

Switchgear **KONČAR**

Low, Medium & High Voltage

Discover products that can be used in electric power transmission, primary or secondary distribution applications with AIS or GIS technology





About Us

Production of high and medium voltage apparatus started in 1946, at main location Fallerovo šetaliste, Zagreb.

Through time with strong dedication and will, we gained experience sufficient to successfully introduce new products such as SF₆ and vacuum circuit breakers, disconnectors, GIS and air insulated metal enclosed switchgear.

Customer satisfaction and investment in research and development are fundamental principles of the company. Principles that ensure permanent place on the world map of medium and high voltage switchgear producers.

75

years' experience

High Voltage

K8D.6-N

Gas insulated switchgear for indoor applications from 110 kV to 145 kV, 3150 A and 40 kA short circuit rating.

With standardized three phase encapsulated module blocks, K8D.6-N offers a maximum level of flexibility with small footprint. It is the ideal solution for a substation with limited space dimensions, harsh environment or for optimization of substation's layout.

Eco-efficiency is enhanced by segregation concept applied to each module with specifically designed lean enclosures. Due to an optimization, the quantity of SF₆ gas has been reduced.

The circuit breaker is equipped with spring charged operating mechanism and can be single or three pole operated.

Short installation and commissioning time is a result of fully factory assembled switchgear, tested, packed and shipped as one bay with local control cubicle.

Optimum balanced design and high quality materials provide low life cycle costs and a service life of more than 30 years.



8E1

Live tank circuit breaker for outdoor applications from 110 kV to 123 kV, 3150 A and 40 kA short circuit rating.

8E1 is specifically designed to provide a high level of reliability, even under extreme conditions and climates.

The circuit breaker is completely factory preassembled prior to delivery, allowing for quick, easy installation and commissioning with long intervals between maintenance.

Depending on the requirement, the circuit breaker can be three-pole or single-pole operated.





CB-N2

Horizontal center break disconnectors for outdoor applications from 110 kV to 420 kV, 4000 A and 63 kA short circuit rating.

Depending on the customer's request there is single, double or three phase version with or without earthing switch.

For transferring load from one bus to the other disconnectors are fitted with bus transfer switching contacts.

The CB-N2 has dead center interlocking making it maximum reliable under severe conditions such as high wind or heavy ice and it is virtually maintenance free.



Z

Free standing earthing switches for outdoor applications from 110 kV to 420 kV, 2500 A and up to 40kA short circuit rating.

Earthing switches are available in single, double or three phase version.

For grounding a transformer neutral point the earthing switch is equipped with suitable insulators both under the supporting frame and along the vertical driving shaft.

Medium Voltage

KSMV

Gas insulated metal enclosed switchgear for primary distribution from 24 kV to 38 kV, 2500 A and 31.5 kA short circuit rating.

All live parts are placed in SF₆ gas insulated steel containers, which provide mutual insulation of current path elements, as well as insulation to the earth level potential. Busbar compartments are also gas insulated, hermetically closed and sealed for minimum 25 years.

The electric arc quenching takes place in vacuum interrupters built in circuit breakers and load break switches. SF₆ gas is not used as arc-quenching medium, which provides complete environment acceptability and eliminates operational maintenance of the primary circuits.

Use of vacuum circuit breaker and robust components offer a maintenance free switchgear up to 10 years and a service life of more than 30 years.



KSMA

Gas insulated metal enclosed switchgear for primary distribution from 24 kV to 38 kV, 2500 A and 31.5 kA short circuit rating.

Busbar and cable connections between the modules are performed by insulated busbars or cables with plug-on connectors according to IEC 60502 and DIN 47636 standards.

Other live parts are placed in SF₆ gas insulated steel containers, which provide mutual insulation of current path elements, as well as insulation to the earth level potential.

The electric arc quenching takes place in vacuum interrupters built in circuit breakers and load break switches which ensures maintenance free equipment up to 10 years and service life of more than 30 years.

Nominal parameters have been confirmed by tests performed in accordance with IEC standards.



VDA & VDAP

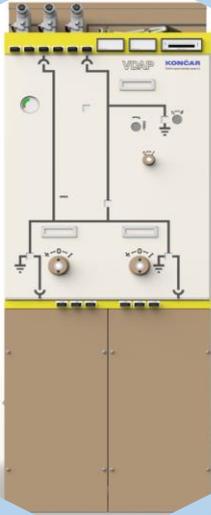
Vacuum compact cubicles series VDA & VDAP are manufactured for rated voltages 12, 17.5, and 24 kV. The main purpose of compact switchgear is energy distribution in transformer substations and nodal points of distribution networks.

Both solutions are designed for indoor installation with overall dimensions considerably reduced in comparison with classic air insulated cubicles.

Compact switchgear series VDA & VDAP are highly reliable due to implementation of vacuum circuit breakers and are completely independent on environmental conditions.

The difference between VDA & VDAP is that VDAP has an ability to extend on customer request while VDA is a fixed compact rig main unit.

Products are type tested under IEC 62271-200 and IEC 62271-1.



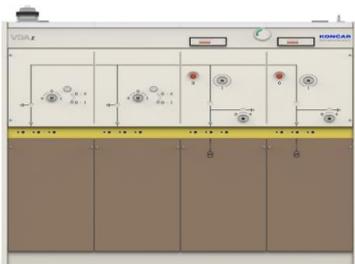
VDAΣ

Medium voltage compact switchgear (ring main units) series VDAΣ are designed for secondary distribution of electrical energy in transformer substation up to 2500 kVA; 10(20)/0.4 kV. With rated nominal insulation level for 24kV it covers 12, 17.5 and 24kV operating voltages.

VDAΣ is an indoor solution type tested in accordance with IEC 62271-200 i IEC 62271-1 which can be extended at customer request.

Having a vacuum circuit breakers and *minimized overall dimensions, VDAΣ provides space saving technology and high reliability.

*in comparison to classic air-insulated switchgear equipped with load break switches.



BVK

Air insulated metal enclosed and compartment switchgear for primary distribution from 12 kV to 36 kV, 3150 A and 40 kA short circuit rating.

BVK is a highly modular type built with well-proven components. Metal sheets segregate each compartment and the energized components are air insulated.

Based on requirements it can be offered as a single or double busbar system with withdrawable vacuum circuit breaker specifically designed to provide a high level of reliability under extreme conditions.

Use of vacuum circuit breaker and robust components offer a maintenance free switchgear up to 10 years and a service life of more than 30 years.



VK & VKΣ

Vacuum circuit breaker for indoor applications from 12kV to 38 kV, rated current up to 3150 A and 40 kA short circuit rating.

VK series is designed as three or single pole unit with vacuum interrupter placed into insulating cylinder.

VKΣ series is designed as three or single pole unit with poles fully epoxy resin insulated. The overall dimensions of the circuit breaker are reduced by use of multicontact instead of flexible connection.

Both series use reliable spring charged operating mechanism which ensures 20.000 switching operations with virtually free maintenance.

VK and VKΣ are designed and tested in accordance IEC standards.



RU & RSN

Medium voltage disconnecter switches RU for voltages from 12kV to 38 kV, up to 2500 A and 50 kA short circuit rating.

It comes as single or three pole version and can be manual or motor operated. The disconnectors can be equipped with earthing blades either at opening or rotating side of the main blades.

Medium voltage disconnecter switches type RSN are indoor type, for voltages 12kV and 24 kV, 630 A and up to 20 kA short circuit rating.

RSN is equipped with HRC fuse and can breaker short circuit current. Blown fuse in any phase automatically causes three-pole tripping of the disconnector switch.

Fuse-switch combination can replace the combination of circuit breaker and disconnector at the network points where rapid auto-reclosing is not required.



Low voltage

VMF & VMI

Low voltage switchgear assembly type VMF & VMI for indoor applications, 660 V, 3000 A and 50 kA short circuit rating.

VMF is used as distribution or sub-distribution in power plants, industrial complexes or public buildings.

The VMI series has the same task as VMF. Although, VMI is designed with withdrawable apparatus while VMF has fixed apparatus.



VMF-K

Power factor correction switchgear assemblies VMFK with rated power up to 1200 kVAr have application in distribution plants and industrial complexes.

VMFK is designed with automatic reactive power regulation in plants without harmonics where reactive power consumption is high and fluctuating. It can be installed as single unit or as modular unit that can be added to existing VMF or VMI low voltage switchgear assembly.



KTS & VTS

The prefabricated concrete or containerized transformer substations are designed for public or industrial distribution needs for up to 30kV.

The main components are: power transformers, medium and low voltage switchgear, interconnections and auxiliary switchgear and circuits.

All substations are factory assembled and tested in accordance with IEC standards ensuring safe and reliable operation.

Short delivery times and putting into operation within days makes them ideal for customers who request prompt and efficient solution.

The modular design allows a quick dismantling for easy relocation or for use as auxiliary substation during repair of existing primary substation.



ISO/OHSAS Certification

We have been certified by a third party in accordance to the ISO 9001:2015, ISO 14001:2015 and OHSAS 18001:2007 standards. These certificates provide proof of the excellent quality, health, safety and environmental management we have in place in our company. The safety of both your and our employees and the environment is our number one priority.



The ISO 9001:2015 standard is based on a number of quality management principles including a strong customer focus, the process approach and continual improvement and the motivation and implication of top management. Using the ISO 9001:2015 standard helps ensure our customers get consistent, good quality products and services.



ISO 14001:2015 provides a framework for our company to achieve the intended outcomes of our environmental management system, which provide value for the environment, our company itself and you.



The purpose of OHSAS 18001 is to help organizations to manage and control their occupational health and safety risks and to improve their occupational health and safety performance. We have achieved this purpose by developing an occupational health and safety management system that complies with the standard.

IEC Certification

The International Electrotechnical Commission (IEC) is the leading global organization that publishes consensus-based international standards.

Those standards addresses product development, performance, compatibility and related topics in order to ensure product compatibility and environmental safety.

We at KONČAR Switchgear Inc. recognize the importance of standards and all our products are designed in accordance with IEC.

In order to ensure our clients with proven performance and quality, our equipment is type tested in world well known and recognized laboratories such as: KEMA Netherlands, CESI Italy and ICMET Romania.





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