

MV/LV package substation solutions

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MV/LV Outdoor Package Substations

Application: Outdoor 11kV MV / LV Substation
Performance: Up to 11kV, 200kVA – 4000kVA

Flexibility

Various tailored configurations utilising class-leading components:

- Medium voltage switchgear - Extensible and non-extensible Ringmaster range
- LV SAIF or Shielded Fusegear and NS Feeder Pillar options using circuit breaker technology
- EcoDesign Tier 2 low-loss Transformers, from 200kVA to 4000kVA, free-breathing or hermetically sealed, ONAN / KNAN, Aluminium or Copper windings
- Simple and Quick installation



MV/LV Outdoor Package Substations

Application: Outdoor 11kV MV / LV Substation

Performance: Up to 11kV, 200kVA – 4000kVA

Cost Effective

- Direct connectivity for medium voltage to transformer and transformer to low voltage
- Delivered to site fully assembled with full logistics co-ordination
- Single lift operation

Simplicity

- Peace of mind-Proven installed base and world-class components
- Single provider for all components reducing overall installation and commissioning time bringing simplicity to supply chain



Flexibility using class-leading products

Packaged substations are tailored to your **individual requirements** using products from the comprehensive Schneider Electric range, providing a **convenient, single source solution**

MV/LV Package substation components



LV distribution fusegear and feeder pillars – up to 5000A

ENATS 37-1 Issue 3 (2014)

- 400V AC switchgear, controlgear and fusegear assemblies

ENATS 37-2 Issue 5 (2012) - Public Electricity

- Network Distribution Assemblies



MV/LV Transformers up to 4MVA and 11kV

ENATS 35-1 Part 1,2,3,4 Issue 6 (2014)

- Distribution Transformers Part 1,2,3*,4

* Part 3 is close-coupled substations limited to 2MVA



Ringmaster gas insulated switchgear – up to 13.8kV and 21kA

ENATS 41-36 Issue 3 (2012)

- Switchgear for Service up to 36kV

ENA TS = “ENA Technical Standards” - based on global IEC standards but includes local requirements of UK electric networks for public electric distribution.

A fully integrated solution

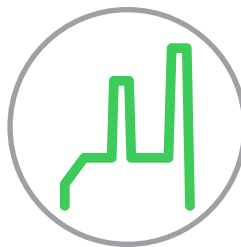
Benefits



- Direct mounting of the MV switchgear and LV fusegear/feeder pillars onto transformer flanges: Smaller foundations



- Costly cabling eliminated: Reduced overheads



- Direct and controlled factory assembly of switchgear onto the transformer: Safe operator protection



- Flexible choice of MV/LV configurations – complete versatility for your needs



- Delivered as a single unit from one provider: Improved logistics



- One point of contact: Easy specification

MDS: Metalclad Distribution Substation

The complete, integrated substation solution
for distribution networks up to 11kV

Find out more

MV/LV Outdoor
Package Substations

Flexibility using class-
leading products

MV/LV Package
substation components

**Metalclad Distribution
Substation**

Example
installations



Metalclad Distribution Substation (MDS)

Application: Outdoor 11kV MV / LV Substation Compliant to IEC62271-202
Performance: Up to 11kV, 200kVA – 1600kVA, *2000kVA available upon request*



Safety

For Operators and General Public

- KEMA Internal Arc tested
Authorised personnel & Public (IAC-AB) according to IEC62271-202
- No arc propagation between MV / LV compartment



Environment

- Integral Bunding to contain 100% of Transformer fluid in case of leakage
- Reduced Total Cost of Ownership; Less concrete foundation & CO2 footprint



Connectivity

- Ability to incorporate intelligent monitoring and control
- Remote Terminal Unit, AC/DC converters



Metalclad Distribution Substation (MDS)

Application: Outdoor 11kV MV / LV Substation Compliant to IEC62271-202
Performance: Up to 11kV, 200kVA – 1600kVA, 2000kVA available upon request



Flexibility

Numerous medium voltage, transformer and low voltage options according to requirements

- Various options of Transformers, RMU / single function CB / Switch – LV fused feeder pillar / LV with ACB or MCB
- Simple and Quick installation
- Single provider for all components bringing supply chain simplicity



Cost Effective

- Direct connectivity for ring main unit to transformer and transformer to low voltage – No interconnection cables
- Delivered to site fully assembled
- Single lift operation
- Reduced footprint provides more valuable space for other onsite processes
- Single point of contact and ordering reducing project management cost



Example installations



Left and middle: Outdoor package substation, fenced without enclosure
Right: 1500kVA pre-fabricated MDS for electric vehicle charging application

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