ZENITH SWITCHGEAR

ZSR40-V-630/1250-25

40.5kV SF6
RING MAIN UNITS

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ZSR40-V-630/1250-25 RMU Key complying standards



IEC 62271-1	Common specifications
IEC 62271-250	Metal-enclosed switchgear and control gear
IEC 62271-100	MV circuit breakers
IEC 60265-1	MV Switches
IEC 62271-102	Disconnectors and earthing switches
IEC 62271-105	MV fuse switch
IEC 60529	Degrees of protection

ZSR40-V-630/1250-25 RMU Normal service conditions



1.*Ambient temperatures: -15^0 +50^0 C

2.Max. daily average relative humidity: 95%

3.Max. monthly average relative humidity: 90%

4.*Max. height above sea level: 1000m

5.Max. earth-quake: Grade 7 Richter Scale

6.ZSR40-V-630/1250-25 is an indoor switchgear usually installed in a secondary or package substation.

7.If ZSR40-V-630/1250-25 is used in outdoor environment, then we will provide a standard IP54 weatherproof enclosure.

8.*Note 1: Please consult us for derating from 40^0 C.

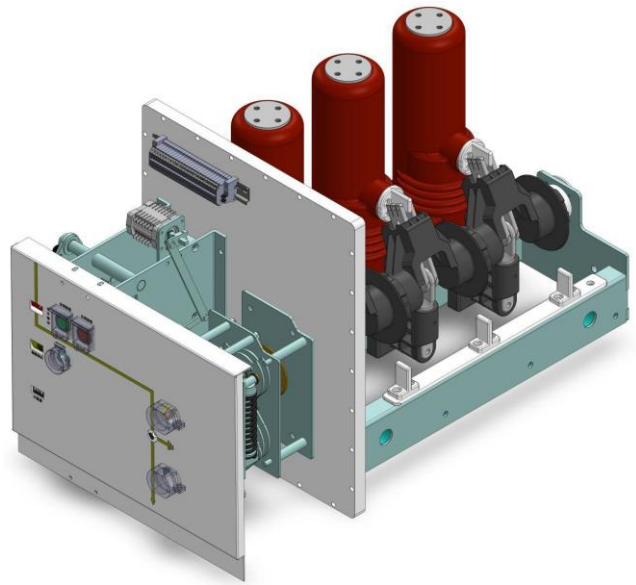
9.*Note 2: Please consult us for usage above 1000m altitude level.

ZSR40-V-630/1250-25 RMU design features



- Modular panel design
- Standard panel dimensions are used
- Easy to install and service
- Front access of power and control cables
- Back can install against the wall (100mm)
- Compact and save space
- Basically, no maintenance is required
- Internal arc fault tested for safety

Internal layout Diagram



1. Integrated 3-position DS/ESW
2. Fault making ESW
3. Compact embedded VCB design
4. Integrated DS/ESW/VCB operating mechanism c/w mechanical interlocks.
5. Motorised operated DS & VCB mechanism (Option available)

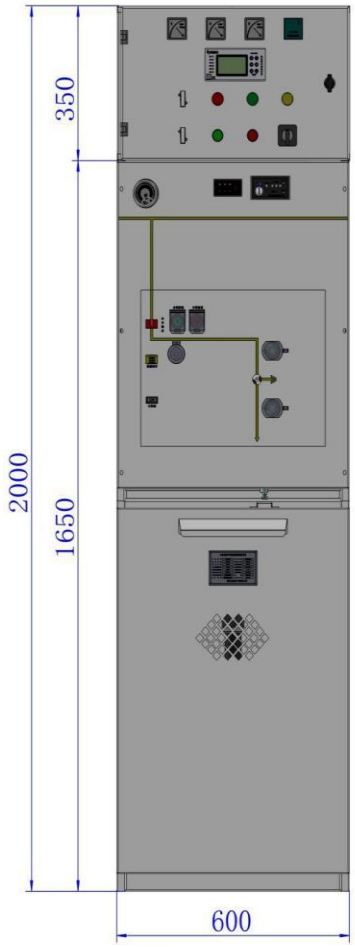
ZSR40-V-630/1250-25 RMU General Technical Parameters		
Maximum rated voltage (kV)	36/40.5kV	36/40.5kV
Lightning impulse withstand voltage (kVp)	170/185	170/185
Power frequency withstand voltage (kV)	70/95	70/95
Frequency (Hz)	50/60	50/60
Normal rated current @ 40^0 C	630/1250	630/1250
Short-time withstand current for main and earthing circuits (kA @ 3 seconds)	20	25
Peak withstand current for main and earthing circuits (kA)	50	62.5
Short-circuit duration (Seconds)	3	3
Internal fault: short -circuit current (kA)	20	25
Internal fault: short-circuit duration (Seconds)	1	1
Internal fault: type of accessibility	AFL/*AFLR	
Degree of protection (internal)	IP65	
Degree of protection (external)	IP41	
Degree of protection	IP42/54*	
Control voltage	24/30/60/110/220V DC/AC	

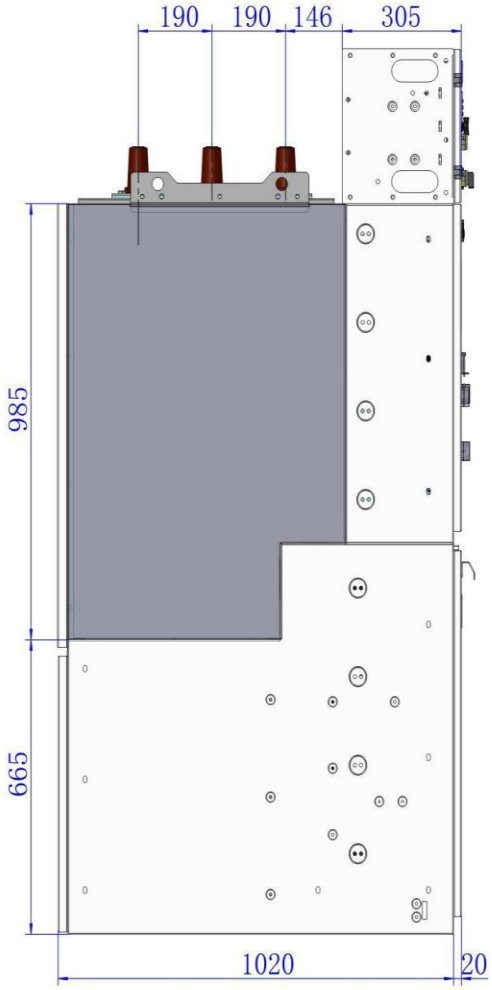
Note: *1. On request of customers. *2. Application for outdoor installation..

Technical Data of V RMU Panel

Designation type	ZSR40-V-630/1250-25	
Maximum rated voltage	36/40.5kV	36/40.5 kV
Insulation level		
Lightning impulse withstand voltage		
- to earth and between phases	170/185 kV_p	170/185 kV_p
- across the isolating distance	185/215 kV_p	185/215 kV_p
Power frequency withstand voltage		
- to earth and between phases	70/95 kV_p	70/95 kV_p
- across the isolating distance	85/115 kV_p	85/115 kV_p
Frequency	50/60 Hz	50/60 Hz
Normal rated current @ 40^0 C	630/1250 A	630/1250 A
Shorting circuit breaking current	20 kA	25 kA
Short-time withstand current	20 kA	25 kA
Short-circuit duration	3 s	3 s
Making capacity	50 kA	62.5 kA
short-circuit duty class	E1	E1
Mechanical endurance class	M1	M1
Operating sequence	O-0.03s-CO-180s-CO	O-0.03s-CO-180s-CO
Operating mechanism	Motorized spring charged	Motorized spring charged
Dimensions (WxDxH)	600Wx1020Dx2000H	600Wx1020Dx2000H

TYPICAL FRONT & SECTION VIEW OF ZSR40 SF6 RMU





PRODUCT MODEL ORDERING CODE

ZENITH SWITCHGEAR MODEL	RATED VOLTAGE (kV)	VCB	RATED CURRENT (A)	SHORT TIME CURRENT (kA 3s)
ZSR	36	V	630	20
ZSR	36	V	630	25
ZSR	36	V	1250	25
ZSR	40.5	V	630	20
ZSR	40.5	V	630	25
ZSR	40.5	V	1250	25

EXAMPLE: ZSR-36-V-630-20 RMU

8. Ordering information required

1. Primary schemes or Zenith Switchgear ZSR40-V-630/1250-25 RMU Modules;
2. Single line system diagram;
3. Rated voltage, rated current, rated short circuit breaking current;
4. Control voltage and nos. of auxiliary contacts.
5. Plan view of substation layout or switchgear layout diagram;
6. Specification and type of incoming and outgoing power and control cables;
7. Specification and requirement of control, measurement and protection schemes of each type of switchgear panel;
8. Requirement of interlocks and automatic features if any;
9. Model/part numbers, specification and quantity of key switchgear components.
10. If switchgear is used in special operating environmental condition, please specify clearly;
11. Other special requirements if any.

9. How to contact us?

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