VW3GZ

DC Disconnector

Design Features

VOZWEI

- Tailored for solar energy and energy storage systems
- Rated working voltage DC500~1500V
- With high breaking capacity up to 100kA
- Multiple patented arc-extinguishing designs ensure
- lower temperature rise

Ambient conditions

Operating ambient temperature/storage temperature

- Recommended ambient air temperature limit is-40°C~+70°C, it can reach to +70°C in a short time(within 24h), derating is required above 40°C

Altitude conditions

- The altitude of the installation location is less than 5000m.
- Relative humidity:not exceed 50% at the maximum ambient temperature of +40°C,but higher relative humidity at the lower temperature,for example,90% at 20°C.Special measures should be taken considering the dews on product surface due to temperature change.

Pollution grade

- Level 3

Salt spray grade

- GB2423.18 - Extreme Grade 2

Selection Guide

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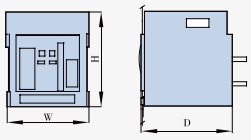
Series			VW3GZ-16		VW3GZ-40
					
Rated current In(A)			200, 400, 630, 800, 1000, 1250, 1600		630, 800, 1000, 1250, 1600, 2000, 2500, 2900, 3200, 3600, 4000
Rated working voltage Ue(V)50Hz/60Hz			DC1000	DC1500	DC500/750/1000/1200/1500
Rated insulation voltage Ui(V)			1600		1600
Rated impulse withstand voltage Uimp(kV)			12		15
Number of poles			3P	4P	2P
Rated short circuit making capacity (peak value)Icm(kA)			55		100
Rated short-time withstand current (effective value) Icw(kA) 1s			55		100kA 1s 150kA 0.2s
Electrical life (times)			500	500	1000
Operating performance	Mechanical life (times)	Without maintenance	10000		12500
		Maintenance	10000		30000
Operational condition	Utilization category		DC22/23A		DC-PV2
	Pollution degree		3		3
	Protection grade		IP30		IP40
	Ambient temperature		-40~75°C		⩾-40°C
	Altitude		⩽5000m		⩽5000m
Outline dimension(mm)		Fixed type 2p			395 x 318.5 x 321
(H x W x D) 		Fixed type 3p	335×266×250		/
		Fixed type 4p	335×336×250		/

Note: *Derating is required when the temperature of VW3Z-40 exceeds 40°C. Refer to the temperature derating table for specific requirements."*

Model Explanation and Encoding Rules

VW3GZ	–	□	□	/	□	□	/	□	/	□	□	/	□	□	□	□	□	□	/	□
1		2	3		4	5		6		7	8		9	10	11	12	13	14	15	16

SN	Name	Specification, type code		Description
1	Design code	VW3GZ:Design code		/
2	Frame rating	16: 1600A; 40: 4000A		/
3	Breaking type	Empty:Standard breaking level		/
4	Rated current	VW3GZ-16: 02: 200A; 04: 400A; 06: 630A; 08: 800A; 10: 1000A; 12: 1250A; 16: 1600A VW3GZ-40: 06: 630A; 08: 800A; 10: 1000A; 12: 1250A; 16: 1600A; 20: 2000A 25: 2500A; 29: 2900A; 32: 3200A; 36: 3600A; 40: 4000A		/
5	Installation mode	F: Fixed type		/
6	Number of poles	2: 2P; 3: 3P; 4: 4P Note: (2P only for VW3GZ-40)		/
7	Electric energy storage mechanism	D1: AC400V; D2: AC230V/DC220V; D4: AC/DC110V; D5: DC24V		/
8	Shunt release	F1: AC400V; F2: AC230V/DC220V; F4: AC/DC110V; F5: DC24V		/
9	Closed electromagnet	B1: AC400V; B2: AC230V/DC220V; B4: AC/DC110V; B5: DC24V		/
10	Under-voltage release / Loss of voltage release	Under-voltage release	Q1: AC400V; Q2: AC230V; Q5: DC24V	1.Choose one from the Under-voltage release, Loss of voltage release;
		Loss of voltage release	S1: AC400V; S2: AC230V	
11	Under-voltage release / loss of voltage release Delay time	0: Instantaneous; 1: 1s delay; 3: 3s delay; 5: 5s delay		/
12	Auxiliary contact	A33: 3NO3NC; A44: 4NO4NC; … ; A1414: 14NO14C		/
		A3: Three-group switching; A4: Four-group switching; …; A14: Fourteen-group switching		/
13	Internal Accessories	BX: Closing ready signal output unit JS: Counter functional unit Note: JS only for VW3GZ-40		/
14	External accessories	M: Doorframe Note: M only for VW3GZ-16, standard S: Button lock		/
15	Wiring mode	C1: Horizontal wiring; C2: Vertical wiring; C4: Mixed wiring(upper horizontal,lower vertical); C5: Mixed wiring(upper vertical,lower horizontal); Note: C4, C5 only for VW3GZ-40		/
		1: Standard wiring		/
16	Language type	Empty: Chinese; Y: English		/

Interlocking Piece Model Explanation and Encoding Rules

Key lock (16, 40)	SF11: Key lock device (one lock and one key) SF21: Key lock device(two locks and one key) SF22: Key lock device(two locks and two keys) SF31: Key lock device(three locks and one key) SF32: Key lock device (three locks and two keys) SF53: Key lock device(five locks and three keys)	Select one from six locks;
Mechanical interlocking	SR11: Mechanical interlocking device (two sets of steel cables,one for closing and one for opening)	1.Select one from five mechanical interlocks
	SR12: Mechanical interlocking device (three sets of steel cables,one for closing and two for opening)	
	SR21: Mechanical interlocking device (three sets of steel cables,two for closing and one for opening)	
	SY11: Mechanical interlocking device (two sets of hard rods,one for closing and one for opening)	

Shunt Release(F)

To break the DC disconnector by remote control

project	VW3GZ-16			VW3GZ-40		
						
Rated insulation voltage(Ui)	Rated control supply voltage(Us)	Closed current VW3GZ-16	Instantaneous power VW3GZ-16	Rated control supply voltage(Us)	Closed current VW3GZ-40	Instantaneous power VW3GZ-40
400V	AC380V/AC400V	1.5A	600W	AC230V	2.9A	575VA
	AC220V/AC230V	2.2A	500W	AC400V	2.1A	780VA
	DC220V	2.2A	500W	DC110V	5.2A	550W
	DC110V	2.5A	270W	DC220V	2.9A	630W
	DC24V	2.5A	60W	DC24V	11A	264W
		/		AC110V	5.2A	550VA
Operating voltage	(70%-10%)Us					
Action time(ms) Switching responsetime in Us	<50ms					

Accessories

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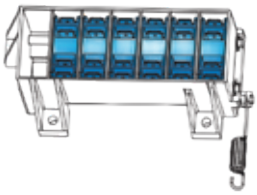
Auxiliary contact

project	VW3GZ-16	VW3GZ-40
		
Rated insulation voltage(U)	400V	
Corventional Themal Current (Ith)	16A	
Utilization Category	AC-12 AC-15 DC-12 DC-13	AC-12 AC-15 DC-12
Rated working voltage(Ue)	AC380 AC400 DC250 DC220 DC48	AC380 AC400 DC250
Rated Operating Curent(Ie)	16A 3A 5A 1.2A 6A	16A 3A 5A

Type	Code	Type	Code
3NO3NC	A33	4NO4NC	A44
5NO5NC	A55	6NO6NC	A66
7NO7NC	A77	8NO8NC	A88
9NO9NC	A99	10NO10NC	A1010
11NO11NC	A1111	12NO12NC	A1212
13NO13NC	A1313	14NO14NC	A1414

Note:

1.VW3GZ-16 series have 3NO 3NC~14NO 14NCNO:normally open contactNC:normally closed contact
2.VW3GZ-40 series only have 3NO 3NC~6NO 6NCNO,"N66"indicates contacts with no common point,while "N6"denotes contacts with a common point The same logic applies to other codes
3.Standard configuration includes N3/N33 contact arangements
4.The auxilary contacs support a minimum load of DC24V 10mA

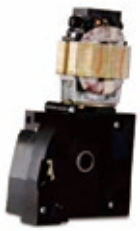
Undervoltage (loss-of-voltage) release (Q)

		VW3GZ-16				VW3GZ-40			
Rated operational voltage(V)		Undervoltage release		Loss-of-voltage release		Undervoltage release		Loss-of-voltage release	
		AC230	AC400	AC230	AC400	AC230	AC230	AC230	AC400
Action type	Type	Code							
	Instantaneous time	Q20	Q10	S20	S10	Q20	Q10	S20	S10
	Delay time 1s	Q21	Q11	S21	S11	Q21	Q11	S21	S11
	Delay time 3s	Q23	Q13	S23	S13	Q23	Q13	S23	S13
	Delay time 5s	Q25	Q15	S25	S15	Q25	Q15	S25	S15
Operation voltage(V)		(0.35-0.7)Ue		<0.35Ue		(0.35-0.7Ue		(0.1-0.35)Ue	
Guarantee the reliable closing		(0.85-1.1)Ue							
Not guarantee the reliable		⩽0.35Ue							
Maintain power consumption(W)		4	3.27	3.5	3.3	3.4	3.6	3.24	6.36

Accessories for VW3GZ-16:

Motor operating mechanism (D)

The DC disconnector has the function of motor driven energy storage and automatic energy restoring.
(Manual energy storage can also be done)



Rated control supply voltage Us (V)	AC230	AC400	DC110	DC220	DC24
Operation voltage	(85%-110%) Us				
Operating power	80VA		80W		
Starting power	400VA		400W		
Energy storage time(s)	⩽5				
Motor type	Brush motor				

Closed Electromagnet (B)

After storing energy, closed electromagnet may make the energy release instantly so that the DC disconnector is closed quickly.

Power Consumption Table of Closed Electromagnet

Rated insulation voltage(Ui)	Rated control supply voltage(Us)	Closed current	Instantaneous power
		VW3GZ-16	VW3GZ-16
400V	AC380V/AC400V	1.5A	600W
	AC220V/AC230V	2.2A	500W
	DC220V	2.2A	500W
	DC110V	2.5A	270W
	DC24V	2.5A	60W
Operating voltage	(85%-110%)Us		
Minimum time of power on	100ms±10ms		
Action time (ms) Switching response time in Us	＜50ms		

Accessories

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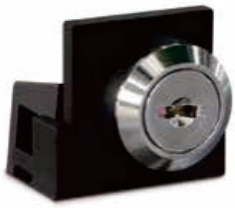
Lock

Off-position key lock (SF11, SF21, SF31, SF32, SF53, SF22)



Opening position lock can lock the OFF button of the switch disconnector on the pressed position. After the opening position lock is chosen by the users, we would install and configurate.

Application method:

One lock one key (SF11): One DC disconnector with one same lock and one key, and only allowed to closed when locked.

Two locks one key (SF21): Two DC disconnectors with two same locks and one key, and only allowed one DC disconnector closed.

Three locks one key (SF31): Three DC disconnectors with three same locks and one key, and only allowed one DC disconnector closed.

Three locks two keys (SF32): Three DC disconnectors with three same locks and two keys, and only allowed two DC disconnectors closed.

Five locks three keys (SF53): Five DC disconnectors with five same locks and three keys, and only allowed three DC disconnectors closed.

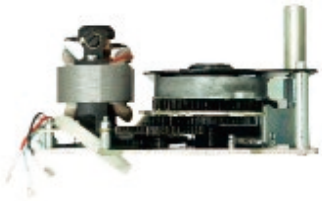
Double interlock (SF22): With two different sets of keys and locks.

Phase separator

Phase separators are vertically installed between wiring boards of DC disconnector which strengthen insulation.

Accessories for VW3GZ-40:

Motor operating mechanism (D)



The circuit breaker's spring charging is accomplished by a motor-operated mechanism, featuring both motor-powered energy storage and automatic recharging functions (manual charging is also available). It has no overvoltage protection capability. The device can withstand 1.4Us for 1 second, but prolonged energization may cause burnout. The mechanism can operate 100 cycles at 1.4Us with a maximum frequency of once every 3 minutes.

project	Parameters					
Rated control voltageUs	AC230	AC400	DC110	DC220	DC24	AC110
Operational voltage	(0.85-1.1) Us					
Operating power	150W					
Starting power	500-600W					
Energy storage time (s)	≤5s					
Type	Brushed Motor					

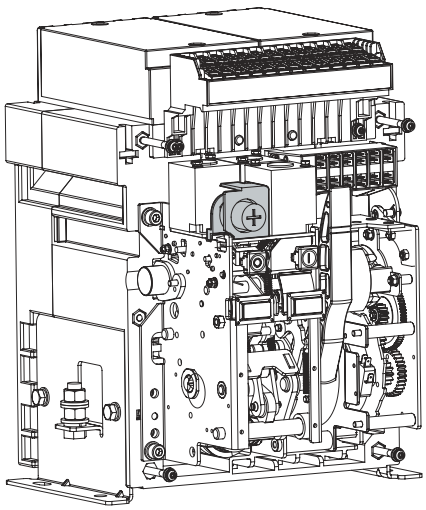
Closed electromagnet (B)

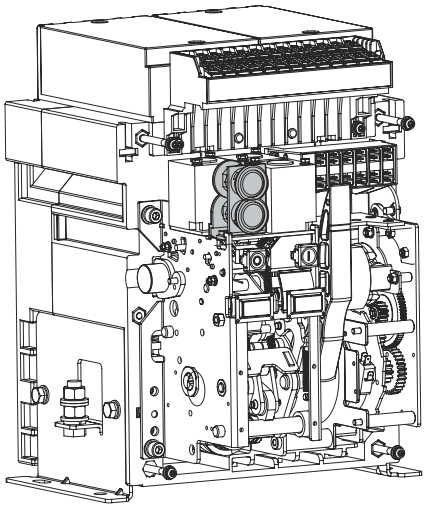
The closing solenoid is primarily composed of a coil, iron core assembly, and electronic components. When energy storage is completed and the closing operation is ready, energizing the closing solenoid enables instantaneous release of the stored energy in the operating mechanism, causing rapid closure of the circuit breaker.The shunt trip device has no overvoltage protection function. It can withstand 1.4 times the rated control supply voltage (1.4Us) for 1 second. Prolonged energization may cause burnout. The device is capable of 100 operations at 1.4Us with a maximum operating frequency of one operation per 3 minutes.

Rated Insulation Voltage (Ui)	VW3GZ-40		
	(Us)	Pickup Inrush Current	Pickup Inrush Power
400V	AC230V	2.9A	575VA
	AC400V	2.1A	780VA
	DC110V	5.2A	550W
	DC220V	2.9A	630W
	DC24V	11A	264W
	AC110V	5.2A	550VA
Operating Voltage	(0.85-1.1)Un		
Movement time (ms)	<50ms		

Lock

Off-position key lock (SF11, SF21, SF31, SF32, SF53, SF22)





The open-position lock secures the trip button in the depressed position. When selected by the customer, we will install and configure it. Usage method:

(1) key lock:

One lock one key (SF11): One DC disconnector with one same lock and one key, and only allowed to closed when locked.

Two locks one key (SF21): Two DC disconnectors with two same locks and one key, and only allowed one DC disconnector closed.

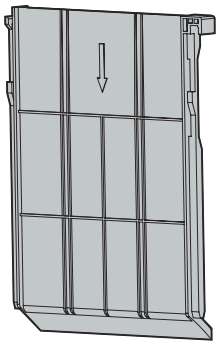
Three locks one key (SF31): Three DC disconnectors with three same locks and one key, and only allowed one DC disconnector closed.

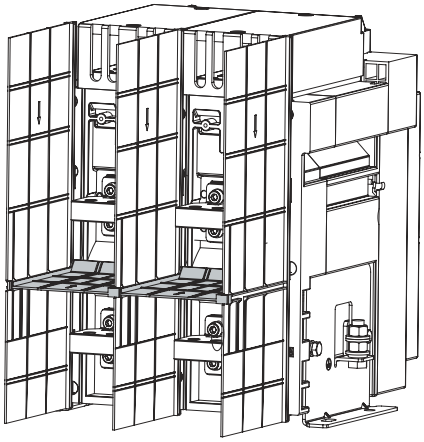
Three locks two keys (SF32): Three DC disconnectors with three same locks and two keys, and only allowed two DC disconnectors closed.

Five locks three keys (SF53): Five DC disconnectors with five same locks and three keys, and only allowed three DC disconnector closed.

(2) Double interlock (SF22): With two different sets of keys and locks.

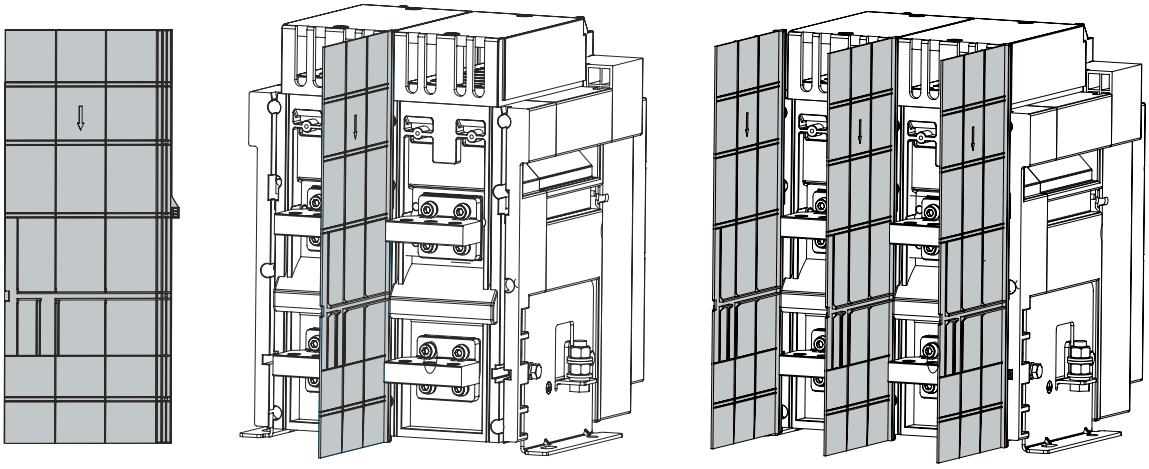
Phase separator





Phase separator

Installed vertically between the terminal blocks of the fixed part of a fixed-mounted DC disconnector , it enhances the insulation strength at the busbar connection points and prevents arc propagation into the breaker's interior.



Main Characteristic

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Model Explanation and Encoding Rules

Connection of Ground Terminal

It should be cleaned before grounding of the fixed type DC disconnector. And connect the PE wire to grounding bar of the switchgear by M12. The area of wire refers to the follwing table.

Cross-sectional area of phase wire（ mm^2）	Corresponding protective conductor （ minimum cross-sectional area of PE（ mm^2））
35 ＜ S≤400	S/2
400 ＜ S≤800	200
S＞ 800	S/4

Temperature derated coefficient

The temperature and altitude correction factors for VW3GZ-16 and VW3GZ-40 can be referenced according to the following table:

If the ambient temperature is higher than +40°C,capacity can be corrected according to the following table.

Type	Rated current(A)In	+40°C	+45°C	+50°C	+55°C	+60°C	+65°C	+70°C
VW3GZ-16	200-1250	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	1600	1.0	1.0	1.0	1.0	0.98	0.93	0.87
VW3GZ-40	6300-2500	1.0	1.0	1.0	1.0	1.0	/	1.0
	2900	1.0	1.0	1.0	1.0	1.0	/	0.96
	3200	1.0	1.0	1.0	1.0	0.94	/	0.92
	3600	1.0	1.0	1.0	0.94	0.92	/	0.9
	4000	1.0	0.95	0.92	0.89	0.95	/	0.85

Altitude correction coefficient

Type	Project	Parameters				
	Altitude	2000	3000	4000	4500	5000
VW3GZ-16	Power frequency withstand voltage(V)	5000	4500	3500	/	2200
	Rated current(A)	1.0In	0.9In	0.8In	/	0.6In
	Rated working voltage(V)	DC1000 DC1500	DC1000 DC1500	DC1000 DC1500	/	DC1000 DC1500
	Rated Insulation voltage(V)	1600V	1600V	1600V	/	1600V
VW3GZ-40	Working current(A)	1.0In	0.9In	0.88In	0.85In	0.82In
	Breaking capacity	1.0	0.98	0.93	0.88	0.85

Size and Connection

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Copper busber specification

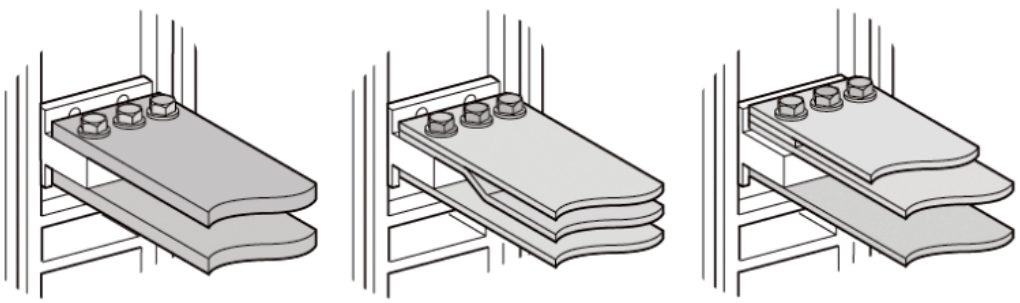
Frame size rated current Inm (A)	Rated current In (A)	Copper busbar specification		
		Number of busbar		Dimension
		Horizontal wiring	Vertical wiring	
VW3GZ-16	⩽630	1		50×5
	800	1		50×10
	1000	1		50×10
	1250	2		50×10
	1600	2		50×10
VW3GZ-40	630	2	1	80×5
	800	2	1	80×5
	1000	2	1	80×5
	1250	2	1	100×5
	1600	2	1	100×5
	2000	3	2	100×5
	2500	4	3	100×5
	2900	3	2	100×10
	3200	4	3	100×10
	3600	5	4	100×10
	4000	5	4	100×10

Note 1: *The table shows that the DC disconnector is installed in an open environment with a maximum ambient temperature of 40 °C and meets the copper bar specifications specified in GB/T 14048.3 for heating conditions. If the temperature exceeds 40 °C, the breaking capacity should be reduced or the number of copper bars should be increased.*
Note 2: *The maximum allowable temperature for copper bars should not exceed 110 °C.*

Recommended screw used of outlet busbar diameter

Switch Disconnector type	Outlet busbar diameter	Screws grade 8.8 (with washer)	Tightening torque
VW3GZ-16	Φ11	M10	50N.m
VW3GZ-40	Φ13	M12	70N.m

Wiring method for copper bars



Size and Connection

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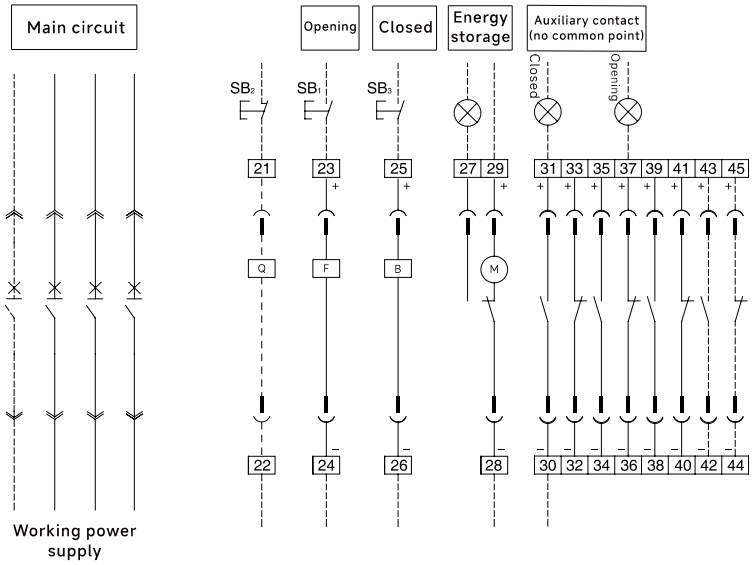
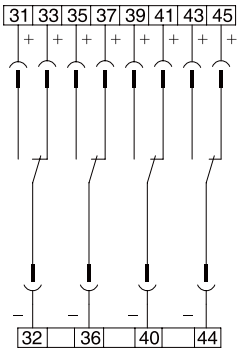
VW3GZ-16 Electrical wiring Diagram



Special type (four sets of auxiliary)



Note: ***SB1*** *Shunt button* ***SB3*** *Close button* ***F*** *Shunt release*
B *Closed electromagnet* ***M*** *Motor operating mechanism*

Terminal Number	
21#, 22#	Under-voltage release or loss of voltage release
23#, 24#	Shunt release
25#, 26#	Closed electromagnet
27#, 28#, 29#	Motor operating mechanism
30#~45#	Auxiliary contact

Note:

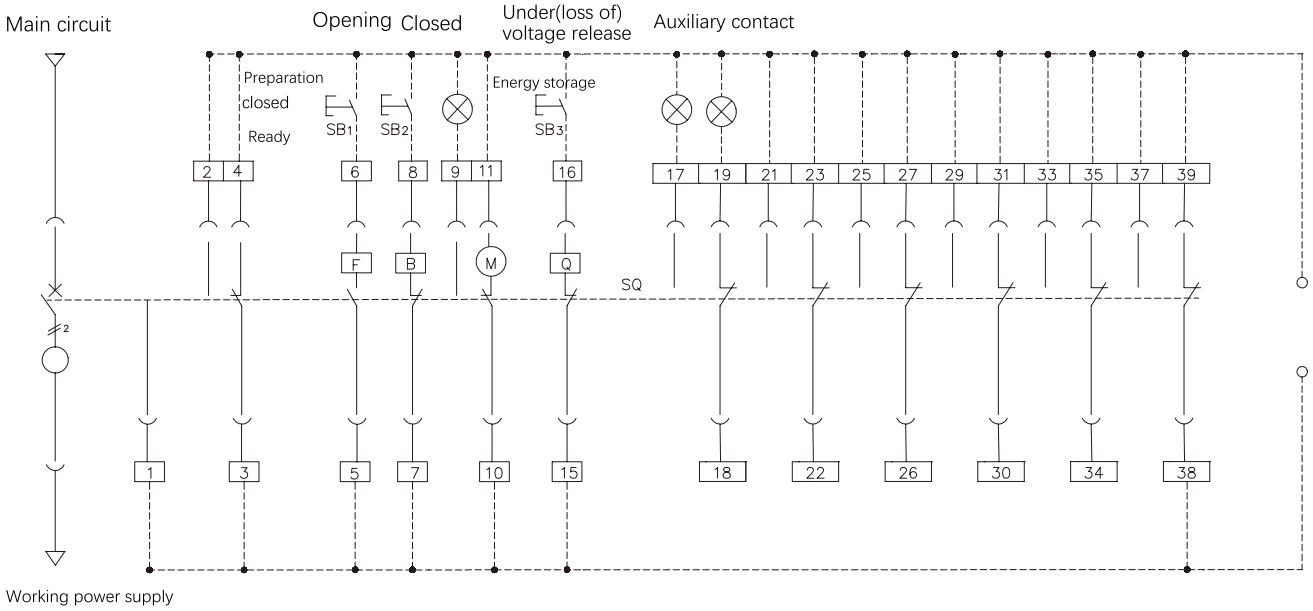
1) the Q, F, B, M can be with different power supply voltage;

2) Terminal 29# can be directly connected to the power supply (automatic pre energy storage),It can also be connected to the normally open button and then to the power supply (manually controlled pre energy storage);

3) The buttons and indicator should be provided by the user;

4) If the control power supply is DC, please connect the positive and negative wire

VW3GZ-40 Electrical wiring Diagram



Note:

SB1 *Open button* ***SB3*** *Undervoltage release button* ***B*** *Closed electromagnet* ***SQ*** *Auxiliary contact*

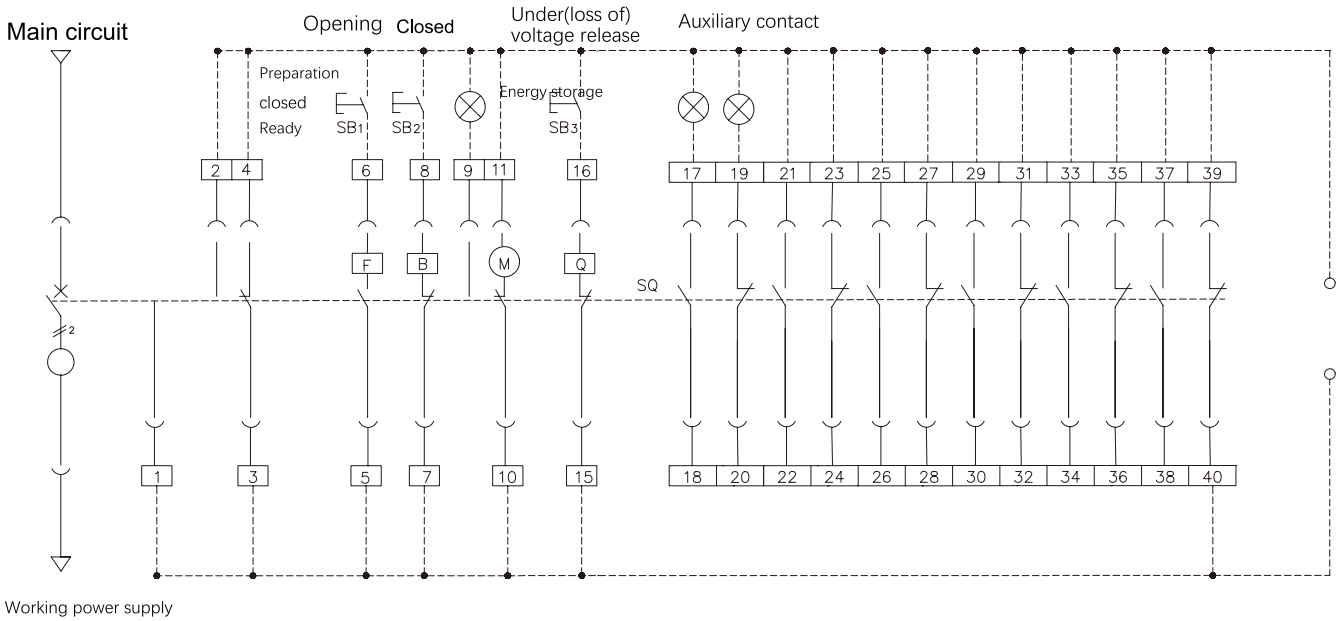
SB2 *Close button* ***F*** *Shunt release* ***M*** *Motor operating mechanism*

Terminal Number	Description
1#	Grounding terminal
2#、3#、4#（Optional）	Closing ready terminal
5#、6#	Shunt release terminal
7#、8#	Closing release terminal
9#、10#、11#	Motor operator terminal
15#、16#（Optional）	Undervoltage release terminal
17#-28#	Auxiliary contact terminal 3no3nc
29#-40#（Optional）	Auxiliary contact terminals

Note:

External wiring diagram shows buttons and indicators to be provided by the user

VW3GZ-40 Electrical Wiring Diagram (No common point)



Note:

SB1 *Open button*

SB2 *Close button*

SB3 *Undervoltage release button*

F *Shunt release*

B *Closed electromagnet*

M *Motor operating mechanism*

SQ *Auxiliary contact*

Terminal Number	Description
1#	Grounding terminal
2#、3#、4#（Optional）	Closing ready terminal
5#、6#	Shunt release terminal
7#、8#	Closing release terminal
9#、10#、11#	Motor operator terminal
15#、16#（Optional）	Undervoltage release terminal
17#-28#	Auxiliary contact terminal 3no3nc
29#-40#（Optional）	Auxiliary contact terminals

Note:

External wiring diagram shows buttons and indicators to be provided by the user

Size and Connection

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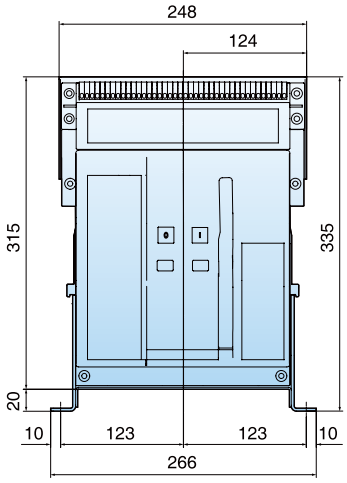
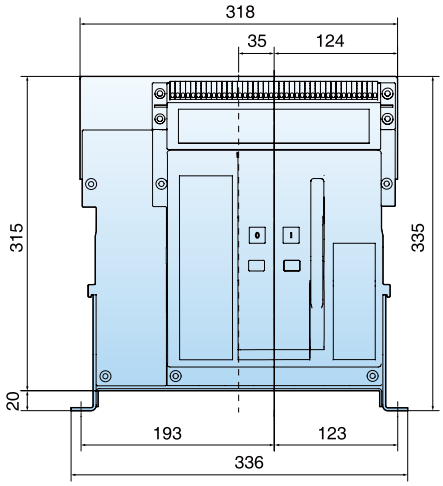
Fixed type (VW3GZ-16, 200-1600A)

Front view

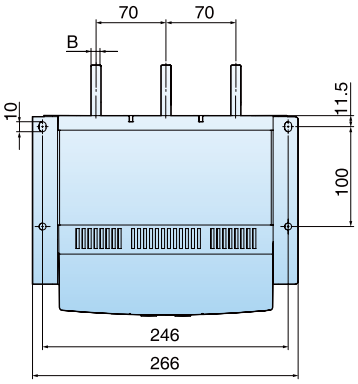


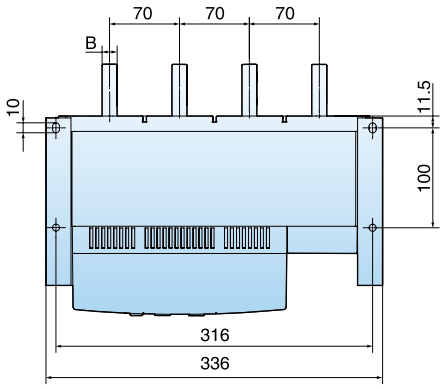
3 pole



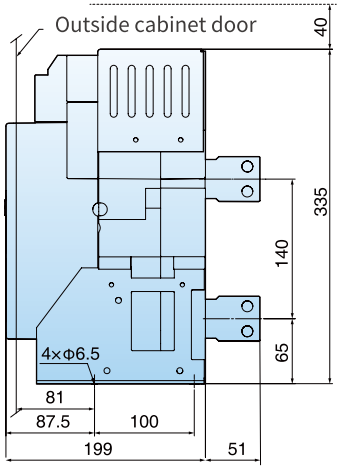
4 pole

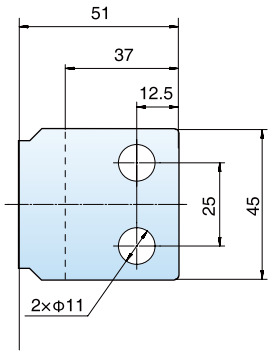
Vertical Wiring





Distance for dismantling the arc extinguishing chamber



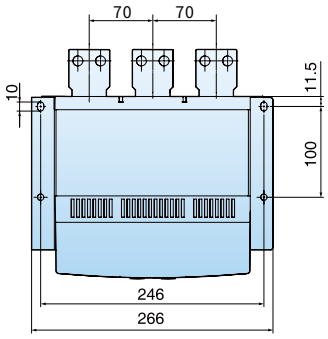


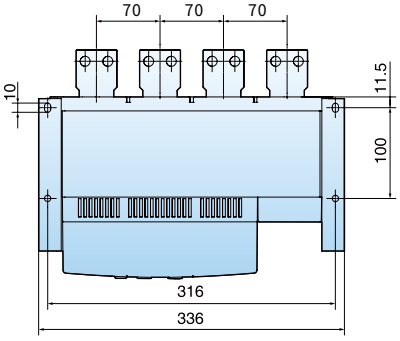
Current	VW3GZ-16 (200~1250A)	VW3GZ-16 (1600A)
Dimension B (mm)	10	15

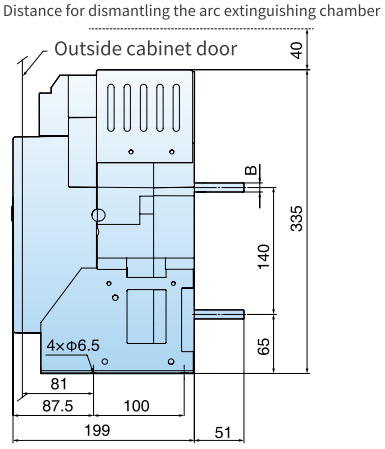
Size and Connection

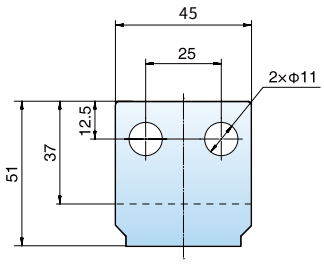
VOZWEI

Horizontal Wiring

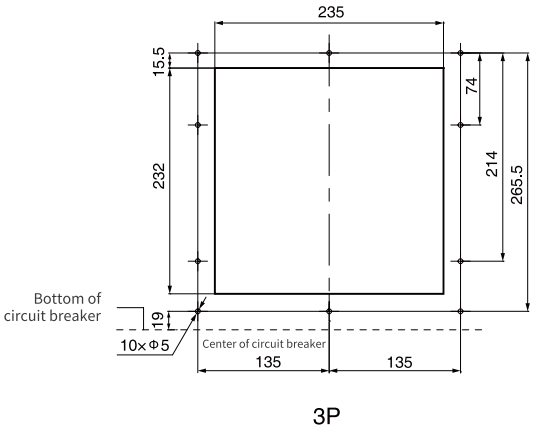




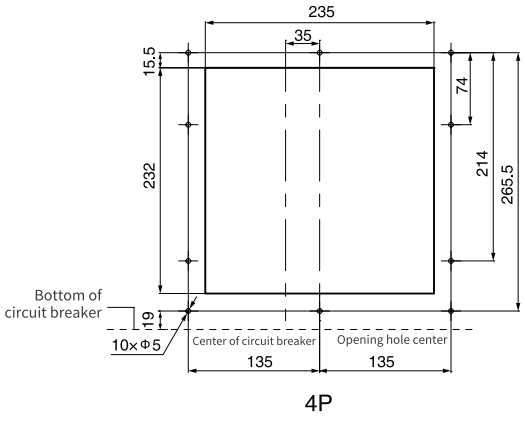




Cabinet door open hole dimension



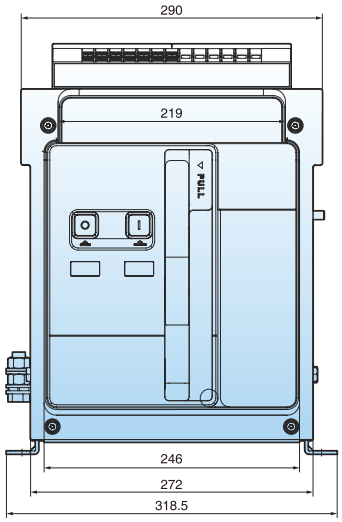
3P



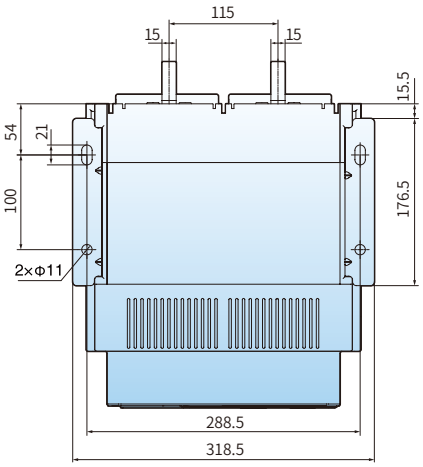
4P

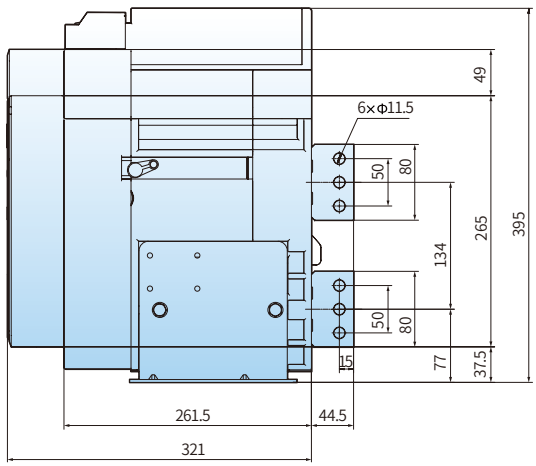
Fixed type (VW3GZ-40, 630~2500A)

Front view

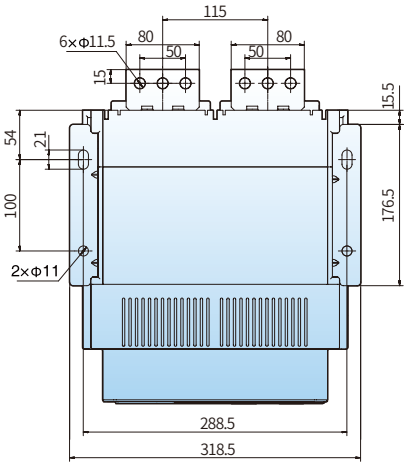


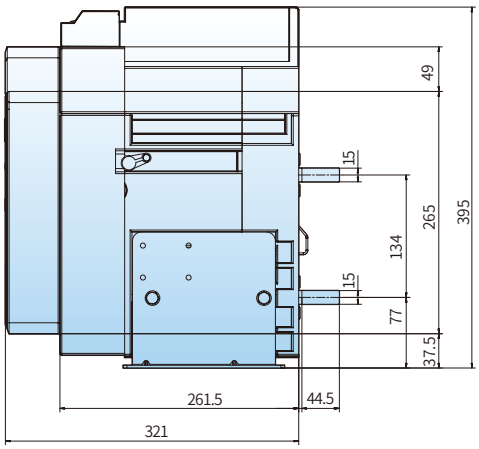
Vertical Wiring





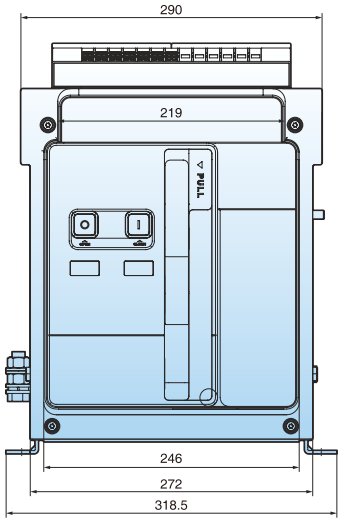
Horizontal Wiring



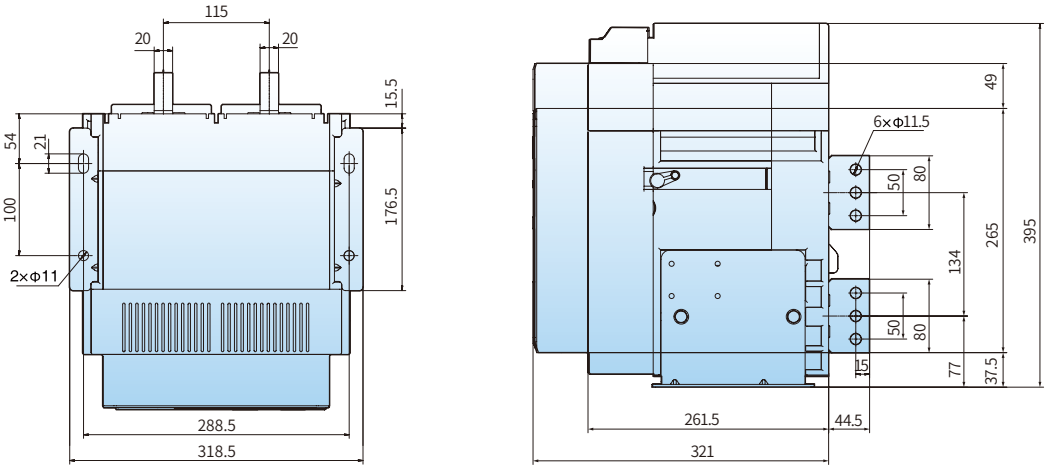


Fixed type (VW3GZ-40, 2900-3200A)

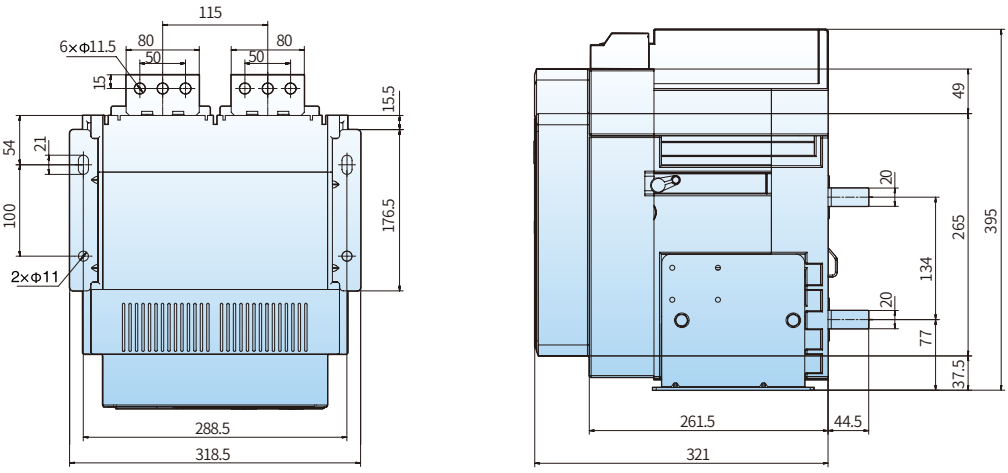
Front view



Vertical Wiring



Horizontal Wiring

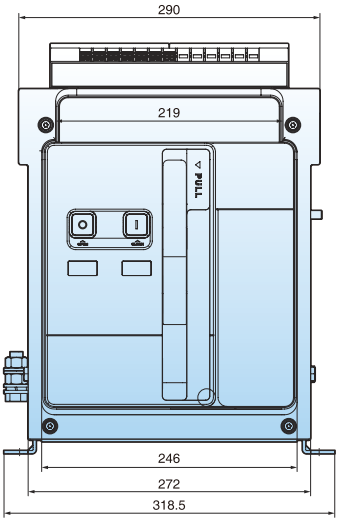


Size and Connection

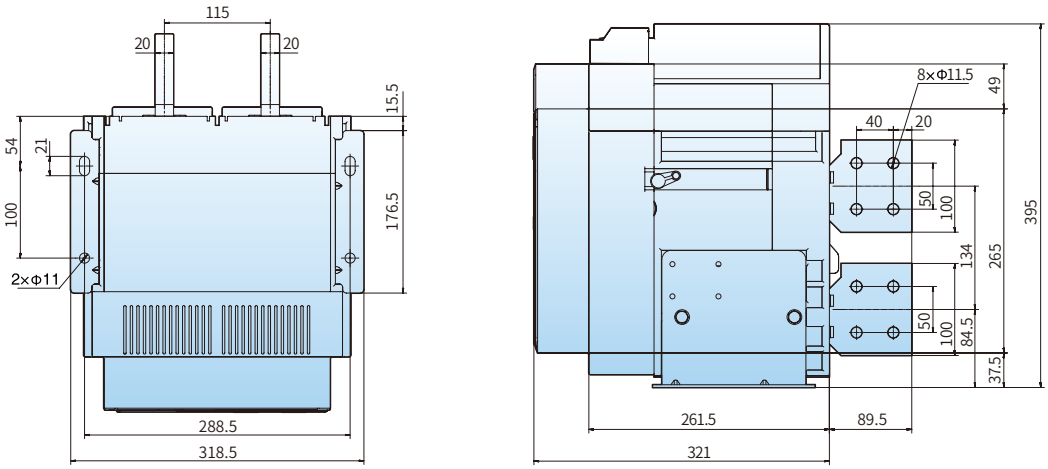
VOZWEI

Fixed type (VW3GZ-40, 3600-4000A)

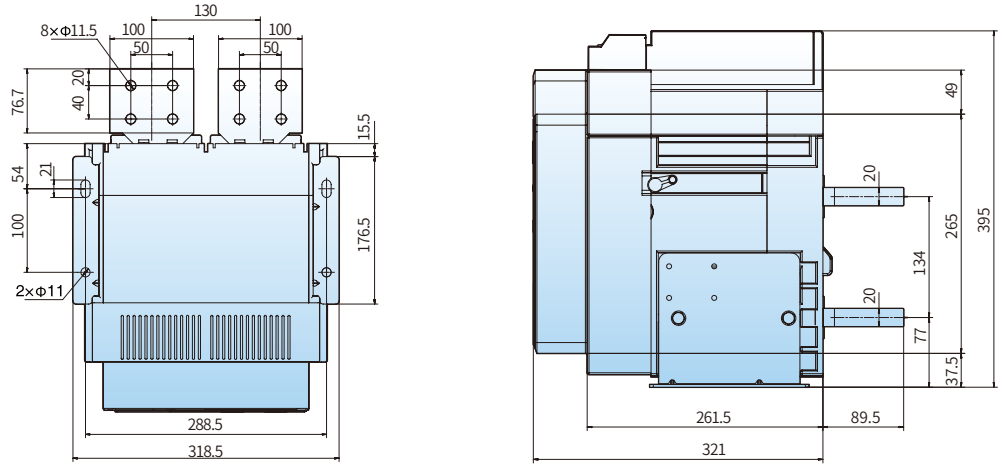
Front view



Vertical Wiring



Horizontal Wiring



Size and Connection

VOZWEI

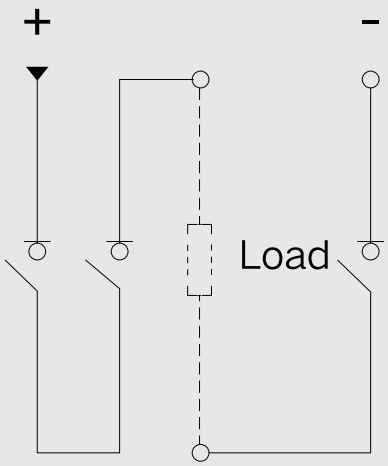
The selection of switchgear in DC systems mainly considers the following aspects:

- Rated working voltage, considering the number of series connected poles for disconnection
- Rated current, considering load power
- Grounding system method

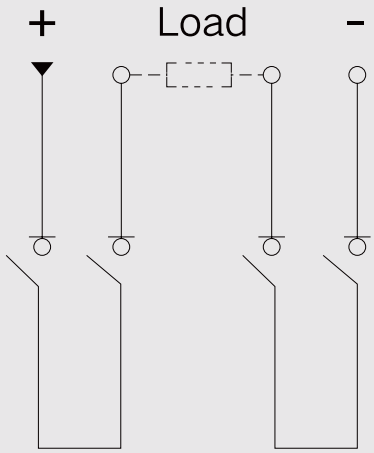
a. Three pole series isolation switch - B-type wiring method

b. Four pole series isolation switch - C-type wiring method

Recommended wiring method for VW3GZ-16 DC disconnector



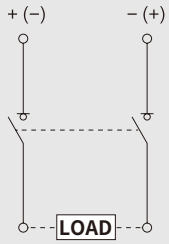
B-type wiring method



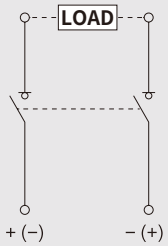
C-type wiring method

Note: *If directly connected in parallel or series with the busbar, the continuous load of the isolating switch can only be 80% of the maximum operating current due to heating reasons.If parallel or series connections are made at a distance of 1 meter from the busbar, the switch disconnector can operate at full load.*

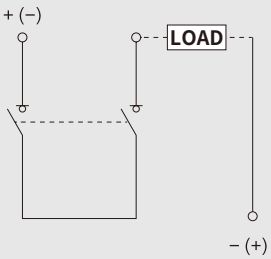
Recommended wiring method for VW3GZ-40 DC disconnector



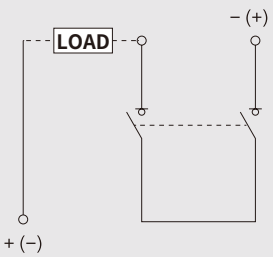
Wiring method 1



Wiring method 2



Wiring method 3

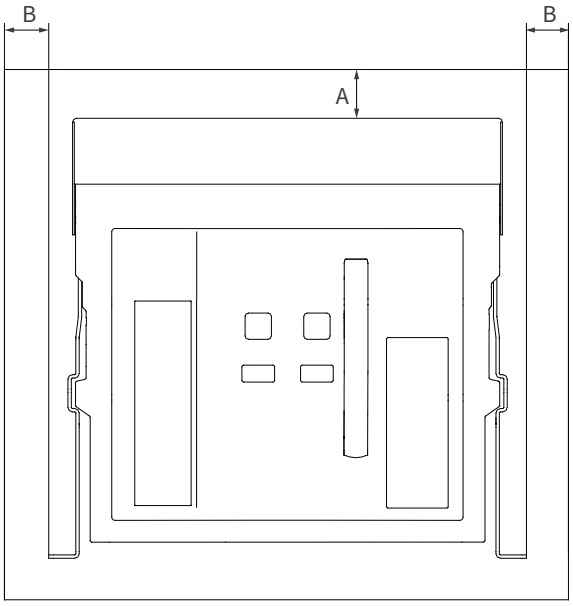


Wiring method 4

Size and Connection

VOZWEI

When users install the DC disconnector into the cabinet, the safe distance between the DC disconnector and the cabinet is shown in the figure below, and the installation dimensions are shown in the table below.



Fixed type DC disconnector

unit: mm

Fixed type	To the insulator		To the metallic body grounded safely		To the live part	
	A	B	A	B	A	B
VW3GZ-16	0	0	0	0	60	60
VW3GZ-40	0	0	0	0	80	80

Note: *The safety distance for fixed switches should consider a space of 40mm required to remove the arc extinguishing chamber;*

Order Notes

VOZWEI

Please fill in numbers in,and check √ in☐		
User: Number of units ordered: Date of ordering:		
Basic parameters	Shell frame level	☐ VW3GZ-1600 ☐ VW3GZ-4000
	Installation mode	F-Fixed type
	Rated current(A)	VW3GZ-1600 ☐ 200 ☐ 400 ☐ 630 ☐ 800 ☐ 1000 ☐ 1250 ☐ 1600 VW3GZ-4000 ☐ 630 ☐ 800 ☐ 1000 ☐ 1250 ☐1600 ☐ 2000 ☐ 2500 ☐ 2900 ☐ 3200 ☐ 3600 ☐ 4000
	Breaking type	☐ Empty: Standard breaking level
	Number of poles	☐ 2-2P ☐ 3-3P ☐ 4-4P Note:(2P only for VW3GZ-4000)
	Wiring mode	VW3GZ-1600: ☐ C1-Standard Horizontal Wiring ☐ C2-Standard Vertical Wiring VW3GZ-4000: ☐ C1-Horizontal wiring ☐ C2-Vertical wiring ☐ C4-Mixed wiring(upper horizontal,lower vertical) ☐ C5-Mixed wiring(upper vertical,lower horizontal) ☐ 1-Standard wiring
Required accessories	Electric operating mechanism	☐ D1-AC400V ☐ D2-AC230V/DC220V ☐ D4-AC/DC110V ☐ D5-DC24V
	Shunt release	☐ F1-AC400V ☐ F2-AC230V/DC220V ☐ F4-AC/DC110V ☐ F5-DC24V
	Closed electromagnet	☐ B1-AC400V ☐ B2-AC230V/DC220V ☐ B4-AC/DC110V ☐ B5-DC24V
Optional accessories	Under-voltage release	Voltage specifications ☐ Q1-AC400V ☐ Q2-AC230V ☐ Q5-DC24V
		Delay time ☐ 0-Instantaneous ☐ 1-1s delay ☐3-3s delay ☐ 5-5s delay
	Loss of voltage release	Voltage specifications ☐ S1-AC400V ☐ S2-AC230V
		Delay time ☐ 0-Instantaneous ☐ 1-1s delay ☐ 3-3s delay ☐ 5-5s delay
	Auxiliary contact	☐ A33-3NO3NC ☐ A44-4NO4NC ☐ A55-5NO5NC ☐ A66-6NO6NC ☐ ____NO____NC(Max.14)
		☐ A3-Three-group switching ☐ A4-Four-group switching ☐ BX-Closing ready signal output unit ☐ A6-Six-group switching ☐ _____-group switching(Max.14)
	Closing ready	☐ BX-Closing ready signal output unit
	Counter	☐ JS-Counter Note: (JS only for VW3GZ-40)
	Door frame	☐ M-Door frame Note: (M only for VW3GZ-16)
	Button lock	☐ S-Button lock
Language type		☐ Chinese ☐ Y-English
Interlocking Off-position lock accessories		☐ SF11-Key lock device(one lock and one key) ☐ SF21-Key lock device(two locks and one key) ☐ SF31-Key lock device (three locks and one key) ☐ SF22-Key lock device(two locks and two keys) ☐ SF32: Key lock device(three locks and two keys) ☐ SF53: Key lock device (five locks and three keys)
Mechanical interlocking		☐ SR11-two sets of steel cables, one for closing and one for opening ☐ SR12-three sets of steel cables, one for closing and two for opening ☐ SR21-three sets of steel cables, two for closing and one for opening ☐ SY11-two sets of hard rods, one for closing and one for opening
Other requirements		