Distribution Solutions

MNS® Rear Low-voltage switchgear with new 6300A system solutions

Release Note

ABB's MNS platform for switchgear has been evolving for over 40 years. Since its inception, the MNS design has focused on the fundamental principles of safety, reliability, modularity and scalability.

Rear access technology in MNS assembly enables space optimized and cost efficient power center and MCC application.

With new features released, MNS Rear futher enhance its best solution to reduce switchgear width, along with main benifits:

Maximum safety

- The outstanding passive arc protection design and complete type tests effectively guarantee the safety of operators and the reliability of equipment operation.

Design-verified

- Using the standard MNS universal panel design, system meets highest standards.

The withdrawable design, providing the highest availability and reliability thus minimizing any loss from an unexpected downtime.

Online re-configuration, where operational procedures allow. Access to cable separated and from rear side for highest operational safety.

Digital option

- Industry 4.0 ready – using digital devices that seamlessly integrate into the ABB Ability™ digital portfolio.

Flexible and bespoke

- Integrates seamlessly to the wider MNS portfolio.

Products replaced

- None

Production site

- China
- Egypt
- India
- Poland
- United Arab Emirates
- Turkey (ToT is on-going)
- Brazil (ToT is on-going)

Sales configurator

- MNS Engineer V2 Release 10.1
- To be ready in next release of MNS Pro Treffo version in 2022

Availability

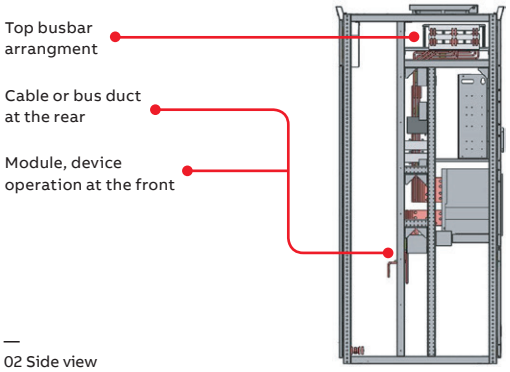
- Offer and delivery from Januaray 2022

Contact persons

- Your normal sales representative
- Your local product specialist or PMD
- Neil-Naitao Zhang, Global Product Manager, MNS Rear, LV Switchgear
- Ajit Arun Deshpande, Global Product Marketing Manager, LV Switchgear
- Paolo Cortese, Global Product Marketing Manager, LV Switchgear
- Scott Douglas, Global Product Marketing Manager, LV Switchgear
- Robertino Scorrani, Global Product Marketing Manager, LV Switchgear

MNS Rear offers a range of benefits.

Full interchangeability of modules between different MNS designs for front or rear access.



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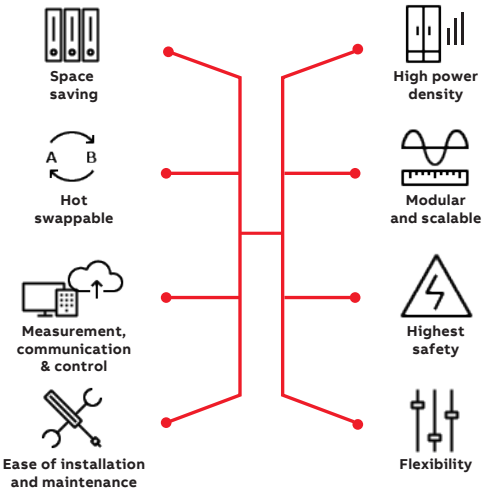
02 Side view

Why choose MNS Rear



Integration of digital devices to gather and report data from the electrical system. This information is available in the ABB Ability Condition Monitoring or any other energy management system and be used to achieve operational savings through increased efficiency.

Safety is a priority.

As with all MNS solutions, MNS Rear is fully arc fault containment tested and certified acc. to IEC TR 61641 Ed.3 criteria 1 to 7.

MNS Rear enables quick and simple installation. Once installed, the system can be easily accessed, reconfigured and maintained with cable access segregated at the rear.

Standards		**Low voltage switchgear and controlgear assemblies - verification by testing**	**IEC 61439-2**
Test certificates			DEKRA/ASTA
Electrical data	Rated voltages	Rated insulation voltage U_i	1000 V3~, 1500 V-
		Rated operating voltage U_e	690 V3~, 750 V-
		Rated impulse withstand voltage U_{imp}	6/8/12 kV, depending on equipment
		Overvoltage category	II / III / IV
		Degree of pollution	3
		Rated frequency	up to 60 Hz
	Rated currents	Main busbar	
		Rated current I_e	up to 7300 A
		Rated peak withstand current I_{pk}	up to 220 kA
		Rated short-time withstand current I_{cw}	up to 100 kA
		Distribution bar	
		Rated current I_e	up to 1500 A
		Rated peak withstand current I_{pk}	up to 220 kA
		Rated short-time withstand current I_{cw}	up to 100 kA
	Arc fault containment	Rated operational voltage	up to 690 V
		Prospective short-circuit current	up to 100 kA
		Duration	300 ms
		Criteria (IEC TR 61641)	1 to 7
	Forms of separation		up to Form 4b
Mechanical characteristics	Dimensions	Height	2300 mm
		Width	400, 600, 800, 1000, 1200 mm
		Depth	1000, 1200, 1400 mm
	Degree of protection	IEC 60529	up to IP54

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