SIEMENS

Ingenuity for life

up to 17.5 kV, up to 40 kA

NXAIR – "Enjoy the Air"

Air-Insulated Medium-Voltage Switchgear

Switch-disconnector panel with HV HRC fuses for NXAIR up to 17.5 kV, up to 31.5 kA

More than 480,000 air-insulated switchgear panels of Siemens are presently in operation worldwide, and medium-voltage switchgear type NXAIR is the ideal basis for building up a reliable power grid. NXAIR is continuously developed and improved in order to implement the latest requirements of both markets and customers. This provides safety in all respects – today and in the future.

A particularly important aspect is the stable supply of the switchgear's auxiliary circuits. Lighting, air conditioning, as well as protection and control devices are often fed by battery systems that obtain their energy from auxiliary transformers.

For switching and protecting such transformers in subordinate and main substations, panels equipped with a switch-disconnector/fuse combination are installed as a rule.

The new NXAIR switch-disconnector panels with HV HRC fuses have been developed exactly for these cases of application. They can be installed in switchgear up to 31.5 kA without any problems, and protect transformers up to 1250 kVA reliably. The panels offer maximum personal safety thanks to internal arc classification IAC A FLR 31.5 kA, 1 s, as well as high availability thanks to loss of service continuity category LSC 2A.

NXAIR is completely type-tested acc. to IEC 62271-200, IEC 62271-102, and IEC 62271-105. The switchgear ratings are partly beyond the requirements of the IEC standards.

Thus, NXAIR stands out for maximum operational and personal safety, maximum reliability, and operator friendliness.

Compact design, low maintenance, and easy, reliable technology make NXAIR an investment that will pay off throughout its entire lifecycle.

Your benefits

- Saves lives
- Saves money
- Ensures peace of mind
- Increases productivity
- Preserves the environment

Technical data of switch-disconnector panel with HV HRC fuses

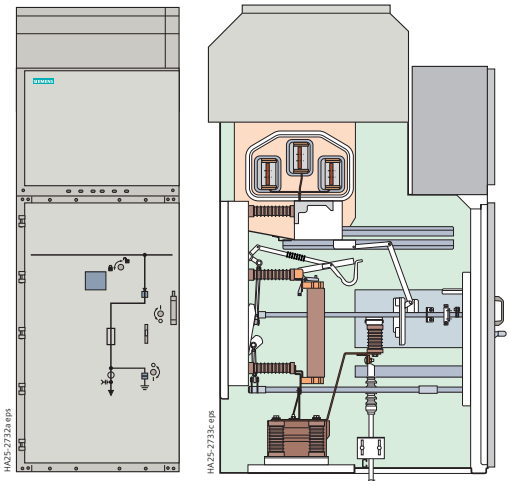
Rated values			
Rated voltage	kV	≤ 12	17.5
Rated frequency	Hz	50/60	50/60
Rated short-duration power-frequency withstand voltage	kV	28/42 [1)]	38
Rated short-duration power-frequency withstand voltage (open isolating distance)		32/48 [1)]	45
Rated lightning impulse withstand voltage	kV	75	95
Rated lightning impulse withstand voltage (open isolating distance)		85	110
Rated short-time withstand current (3 s) (max.)	kA	31.5 [2)]	31.5 [2)]
Rated short-circuit making current (max.)	kA	80/82 [2)]	80/82 [2)]
Rated peak withstand current (max.)	kA	80/82 [2)]	80/82 [2)]
Rated normal current of busbar (max.)	A	4000	4000
Rated normal current of feeder (max.)	A	200 2)	200 [2)]
Rated normal current of the HV HRC fuse (max.)	A	80	80
Dimension of HV HRC fuse	mm	442	442
Transformer ratings to be protected (max.)	kVA	800	1250
Panel width	mm	800	800
Panel height	mm	2350	2350
Panel depth	mm	1350/1500	1350/1500

1) GOST standard 2) Feeder dependent on the HV HRC fuse-link

Technical features

- Factory-assembled, type-tested switchgear according to IEC 62271-200
- Loss of service continuity category LSC 2A
- Partition class PI
- Switchgear with internal arc classification according to IAC A FLR for an arc duration of 1 s
- Compact design
- Fixed-mounted switch-disconnector/ fuse combination tested acc. to IEC 62271-105
- All switching operations can only be performed with closed high-voltage door
- Positively driven shutter between busbar compartment and switching-device/ connection compartment
- Unambiguous position indicators and control elements as standard on the high-voltage door
- Use of low-maintenance switch-disconnectors
- Type testing of earthing switch and switch-disconnector in the panel
- Transformer protection up to 800 kVA at 12 kV or 1250 kVA at 17.5 kV
- Optionally with current transformers

Basic panel design



Panel with switch-disconnector/fuse combination

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