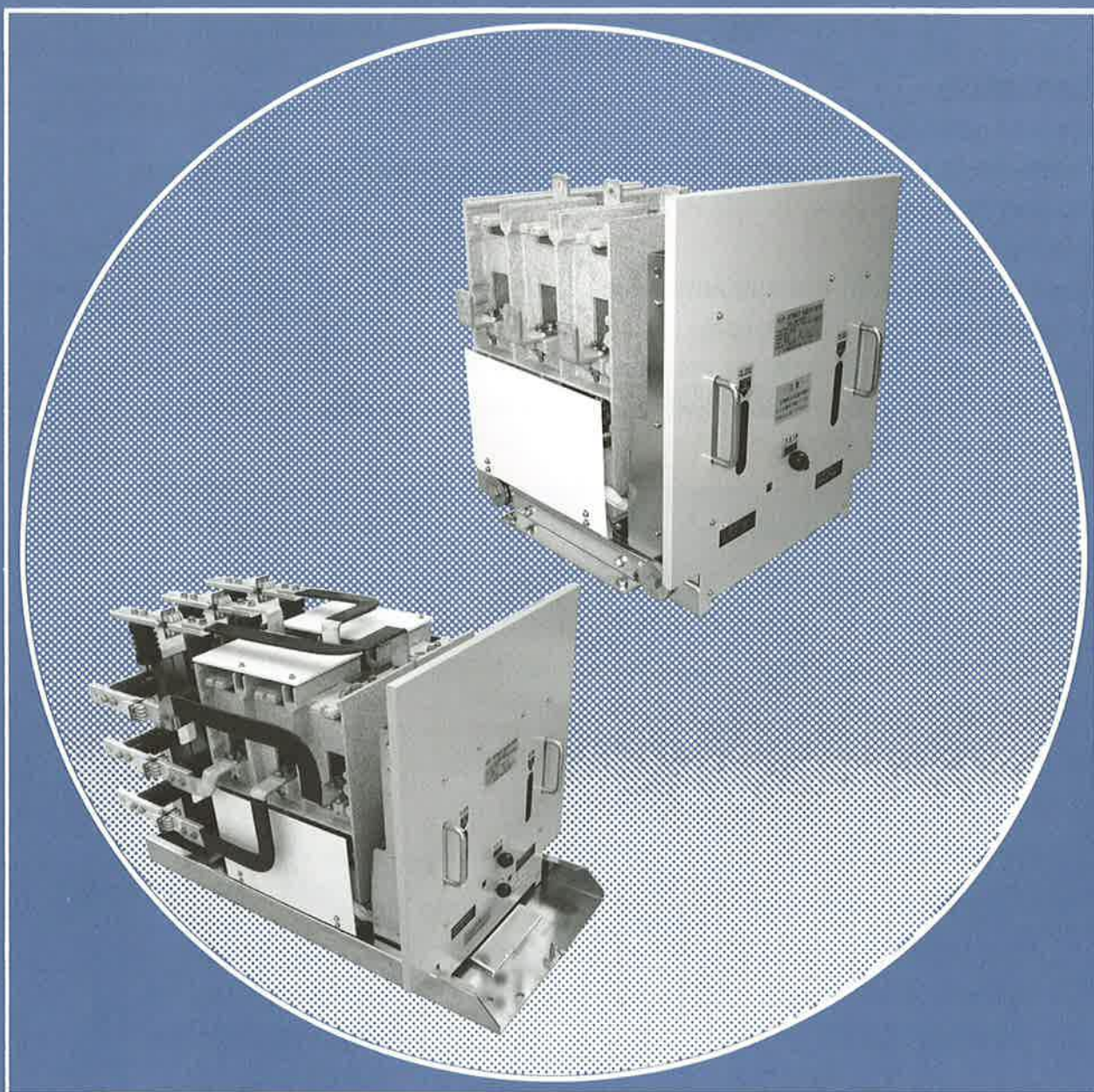


# VSK-C SERIES

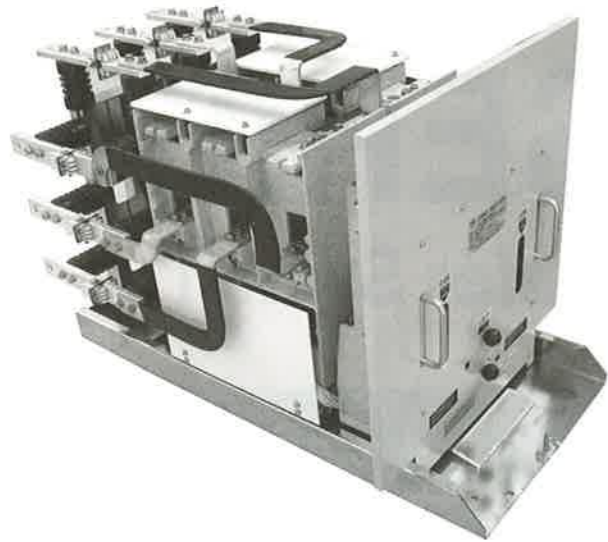
High-Voltage power Transfer Switch



**WashiON**

共立継器株式会社  
KYORITSU KEIKI CO.,LTD.





### ◆ USE

The vacuum type high-voltage power transfer switches of VSK series are transfer switches developed specifically for power switching of high-tension circuits. You can use these transfer switches for switching between normal power supply and stand-by power supply or between commercial power supply and generator power supply.

### ◆ FEATURES

1. Safe and reliable switching  
The electrical and mechanical interlocks assure error-free operation both in auto and manual mode.
2. Long life  
Long life results from the vacuum valves used for the contacts and the simplified operation mechanism.
3. Optimal models selectable for your applications  
You can choose your transfer switch from the fixed type or pull-out type models for 400A to 600A.

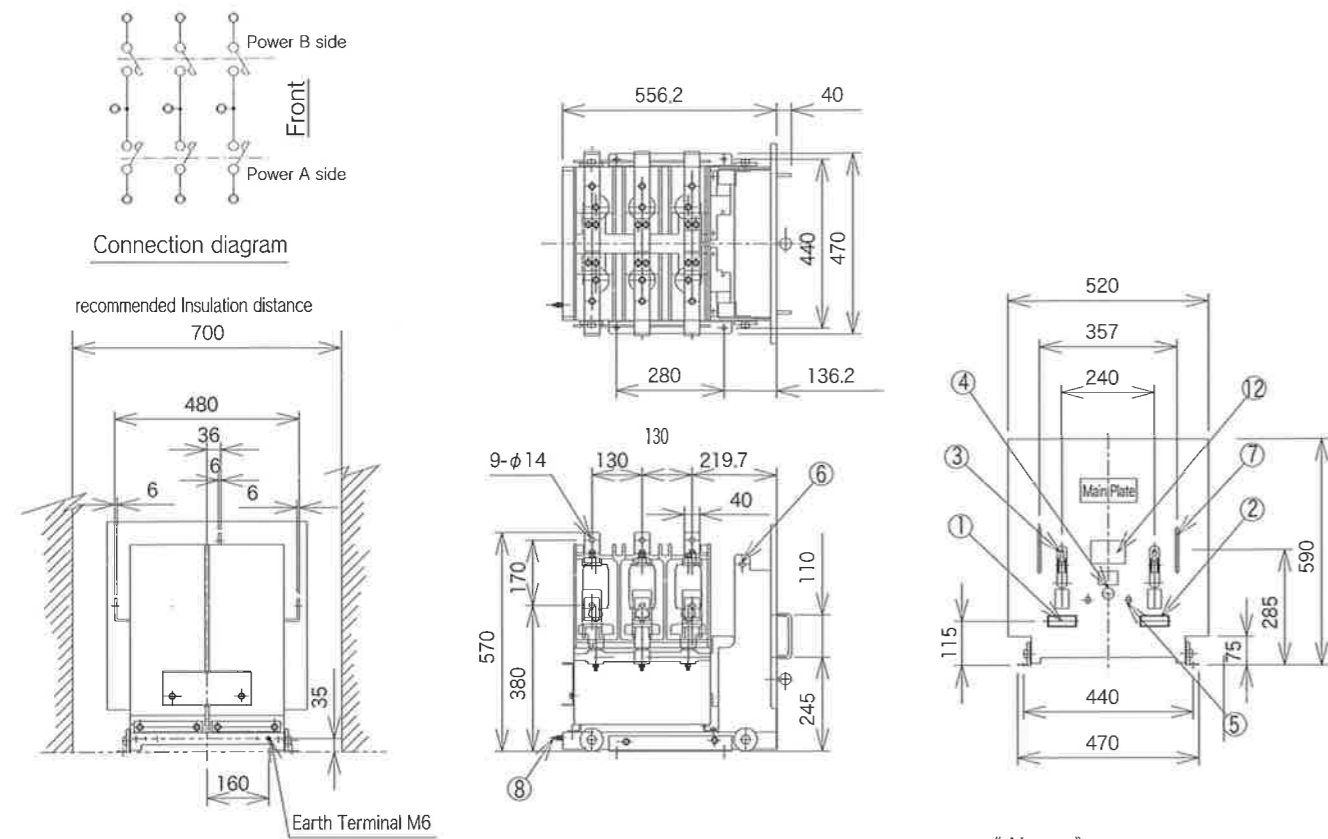
### Important Instructions

1. Perform manual operation only after confirming that both the main circuit and the control circuit are off.
2. Use the wire to the main circuit thick enough for the current that passes through it.
3. When connecting the wire to the main circuit terminal, take ample care that no undue stress works on the terminal of the transfer switch. Also provide supports that can prevent pulls at or bending of the connected wire from acting on the terminal of the transfer switch.
4. Be sure that there is no forgotten or incomplete tightening of the terminal screw.
5. The contact valves of this transfer switch are vacuum valves. Take care not to damage them when unpacking or installing the transfer switch. For the handling of the vacuum valves, refer to their instruction manual.

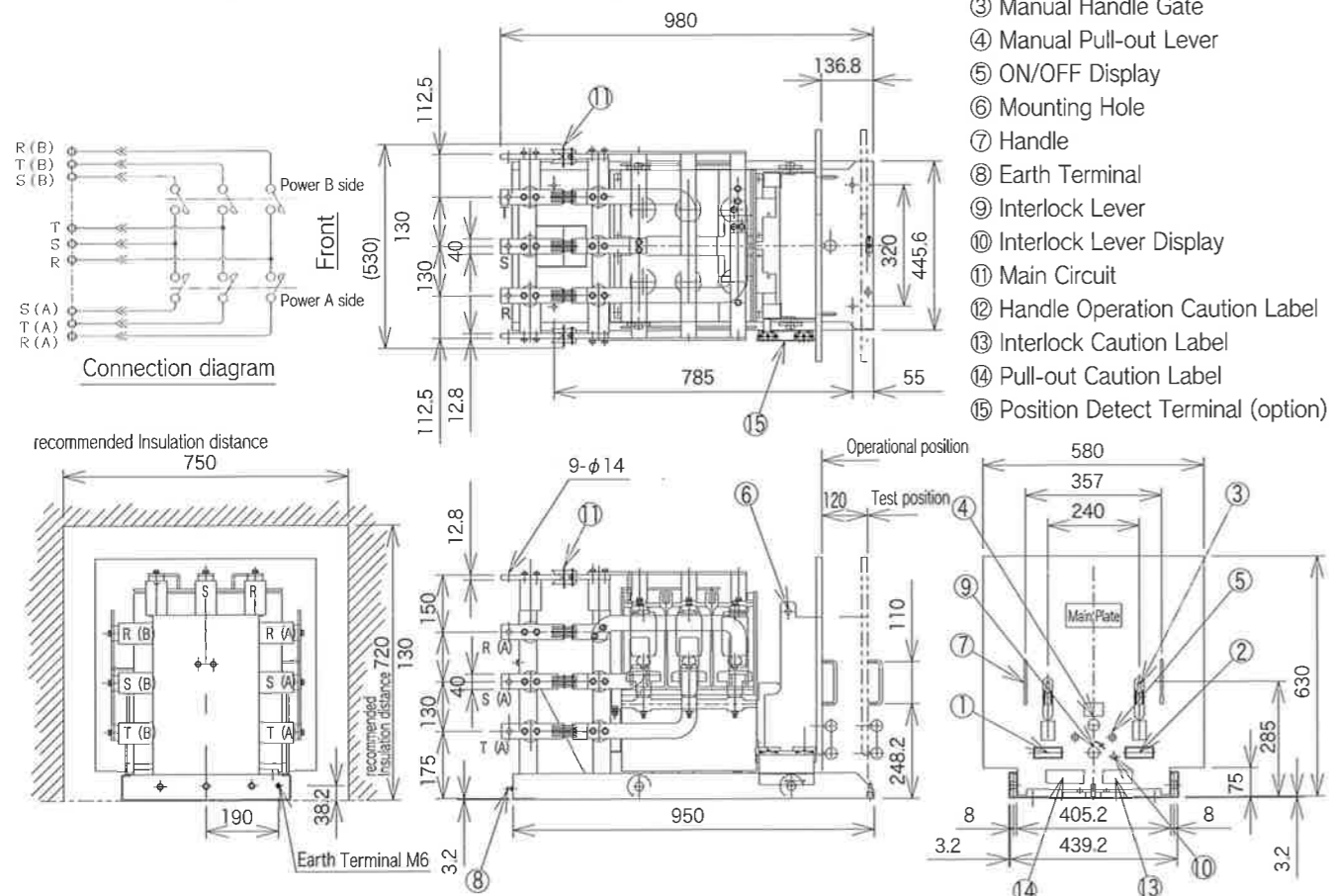
### ■ Rated Specifications

Item		Feature & Performance	
Type	Fixed type	VSK-6H40C	VSK-6H60C
	Pull-out type	VSKO-6H40C	VSKO-6H60C
Rated voltage		7.2 / 3.6 KV	
Rated current		400 A	600 A
Electric life		10,000 times (rated current switch)	
Mechanical life		10,000 times	
Rated breaking current		12.5 KA	
Rated short time current		12.5 KA (1 second)	
Short-circuit making current (Peak)		31.5 KA	
Rated frequency		50 / 60 Hz	
Power frequency withstand voltage (1min,dry)	Main circuit to earth	22 KV	
	Between phases	22 KV	
	Between poles	35 KV	
	Control circuit to earth	2 KV	
Impulse withstand voltage (1.2 / 50 μs)	Main circuit to earth	60 KV	
	Between phases	60 KV	
	Between poles	70 KV	
	Control circuit to earth	7 KV	
Operation method		Electro-magnetic operation (Instantaneous energized)	
Closing / Tripping operation current	100 VAC	9 A / 1.3 A	
	110 VAC	10 A / 1.5 A	
	100 VDC	10 A / 1.3 A	
	110 VDC	11 A / 1.5 A	
Operation voltage range		80 to 100 % of Rated Voltage	
Closing time	AC Operation type	0.15 sec.	
	DC Operation type	0.13 sec.	
Opening time		0.035 sec.	
Transfer time	AC Operation type	approx. 0.19 sec.	
	DC Operation type	approx. 0.17 sec.	
Auxiliary contact	Cotact	2a – 2b	
	Current	15 A	
	Switching capacity	250VAC 15A, 110VDC 5A	
	Micro load	24VDC 0.1A	
Operational temperature		-5 ~ 40°C (no icing)	
Operational humidity		45 ~ 85 % (no condensing)	
Applicable standard		JIS C 4605	
Weight	Fixed type	103 Kg	103 Kg
	Pull-out type	Body 118 Kg / Table 30 Kg	Body 118 Kg / Table 30 Kg
Option (Pull-out type)		Position Detect Switch (Operational position 1C, Test position 1C)	
Control circuit connector		2 pcs of 1 m length are enclosed.	

## Fixed type Appearance Diagram



## Pull-out type Appearance Diagram



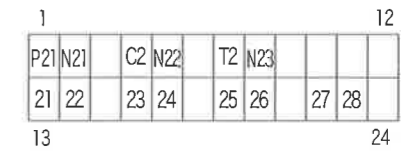
- 《 Name 》
- ① Power A Connector
  - ② Power B Connector
  - ③ Manual Handle Gate
  - ④ Manual Pull-out Lever
  - ⑤ ON/OFF Display
  - ⑥ Mounting Hole
  - ⑦ Handle
  - ⑧ Earth Terminal
  - ⑨ Interlock Lever
  - ⑩ Interlock Lever Display
  - ⑪ Main Circuit
  - ⑫ Handle Operation Caution Label
  - ⑬ Interlock Caution Label
  - ⑭ Pull-out Caution Label
  - ⑮ Position Detect Terminal (option)

## Control Circuit Connector

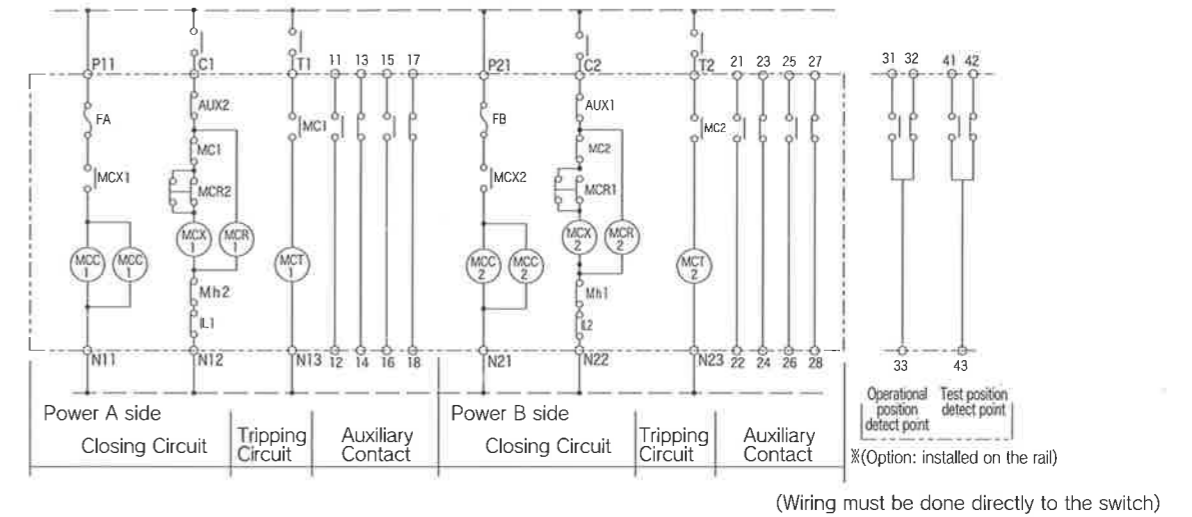
Power A Connector



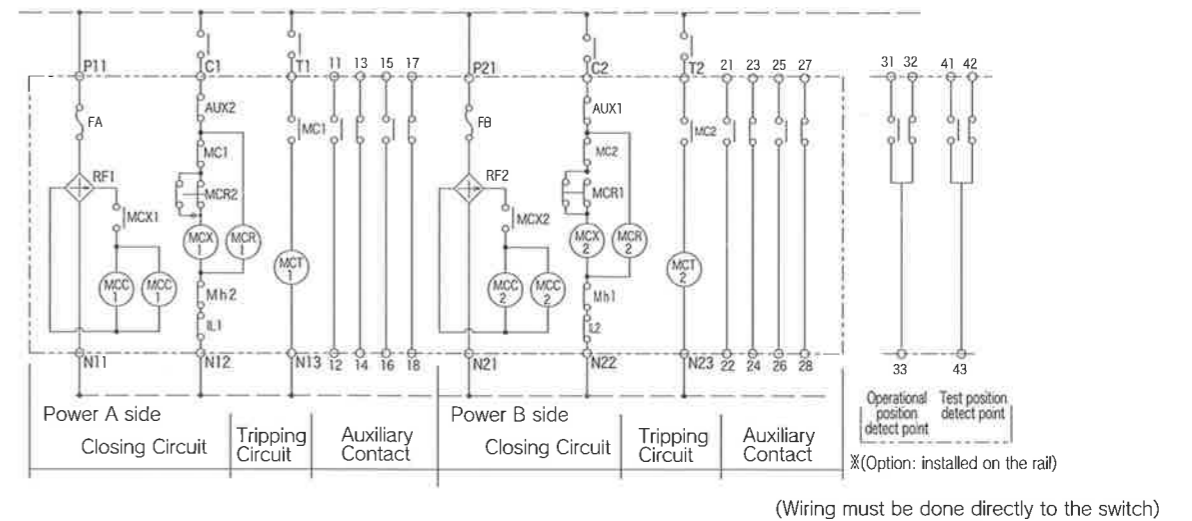
Power B Connector



## DC Operation type Internal Circuit



## AC Operation type Internal Circuit



### Note:

1. AC Operation type is internally equipped with the Rectifier and not necessary to prepare a power device externally for input.
2. The Transformer for operation must be specified with more than the following calculation value  
 $VA = \text{Rated Voltage} \times \text{Rated Current} \times 0.6$
3. If there is no preferential circuit, executing the simultaneous operation may cause the interlock by the internal circuit and the inputting is prevented. One side must be delayed by a timer.
4. The position detect contact is optionally prepared only for the Pull-out type.

- MCC1, MCC2 : Closing Coil
- MCX1, MCX2 : Interlock Relay
- MCR1, MCR2 : Interlock Relay
- MT1, MCT2 : Tripping Coil
- AUX1, AUX2 : Auxiliary Switch
- Mh1, Mh2 : Manual Check Contact
- IL1, IL2 : Interlock Contact (only on Pull-out type)
- RF1, RF2 : Rectifier
- FA, FB : Fuse

## KYORITSU PRODUCTS

TRANSFER SWITCHES  
MANUAL LOAD SWITCHER  
DIRECT CURRENT CONTACTOR  
VOLTAGE RELAY  
AUXILIARY RELAYS  
SMALL SIZE POWER RELAY  
TERMINAL BLOCKS  
ELECTRONICS DEVICES  
CONTROL PANEL

# WashiON

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