakers.

The dual-power controller is panel-mounted, and is connected to the circuit breaker through a dedicated connecting cable. The standard length of this dedicated cable is 2m (suitable for three-phase four-wire product with control circuit voltage AC230V/AC380V). When ordering, specify the extended cable if required according to the actual cable length (with one meter as a length step).

■ Environment Requirement

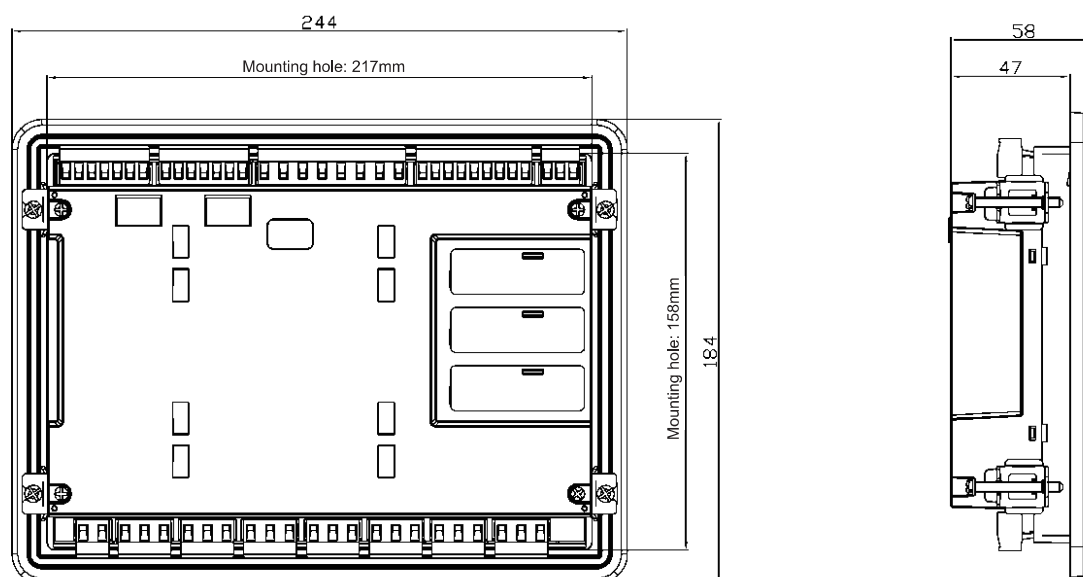
Ambient temperature: -25°C~+70°C

Altitude: ≤2000m

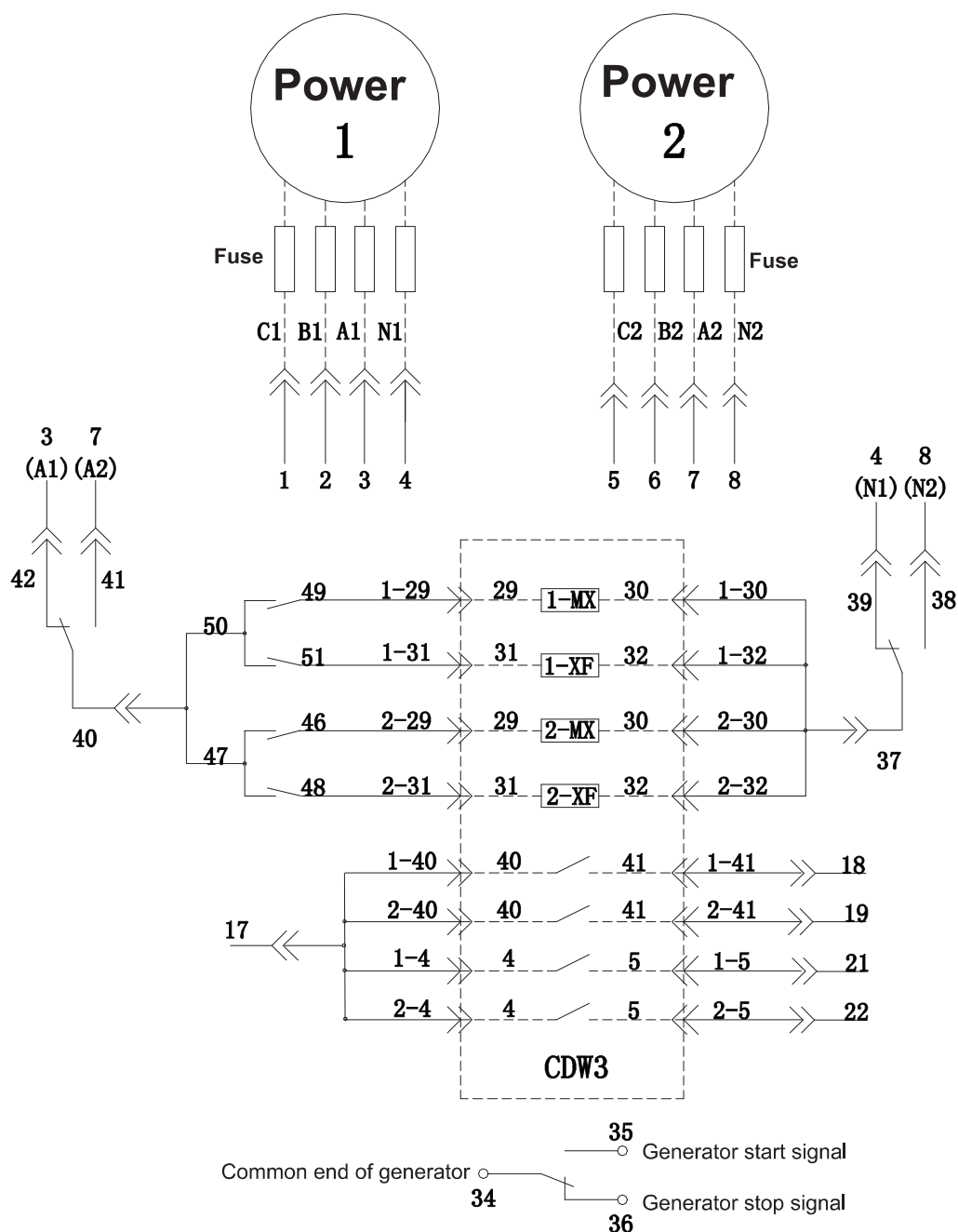
■ Precautions

- When ordering CDW3 dual power controller, please order steel cable mechanical interlock;
- The circuit breaker has four sets of changeover contacts. The dual power controller requires one set of changeover contacts, and only three sets of changeover contacts are available for user.
- The length of dedicated cable of dual power controller is 2m. Any extended length or special requirements shall be specified when ordering.
- No key lock is absolutely allowed in the circuit breaker equipping with a dual power controller, otherwise this may cause damage to the internal components of circuit breaker
- No ON/OFF state door lock is allowed in the circuit breaker equipping with a dual power controller
- When circuit breaker equipping with a dual power controller has a H type controller, the remote control to open or close the circuit breaker will be disabled
- If the dual power controller has undervoltage and overvoltage protection functions, no undervoltage release is required in circuit breaker.

■ Outline and Installation Dimensions



■ CDW3 Dual Power Controller Wiring Diagram (Three-Phase Four-Wire Wiring Diagram)



Notes:

1. MX-Shunt release XF-Closing electromagnets

40, 41: ON/OFF signal 4, 5: Fault signal

2. When the circuit breaker is equipped with a H type controller, powering on/off the circuit breaker through the remote control is forbidden

3. Do not install the undervoltage release, and do not use the key lock

4. The dual power controller must be cooperated with a mechanical interlock

5. Those in the dashed box shall be connected by user. The fault signals 4, 5 are occupied by the controller. If external connection is required, please contact the manufacture before ordering.

NAVIGATOR

Series

■ Model table

Qty. _____

Circuit breaker body (mandatory)							
Frame spec.	1000AF ☐	1600AF ☐	2000AF ☐	2500AF ☐	3200AF ☐	4000AF ☐	6300AF ☐
Breaking capacity	N ☐ H ☐ Note: No H type is available for 1000AF/6300AF						
Rated current	400A ☐	400A ☐	630A ☐	630A ☐	2000A ☐	630A ☐	4000A ☐
	630A ☐	630A ☐	800A ☐	800A ☐	2500A ☐	800A ☐	5000A ☐
	800A ☐	800A ☐	1000A ☐	1000A ☐	3200A ☐	1000A ☐	6300A ☐
	1000A ☐	1000A ☐	1250A ☐	1250A ☐		1250A ☐	
		1250A ☐	1600A ☐	1600A ☐		1600A ☐	
		1600A ☐	2000A ☐	2000A ☐		2000A ☐	
			2500A ☐		2500A ☐		
					3200A ☐		
					4000A ☐		
Number of poles	3P ☐	4P ☐					
Freq.	50Hz ☐	60Hz ☐					
Installation method	Drawer type horizontal ☐ Drawer type vertical ☐ Fixed type horizontal ☐ Fixed type vertical ☐						
Note: The vertical wiring connection is only available for 1600AF&2000AF&4000AF, 2000AF, with a vertical busbar required. Note: No fixed type is available for 6300AF							
Controller	iTR326 ☐	iTR326A (Standard) ☐		iTR326H ☐	Note: No iTR326 is available for 6300AF		
Communication protocol (only for iTR326)	Modbus (Default) ☐		Profibus ☐	Devicenet ☐			
Remote operation							
Shunt coil	AC220V/AC230V ☐	AC380V/AC400V ☐		DC110V ☐	DC220V ☐		
Closing coil	AC220V/AC230V ☐	AC380V/AC400V ☐		DC110V ☐	DC220V ☐		
Motor mechanism	AC220V/AC230V ☐	AC380V/AC400V ☐		DC110V ☐	DC220V ☐		
Undervoltage coil	No undervoltage ☐	AC220V/AC230V ☐		AC380V/AC400V ☐			
Provide delay seconds (for 1000AF/1600AF/4000AF)	0.5s ☐		1s ☐	1.5s ☐	3s ☐		
Provide delay seconds (for 2000AF/2500AF/3200AF/6300AF)	0.5s ☐		1s ☐	1.5s ☐	3s ☐	5s ☐	7.5s ☐
Indicating contact							
Aux. contact	Frame	Aux. switch					
	1000N	4-open and 4-closed ☐					
	1600N&H	4-open and 4-closed ☐					
	2000N&H	4-open and 4-closed ☐	6-open and 6-closed ☐				
	2500N&H	4-open and 4-closed ☐	6-open and 6-closed ☐				
	3200N&H	4-open and 4-closed ☐	6-open and 6-closed ☐				
Note: 4-open and 4-closed is available as default configuration	4000N&H	4-open and 4-closed ☐	6-open and 6-closed ☐	8-open and 8-closed ☐	12-open and 12-closed ☐		
	6300N	4-open and 4-closed ☐	6-open and 6-closed ☐	Note: For 12-open and 12-closed mode, please contact the manufacturer. All auxiliary switches have common points.			
Three-position indicating contact ☐	Ready closing indicating contact ☐			Counter ☐			
Common accessory-lock							
Opening lock:	One-lock and one-key ☐	Mechanical interlock:		Cable interlock ☐	Cross-shell frame mechanical interlock ☐ Button lock ☐		
	Two-lock and one-key ☐			Lever interlock ☐	Drawer type door interlock ☐		
	Three-lock and two-key ☐			2 units ☐			
	Key lock ☐			3 units ☐			
Note: No cable interlocks (3 units) and lever interlocks (3 units) are available for 1000AF/1600AF		Note: When the key lock or mechanical interlock is selected, if the splice lock is used, the product shall work together with the key lock or mechanical interlock selected above.					
Common accessories – controller accessories							
External transformer:	Power module ☐	Ground transformer ☐		External N phase transformer ☐			
	Signal conversion module ☐	Leakage current transformer ☐					
Note: The power module is a standard accessory		Note: The external N phase transformer is available only for 3P+N			Note: The leakage current transformer, ground transformer, and signal conversion module are available only for iTR326H controller		
Common accessories – Protection and connecting accessories							
Phase partition (standard) ☐	No phase partition is provided for 4000AF	Vertical L type adapter with 4000A current ☐ (Only for 2000AF)		Safety shield lock ☐ (Only for 4000AF)			
Door frame (standard) ☐	Extended terminal	☐ Only for 1600AF		Secondary terminal protective cover ☐ (Only for drawer type product)			
Manual							
Power module installation instruction ☐ Undervoltage delay unit installation instruction ☐ Mechanical inerlock installation instruction ☐							
Note: The following standard configuration can be used in the general applications: shunt coil, closing coil, motor mechanism, phase partition, door frame, power module, aux. switch 4-open and 4-closed, iTR326A controller. To required other special application accessories, please check the options in the Model table and Configuration table.							

