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 sectionlizing 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℃~40℃; daily average ≤ 35℃;
2. Altitude: ≤1000m;
3. Relative humidity: daily average ≤95%, monthly average ≤90%;
4. Earthquake intensity: ≤8 degree;
5. Applicable occasions should be free from inflammables, explosives, corrosives and severe vibration.

Model

K Y N 28-12 / □ □ - □

- Rated short circuit breaking current (kA)
- Rated current (A)
- Primary scheme No.
- Rated voltage (kV)
- Design serial No.
- Indoor
- Removable
- Metal-clad

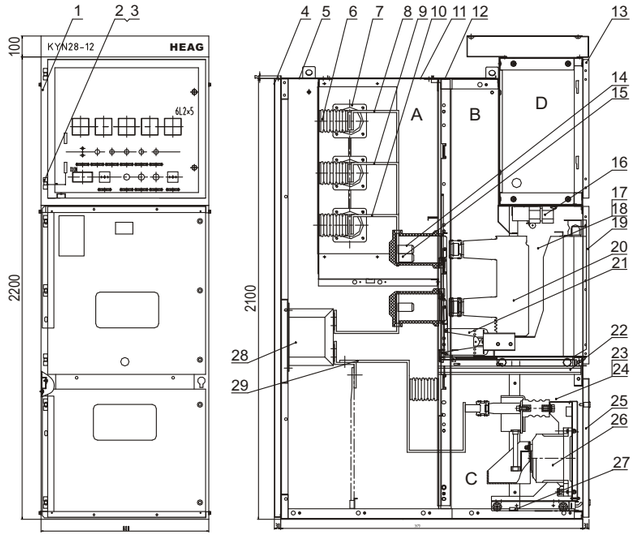
Structure feature

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

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