

KYN28-12 Removable AC Metal-clad Switchgear

Summary

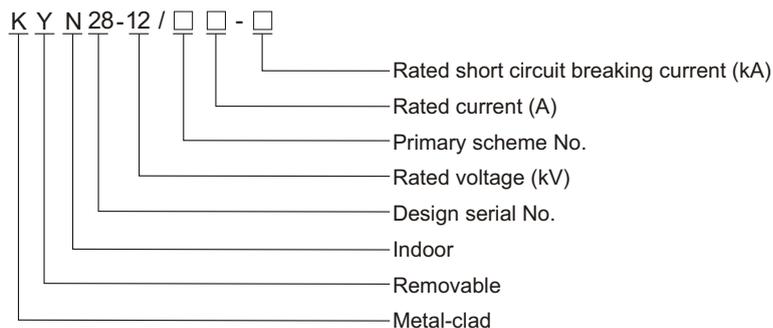
KYN28-12 removable AC metal-clad switchgear (short for panel as below) is a new product, designed and developed by HEAG Group, based on the introduction of advanced foreign design and manufacturing technology. It will be a substitute for old fashioned metal-enclosed switchgear, such as KYN-12, JYN-12, GFC-12, etc. The panel applies to 3.6~12kV 3 phase AC 50Hz network for receiving and distributing power energy and also for control, monitor and protection. It can be arranged for single busbar, single busbar sectionizing system or double busbar. It accords with IEC62271-200 AC Metal Enclosed Switch and Control Equipment above 1kV and below 52kV IEC60694 Standard Common Clauses for HV Switchgear, DIN. VDE AC Switchgear at Rated Voltage Above 1kV, GB3906 3~35kV AC Metal Enclosed Switchgear and so on. It has perfect and reliable prevention function against misoperation.



Ambient condition

1. Ambient temperature: $-10^{\circ}\text{C}\sim 40^{\circ}\text{C}$; daily average $\leq 35^{\circ}\text{C}$;
2. Altitude: $\leq 1000\text{m}$;
3. Relative humidity: daily average $\leq 95\%$, monthly average $\leq 90\%$;
4. Earthquake intensity: ≤ 8 degree;
5. Applicable occasions should be free from inflammables, explosives, corrosives and severe vibration.

Model



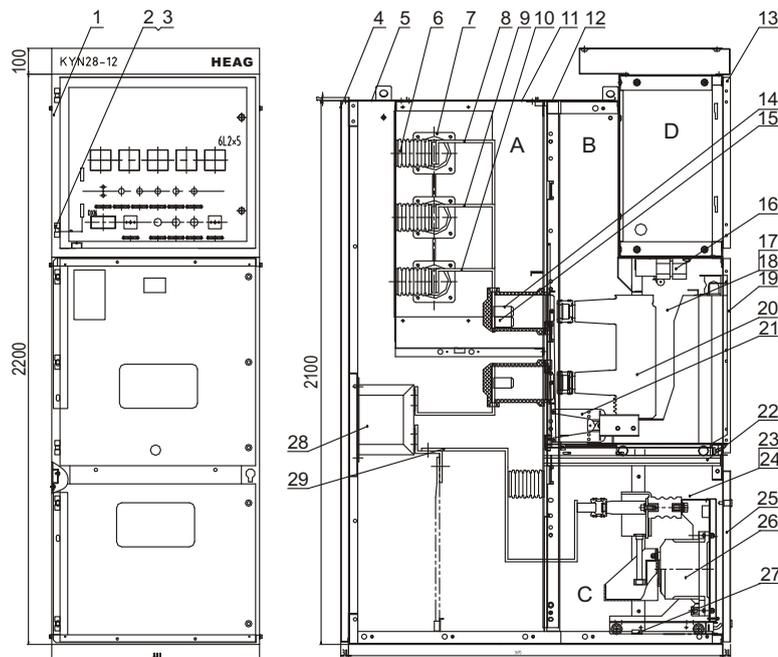
Structure feature

The enclosure is made of aluminium-zinc plated steel sheet by CNC machine, high precise dimension, short production cycle, excellent mechanical strength and nice appearance. The busbar compartment, VCB handcart compartment, cable compartment and relay compartment are separated by metal sheet. Flexible operation for handcart movement, clear position instruction, the earthing switch allow to making short circuit current and creditable mechanical interlock. It fit with many kinds of handcart circuit breaker such as VD4, VS1 and VHY1-12 etc, and also select FK(R)N32-12 fixed load breaker switch or VC series vacuum contactor. The panel adopts air insulated, the door of circuit breaker have the function of anti- explosion, tested by internal electric arcing fault, without any welding contacts on the panel, mechanical and electrical locking design, the product conforms to GB 3906, GB/T11022, IEC 62271-200, DL/T404 standards, and passed domestic and Netherlandish KEMA test.

Technical specification

Item		Unit	Data
Rated insulation level	1min power frequency (phase to earth / across open contacts)	kV	42/48
	Lightning impulse withstand voltage (phase to earth/across open contacts)	kV	75/85
Rated voltage		kV	12
Rated frequency		Hz	50/60
Rated current		A	630~4000
Main busbar rated current		A	1250,1600,2000,2500,4000
Branch busbar rated current		A	630,1250,1600,2000,2500,3150
Rated short time withstand current(4s)		kA	16,20,25,31.5,40,50
Rated peak withstand current		kA	40,50,63,80,100,125
Protection degree			Enclosure IP4X, IP2X(VCB door opened)
Outline dimension(width × depth × height)		mm	650(800,1000) × 1500(1300,1670,2000) × 2200
Weight		kg	800~1200

Structure drawing



A.Busbar compartment B.Circuit breaker compartment C.Cable compartment D.Metering compartment

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|-----------------------------------|-------------------------------------|--------------------------------------|
| 1. Framework | 11. Top Cover of Busbar Compartment | 21. Interlock & Shutter System |
| 2. Hinge | 12. Top Cover of VCB Compartment | 22. Earthing Switch Interlock |
| 3. Middle Hinge | 13. Door of Instrument Compartment | 23. Left Plate of Cable Compartment |
| 4. Rear Plate | 14. Contact Box | 24. Right Plate of Cable Compartment |
| 5. Top Cover of Cable Compartment | 15. Fixed Contact | 25. Door of Cable Compartment |
| 6. Post Insulator | 16. Fixing Plate of Aerial Socket | 26. PT handcart |
| 7. Busbar Bushings | 17. Left Plate of VCB Compartment | 27. Earthing Busbar |
| 8. A-phase Busbar | 18. Right Plate of VCB Compartment | 28. Branch Busbar |
| 9. B-phase Busbar | 19. Door of VCB | 29. Current Transformer |
| 10. C-phase Busbar | 20. Vacuum Circuit Breaker | |