NOJA Power®

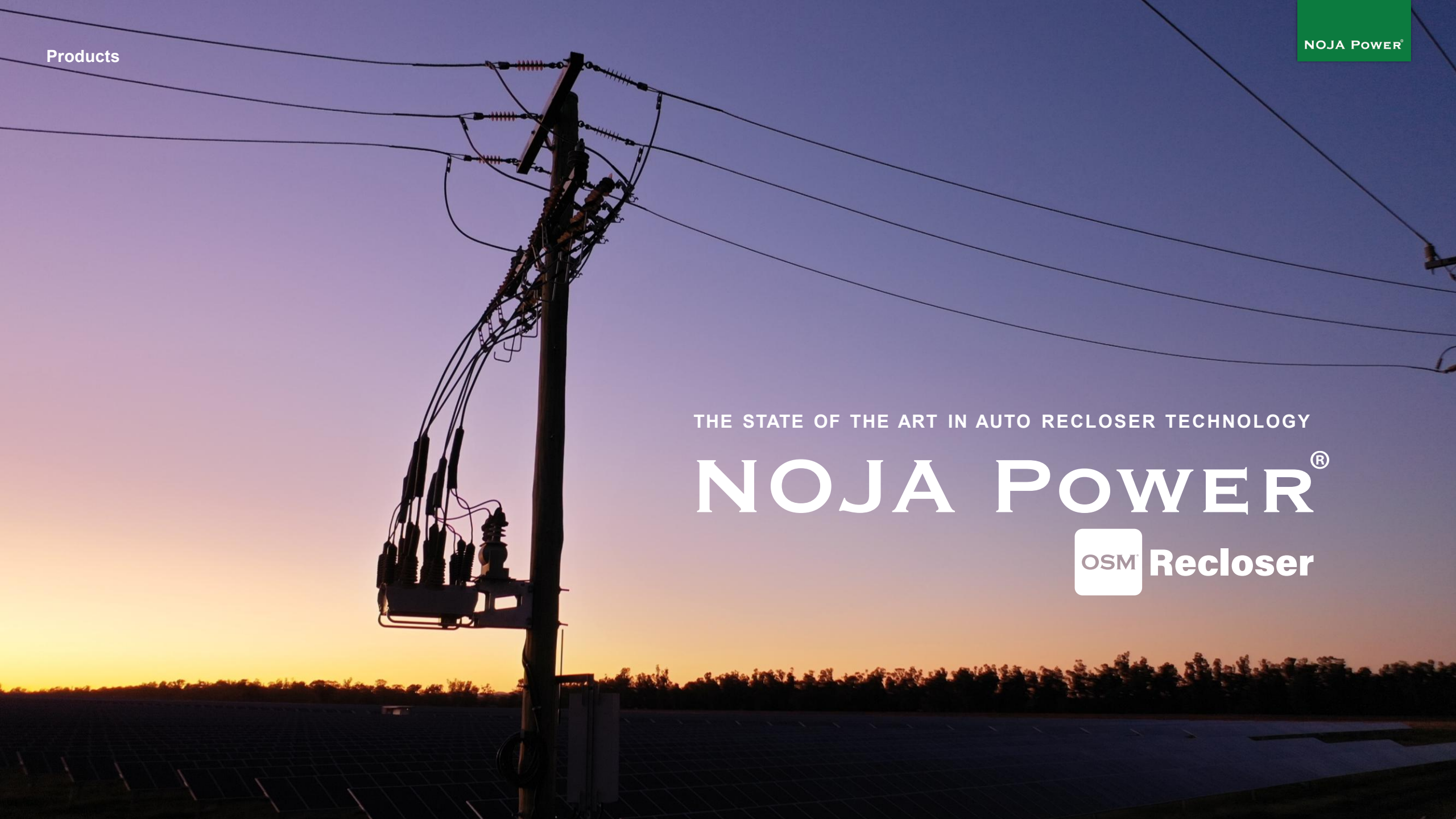
NOJA Power®

GMK Ground Mount Kiosk

Innovation in Integration



NOJA Power®

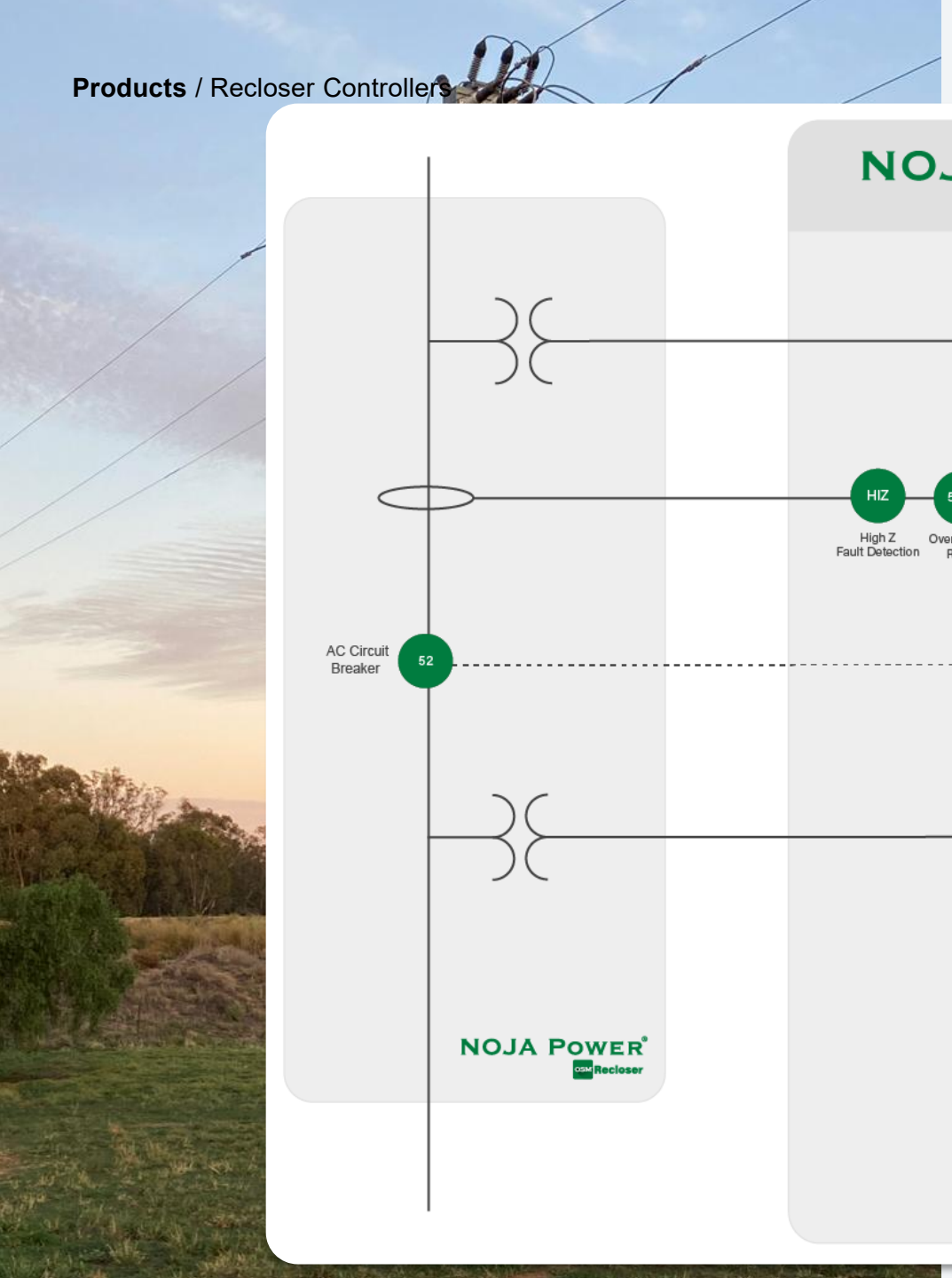


THE STATE OF THE ART IN AUTO RECLOSER TECHNOLOGY

NOJA Power®

OSM Recloser

NOJA POWER



NOJA POWER®
RC Series Controls

Under Voltage Relay
Over Voltage Relay
Vector Shift
Neutral Voltage Imbalance Relay
Frequency Protection

27
59 P
78VS
47N
81 O R U

HIZ — High Z Fault Detection
50 P G Q SG — Overcurrent Relay
51 P G Q SG — Time Delayed Overcurrent
46BC — Broken Conductor
37U — Underpower Protection
32 R U — Overpower Protection
67 P G Q SG — Directional Overcurrent
21YN — Neutral Admittance
21FL — Fault Locator
HRM — Harmonic Relay
PQM — Power Quality Monitoring
51V — Voltage Controlled Overcurrent
PMU — Synchro Phasors
SEC — Sectionalizer
PQM — PQM Up to 63rd Harmonic
25 — Sync Check Auto-Sync Relay
46 — Reverse Phase Relay

AC Circuit Breaker
52

TCM — Trip Circuit Monitor
2 — Time-Delay Closing Relay
3 — Interlocking Relay
79 — Reclosing Relay
86 — Lockout Relay
BF — Breaker Failure

27 — Under Voltage Relay
59 P — Over Voltage Relay
47N — Neutral Voltage Imbalance Relay

LGC — Scheme Logic
RIO — Remote Input/ Output Device
HMI — Human Machine Interface
HST — Historian
ABR — Automatic Backfeed Restoration

LRSS — Local Remote Selector Switch
IR — Inrush Restraint
SGA — Smart Grid Automation
CLP — Cold Load Pickup
ZSC — Zone Sequence Coordination

RC-15/20 ONLY
GPS — GPS Comms
WiFi — Local WiFi
4G — Cellular Comms

16SC — Access Security*
16EC — Hardware Encryption

Standard RC Series Communications Features

RC-20 — RC-20 Only Feature

NOJA POWER OSM Recloser

NOJA Power

GMK
Applications



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Benefits of using NOJA Power GMK



- ✓ Seamless SCADA integration
- ✓ Solid dielectric SF6-Free
- ✓ Integrated protection, metering, isolation

- ✓ Quick installation and commissioning
- ✓ Reduced training as it is familiar for field technicians

- ✓ Common controller and OSM Tank
- ✓ Spares reduction
- ✓ Arc fault venting

NOJA Power

NOJA Power GMK

DER connection solved

- **Solid dielectric true gas free solution**
- Customized to customer and authorities metering requirements – metering VTs and CTs specification, wiring
- Zero maintenance is required (except UPS battery change)
- Equipped with essential anti-islanding protection (ROCOF, LSD, UF, OF, UV, OV)
- Auto-Synch and Synch-Check functionality for generator connection
- NOJA Power RC-20 with inbuilt PMU and advanced measurement capabilities for PQ Monitoring



NOJA Power GMK

Designed to Last

- Unmatched reliability with 30-year life-time
- Stainless steel enclosure suitable for harsh environments
- GMK can be installed on elevated platforms or skids if mobility is required
- Hot-swap controller modules



NOJA Power GMK

Portable switchgear



- Partnership with experts for tailored solutions
- NOJA Power is based in Brisbane, QLD and is open for factory visits and collaboration

NOJA POWER®

NOJA Power GMK

Portable switchgear



- Partnership with experts for tailored solutions
- NOJA Power is based in Brisbane, QLD and is open for factory visits and collaboration

NOJA Power



GMK-1000
Series



GMK-2000
Series



GMK-3000
Series



GMK-4000
Series

NOJA Power

GMK- 2000
GMK- 3000



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NOJA Power GMK-2000

Integrated point of connection



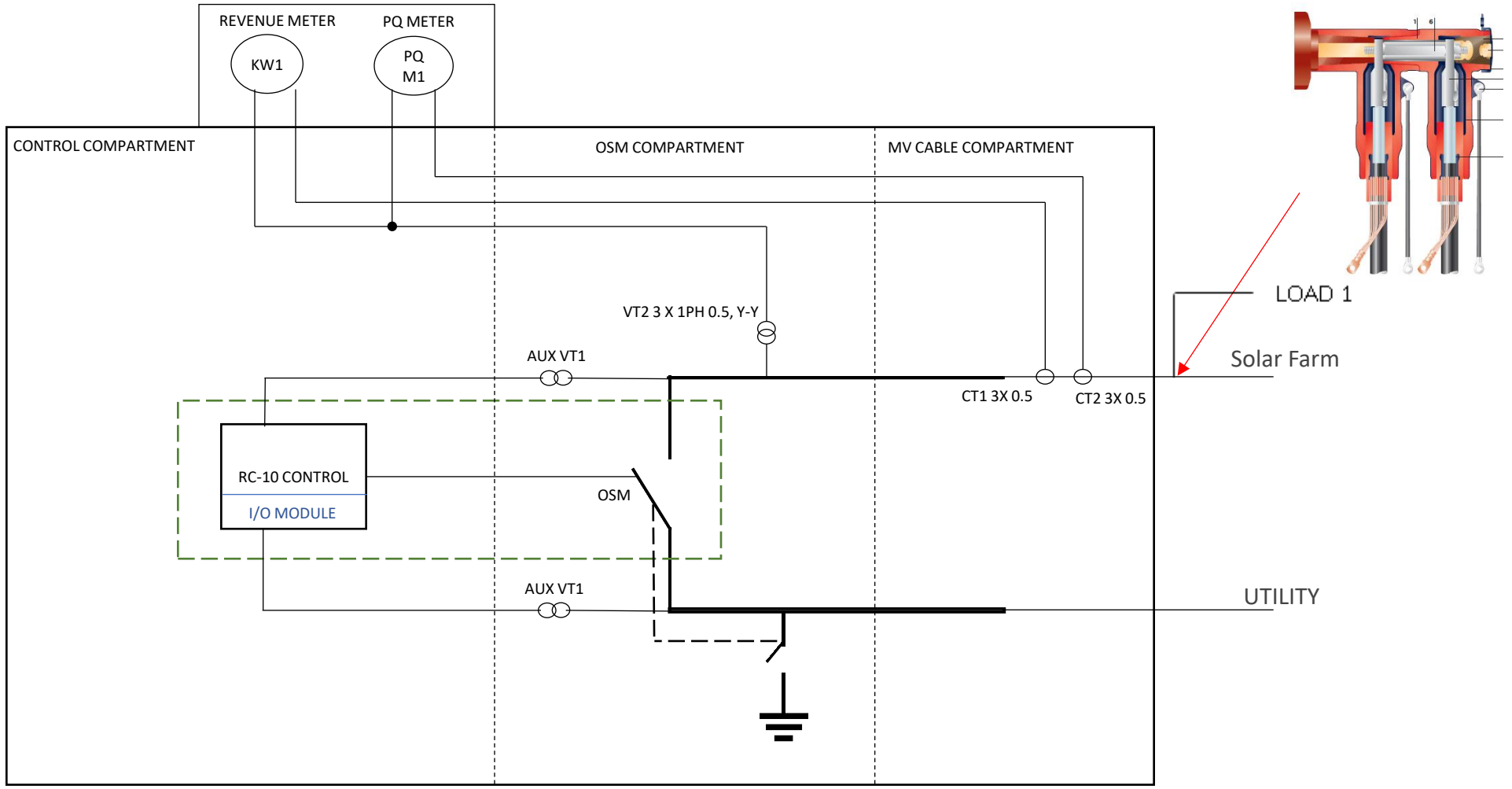
NOJA Power GMK-3000

Arc fault rated GMK enclosure



NOJA Power GMK-2000/3000

Simplified SLD



NOJA POWER

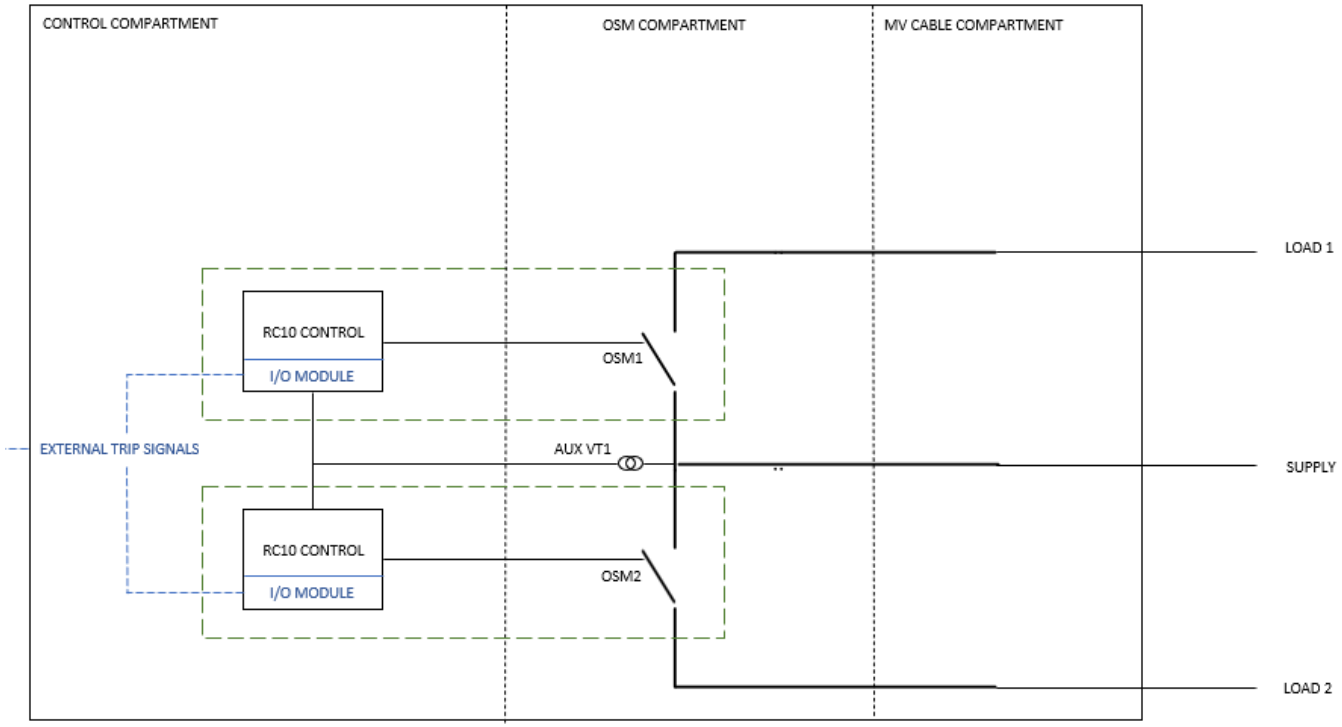
GMK- 4000



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NOJA Power GMK-4000

Two load connection



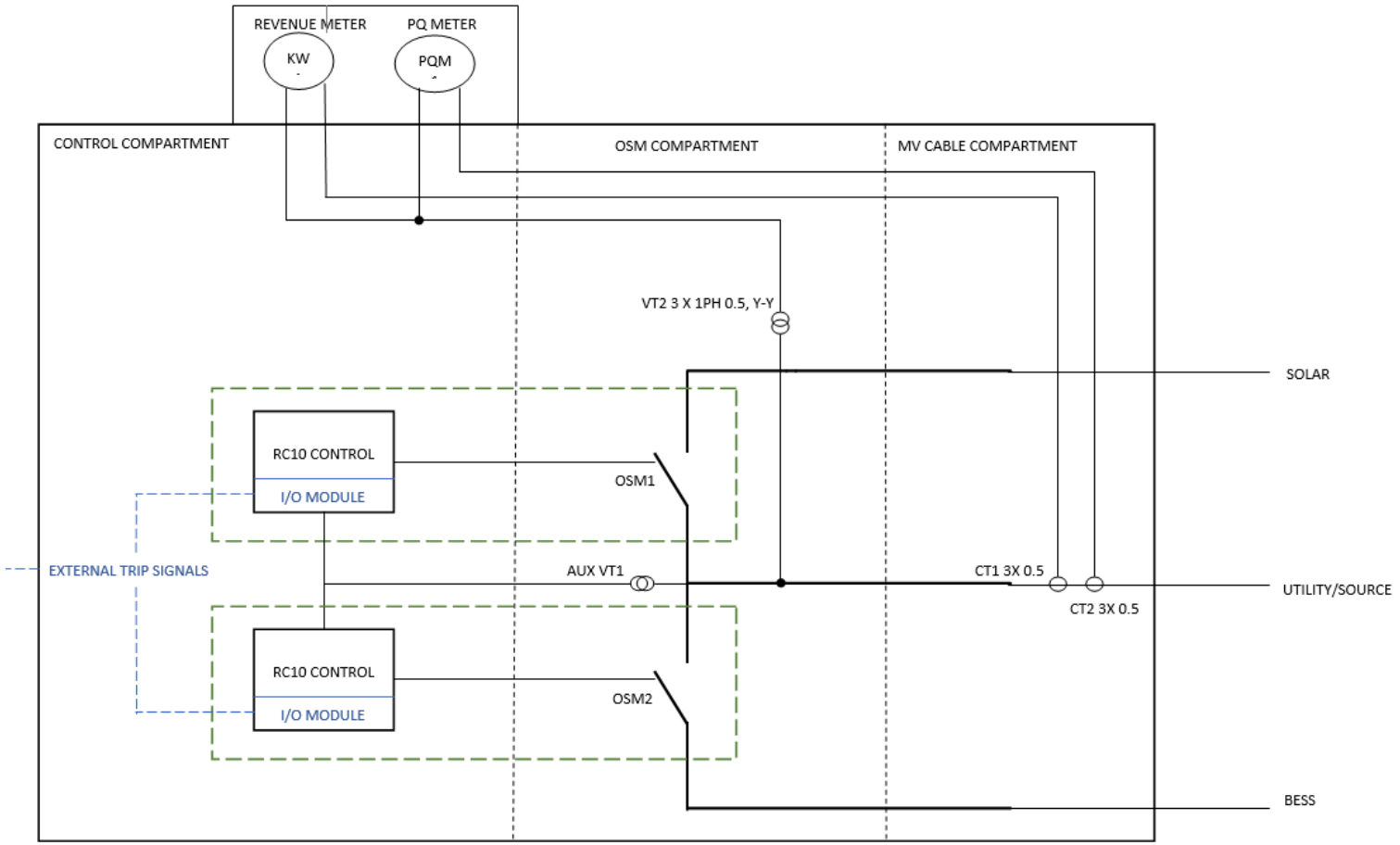


NOJA Power GMK-4000

Hybrid (BESS+Solar) connection point

Highlights :

- Export with Solar during the day
- Export with BESS during the peak evening/night hours
- Keep your export even when one load is under maintenance

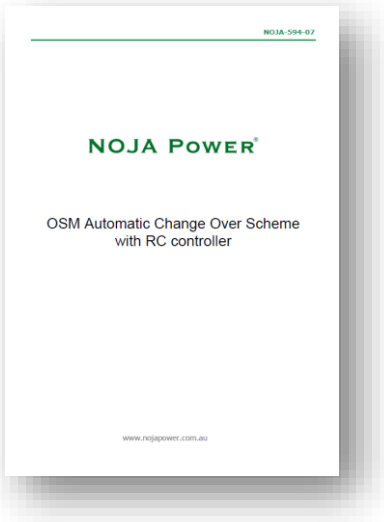


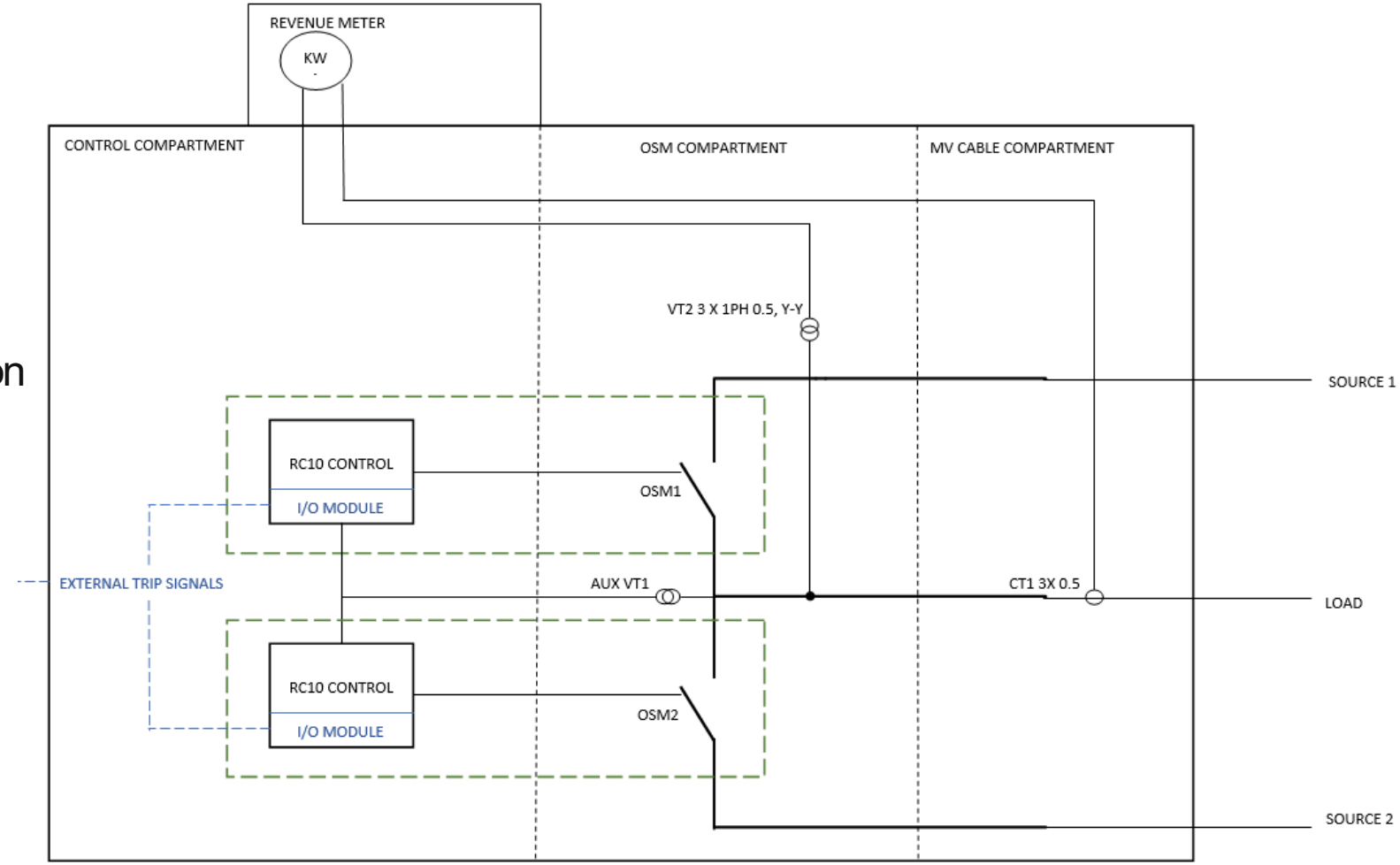
NOJA Power GMK-4000

Auto change over for critical load supply

Highlights :

- Make-before-break = zero interruption
- Break-before-make = momentary interruption





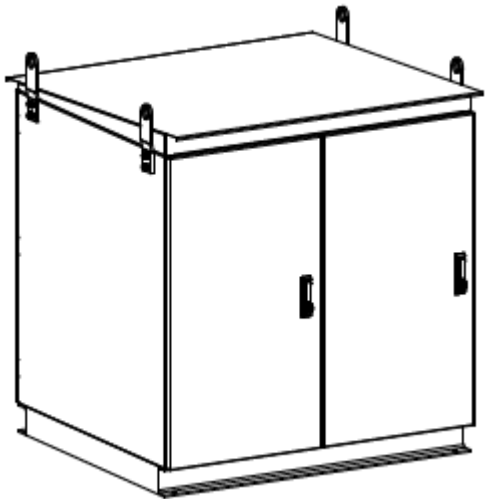
NOJA Power

GMK- 1000

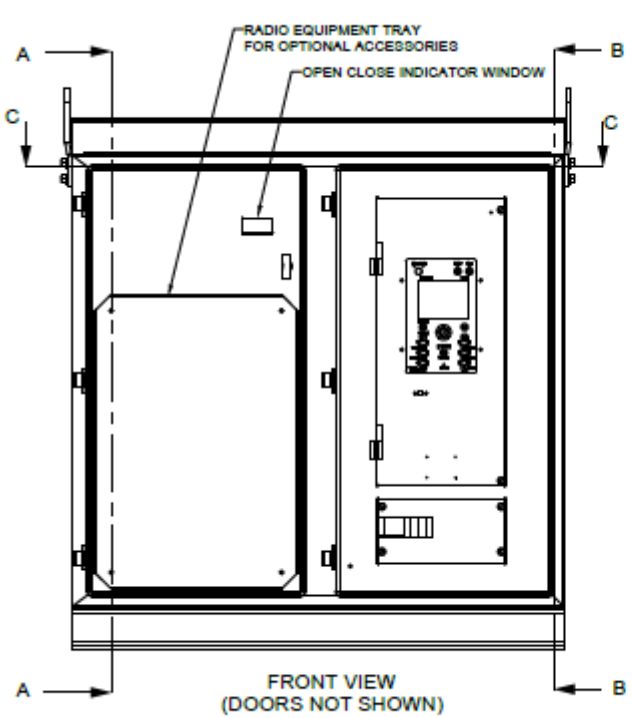


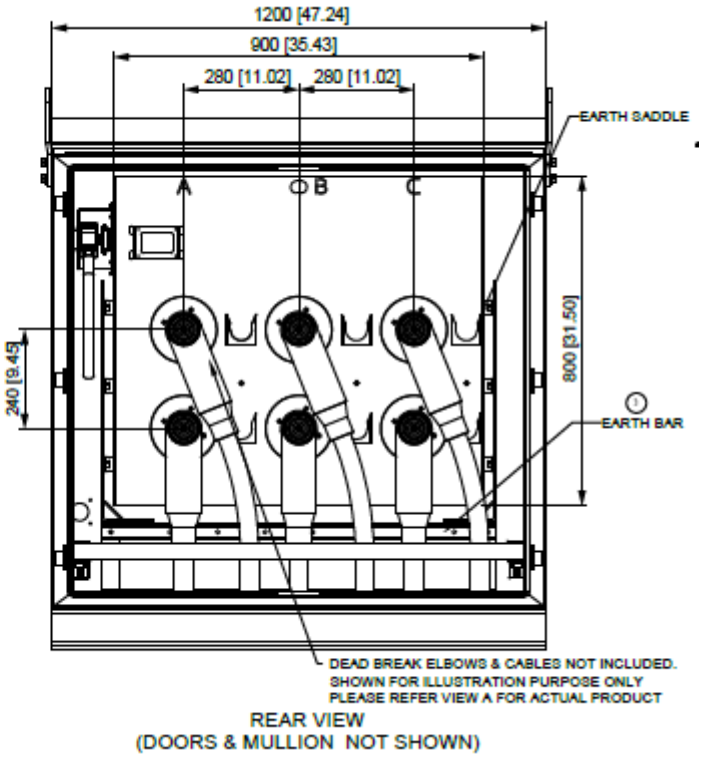
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NOJA Power GMK-1000



- Small footprint – 1.21m²
- Rated up to 27kV
- Nominal current 630A
- Requires Auxiliary Supply
- Direct connection to the OSM Tank





NOJA Power GMK-1000

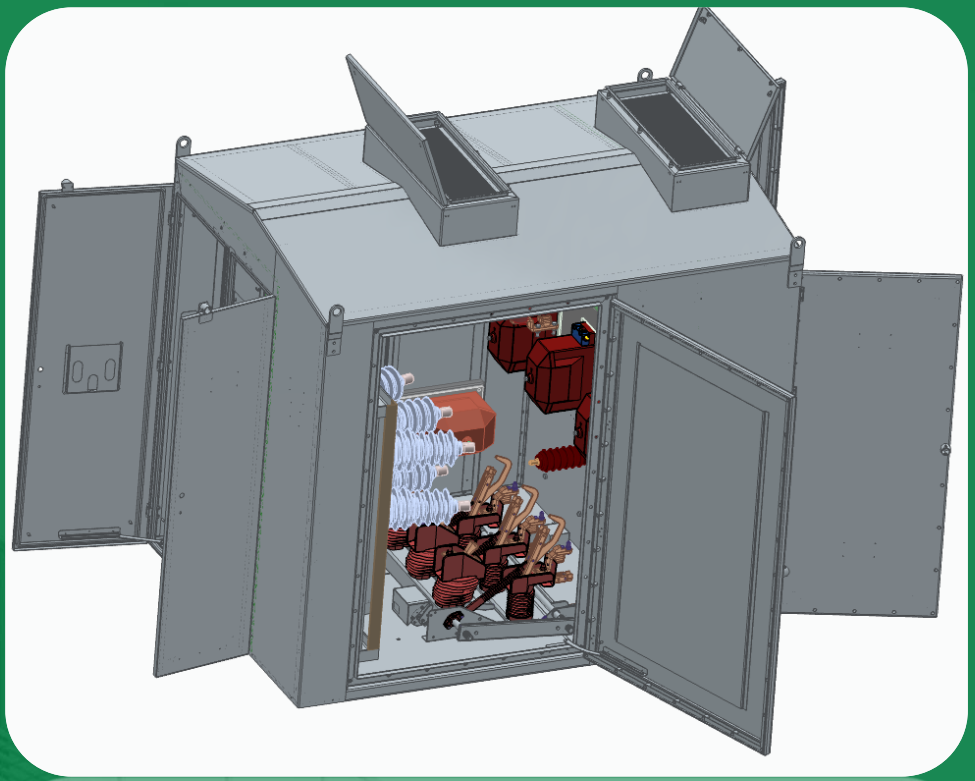
Transportable switchgear



- Small footprint allows GMK-1000 to be installed inside of a container or on a skid for smooth and reliable generator connection using Solid Dielectric Switchgear

NOJA POWER®

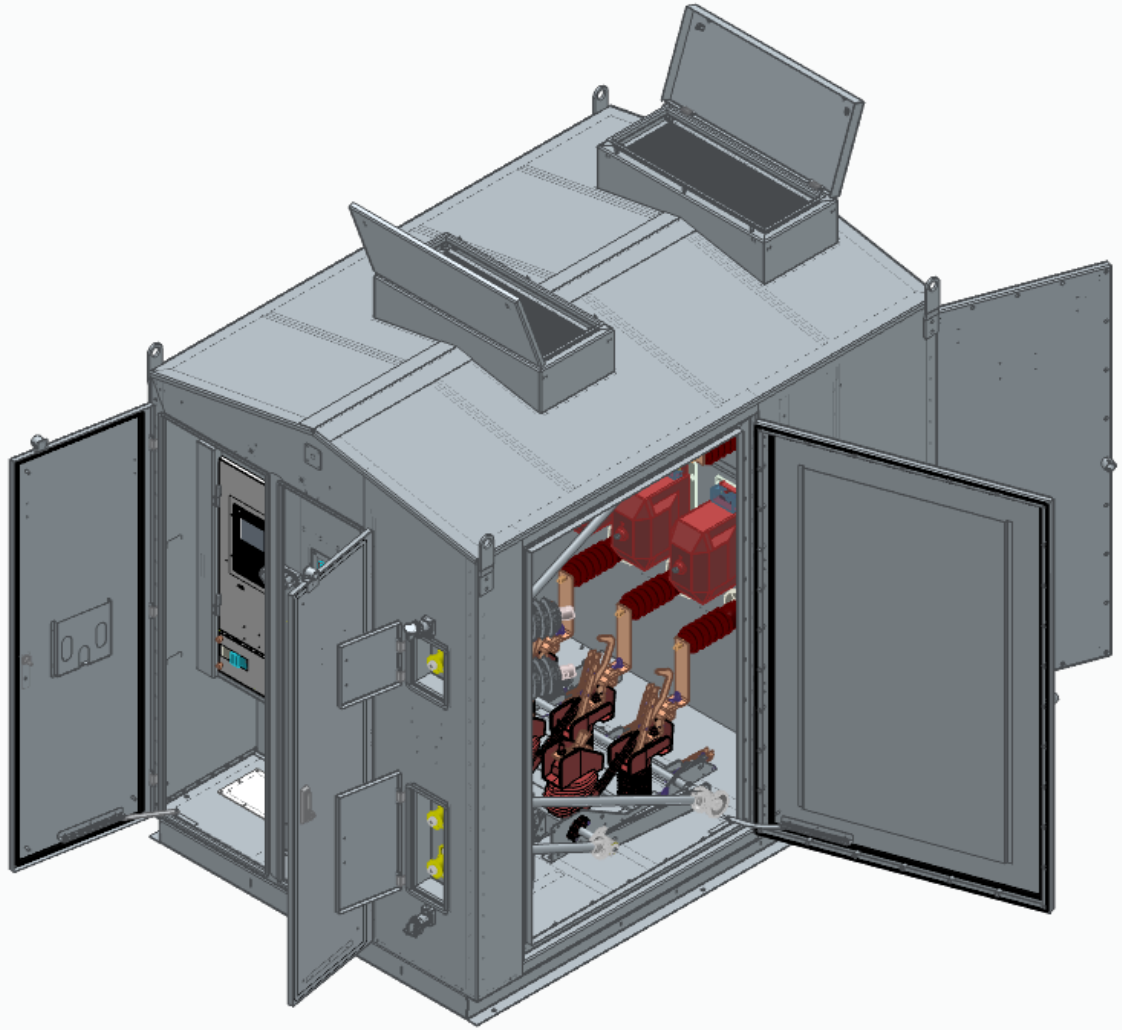
GMK
Isolation Point

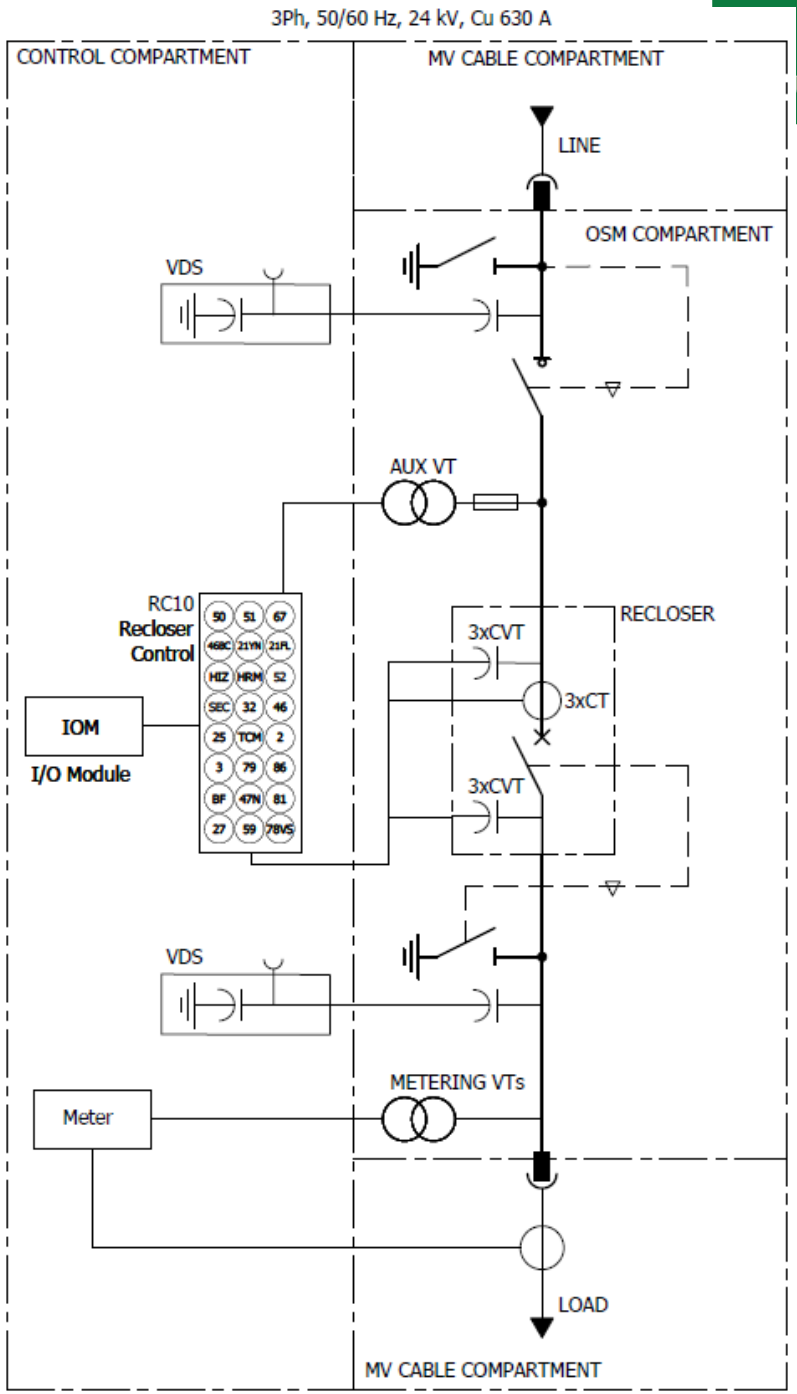


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NOJA Power GMK

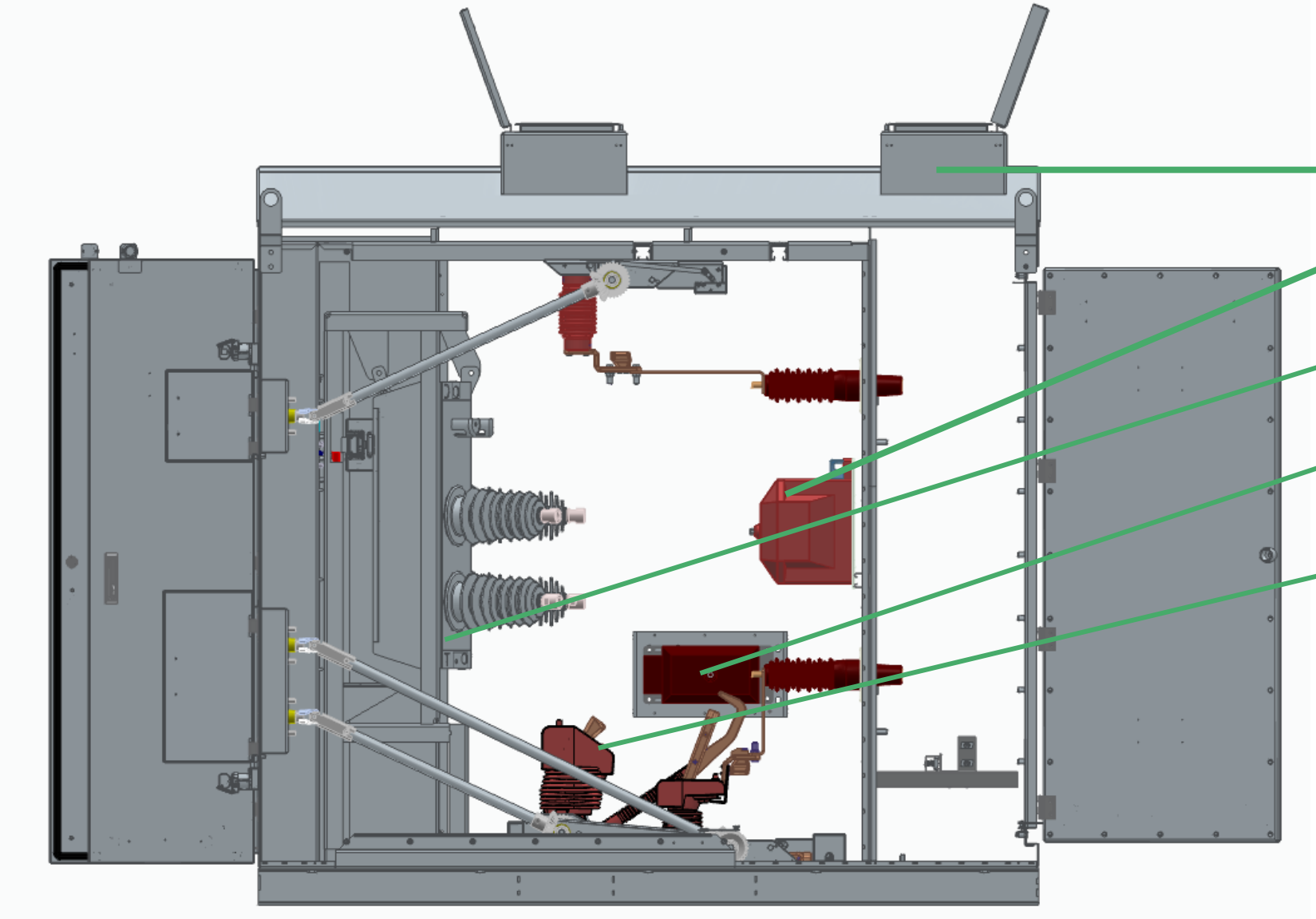
Isolation point with LBS and Earth Switches





NOJA Power GMK

Isolation point with LBS and Earth Switches



Arc Fault vents open

Optional Metering VTs

OSM Recloser tank

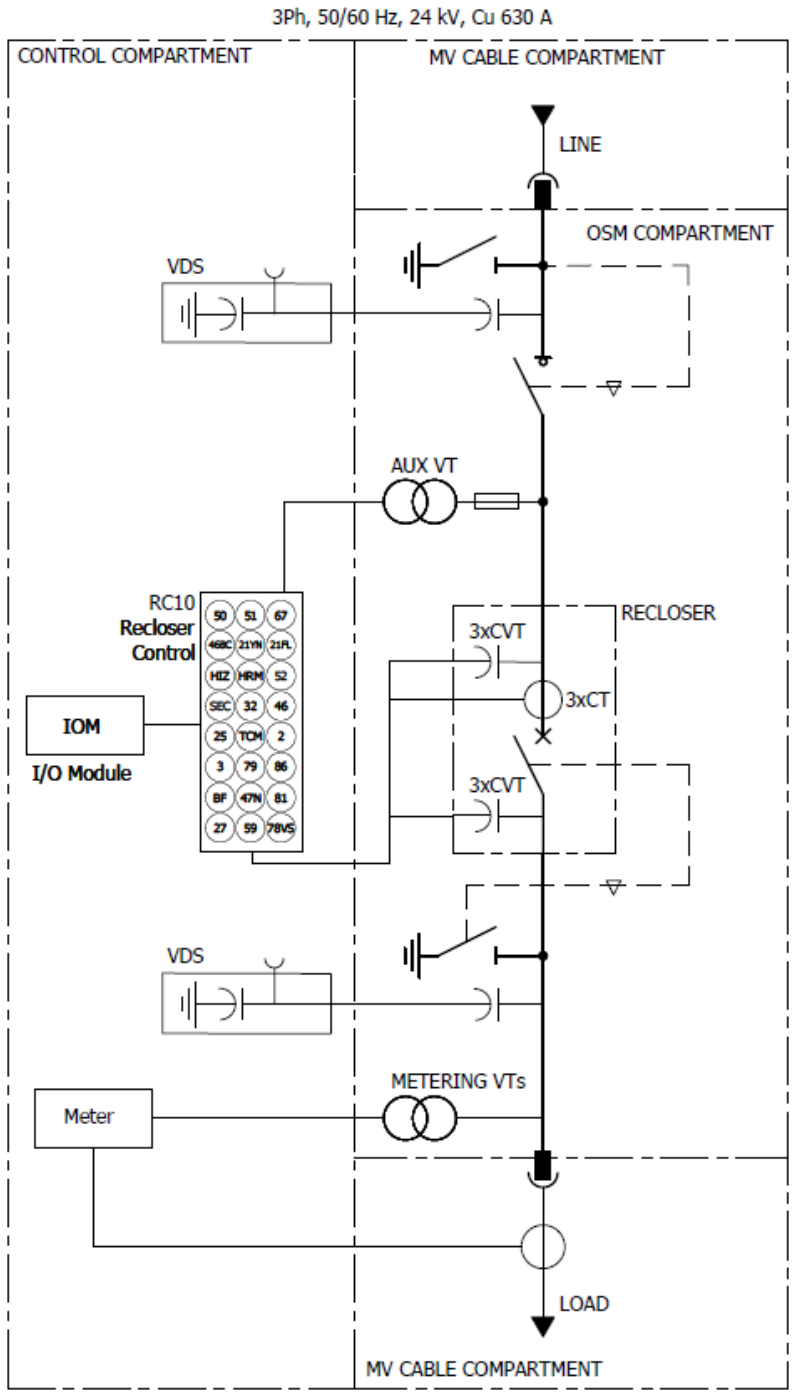
Single Phase Auxiliary VT

Combined Isolator
and Earth Switch

NOJA Power GMK

Isolation point with LBS and Earth Switches

- Dimensions: 2183 mm H x 1609 mm W x 2285 mm D
- Current: 630A
- Voltage: Up to 24kV
- Isc: 16kA for 15kV, 12.5kA for 24kV, 16kA for 24kV coming in 2026
- Line LBS and ES mounted on the bottom side.
- Load ES mounted on the top side.



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NOJA Power GMK

Summary battle card

Functionality	GMK-1000 (only with OSM27)	GMK-2000	GMK-3000	GMK-4000
Full protection including anti-islanding protection (ROCOF, VVS, NVD, UF, OF, UV, OV, LSD)	✓	✓	✓	✓
Small footprint (less than 1.5m²)	✓			
Arc Fault venting			✓	
Extension bay for piggy-back elbows or extra set of metering VTs		✓		✓
Integrated metering		✓	✓	✓
Earth switch (to be confirmed for OSM38 tanks arrangement)		✓	✓	✓
Isolation point with visual break (only up to 24kV system voltage)		✓	✓	
Self-powered design		✓	✓	✓
Two Loads / Auto Change Over setup for critical load			✓	✓

NOJA Power GMK

Key questions

- What is the application for the project?
- Are the single line diagram and other relating requirements defined?
- Does the customer have an experience of using overhead OSM Recloser system?
- Is gas free switchgear critical for the project?
- Is zero maintenance and lifetime important for the project?
- How many loads are planned for the project?

NOJA Power are ready to be involved at any stage of the project with quick lead time of 8-14 weeks EXW



NOJA POWER®

Thank you!

Alexander Kirillov

Sales Manager AUPAC

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