



Metal Enclosed Withdrawable Switchgear

ROBUST I
Series Air-insulated
Switchgear

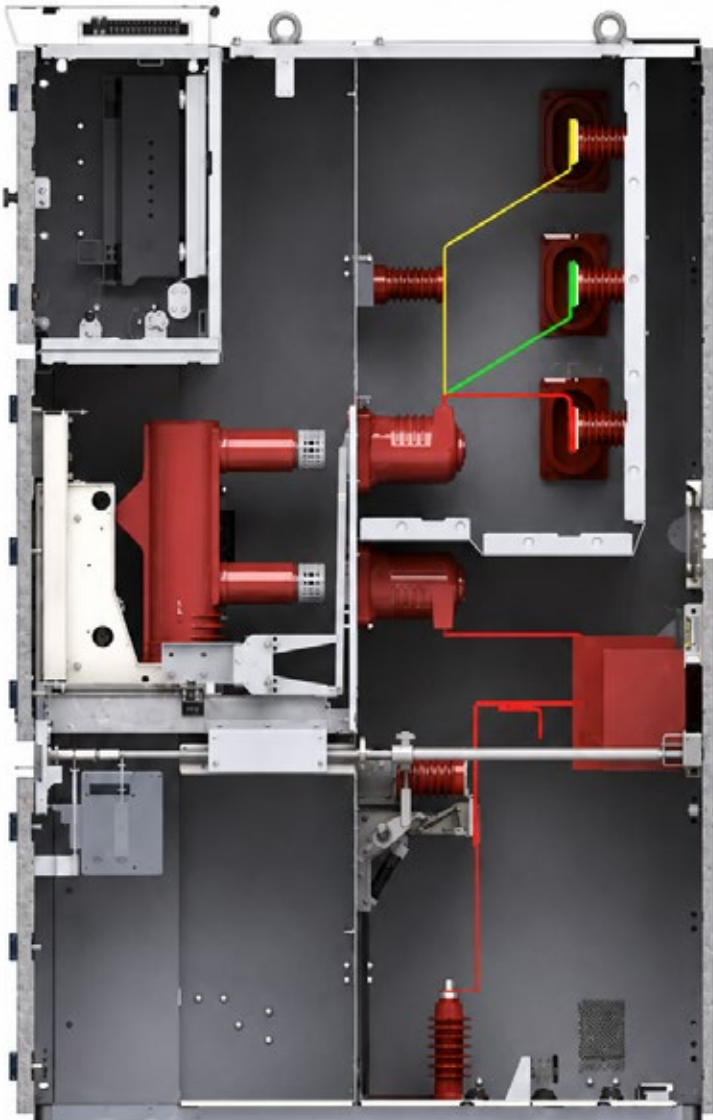


Product

Overview

Robust I is used in power grid of 3.6 - 24kV three-phase alternating current 50 or 60 Hz, accepting and distributing electrical power, along with function of controlling, metering and detecting electric circuit. It is also available for use in single bus section system.

The withdrawable unit can be fitted with the widest range of apparatus available on the market today like vacuum circuit breaker and vacuum contactor.



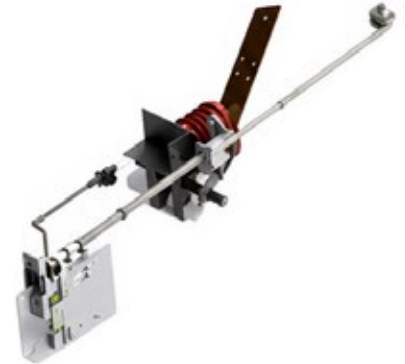
Product Details

- The side plate employs inward double-bending technology.
- The framework is connected with dimpled rivets.
- The side has no protruded screws and relief holes.
- Separate replacement is realizable in case of failures.
- The time for power restoration can be shortened.



- The rear upper and lower doors are interlocked with an interlock, which ensures that the rear upper door cannot be opened when the rear lower door is closed; on the contrary the rear lower door cannot be closed when the rear upper door is opened.

- The ground interlock, simpler in structure and more flexible and reliable in operation, can deliver free switch of interlocking functions whether equipped with a manual or motorized earthing switch, without requiring changing any part.



- Enclosure-top relief cover plate
- One side is equipped hinges
- One side is fixed with nylon screws
- Reduce resistance in pressure relief
- Realize quick relief to ensure safety
- Relief cover has a corrugated grille inside to prevent arcs burning particles to spatter.

- The secondary line is laid in the full-metal-protected secondary line trunking, which can effectively prevent arc burning the secondary line in case of failure in the enclosure.
- Signals can be correctly transmitted through the secondary line to the comprehensive protection controls system to realize fast fault-clearing, mitigating the damage inflicted by failure on electric equipment and improving the stability of electric systems.



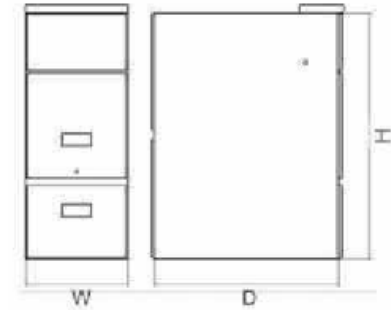
Technical Parameters

ROBUST I

Enclosure Dimensions

Cabinet type	Width W (mm)	Depth D (mm)	Height H (mm)
KYN28A-12(II)	400, 500, 600 ¹ / 650, 800, 1000	1450, 1610, 1750	2240
KYN28A-17.5(II)	800 ² / 1000 ²	1650, 2000	2240
KYN28A-24(II)	800 ² / 1000	1800, 2200	2400

Note: 1) Busbar riser cabinet; 2) The rated current is less than 1250A.



Service Conditions

S/N	Name	Unit	Value
1	Ambient air temperature — Maximum temperature	°C	+40
	Ambient air temperature — Minimum temperature	°C	-15
	Maximum daily temperature difference	K	25
2	Altitude	m	≤1000
3	Pollution level	—	III (equivalent to C)
4	Humidity — Average daily relative humidity	%	≤95
	Humidity — Average monthly relative humidity	%	≤90
5	Seismic capacity (horizontal acceleration)	g	0.2

Note: These conditions given in the table are normal service conditions. The conditions going beyond these values are special service conditions. These service conditions can be modified according to the actual conditions of a project.

Technical Parameters

S/N	Name	Unit	Value
1	Rated voltage	kV	12 17.5 24
2	Rated frequency	Hz	50/60 50/60 50/60
3	Rated current	A	≤4000 ≤3150 ≤3150
4	Temperature rise test	—	I _r I _r I _r
5	Rated power-frequency withstand voltage (1 min)	kV	28 38 50
6	Rated lightning impulse withstand voltage (peak)	kV	75 95 125
7	Rated short-circuit breaking current	kA	40 31.5 31.5
8	Rated short-circuit making current	kA	100 80 80
9	Withstand current and duration	kA/s	40/3 31.5/3 31.5/3
10	Rated peak withstand current	kA	100 80 80
11	Short-duration power-frequency withstand voltage of auxiliary and control circuits	kV	2 2 2
12	Degree of protection — Enclosure	—	IP4X IP4X IP4X
	Degree of protection — Compartment	—	IP2X IP2X IP2X
13	Loss of service continuity category	—	LSC2B LSC2B LSC2B
14	Cooling mode	—	Self-cooling* Self-cooling* Self-cooling*
15	Allowable internal arc duration	s	1 1 1

Note: If the rated current ≥3150A, air cooling should be adopted..



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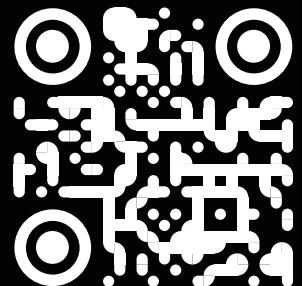
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