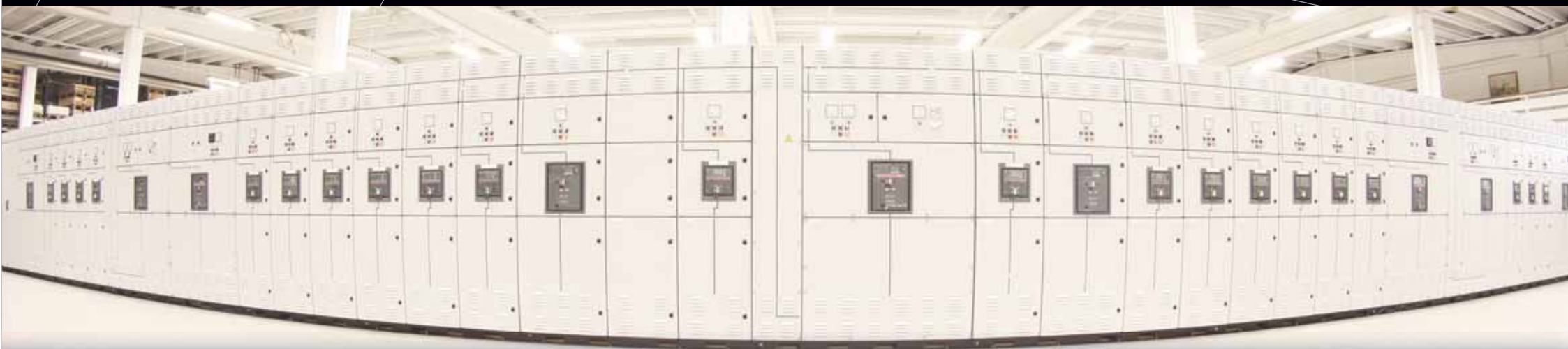


**logstrup**

[www.logstrup.com](http://www.logstrup.com)

**Logstrup Modular System**



Logstrup has been involved in the design and manufacture of Low Voltage Systems for more than 55 years. Since 1958, the company has evolved from a local electrical appliance shop to a global, innovative company.

The first modular system (B-modul) allowed Logstrup to design and build all types of switchboards from a standard range of parts. Since then the modular system has been developed into a flexible, high standard, quality product.

Logstrup currently has around 300 employees in four countries. The headquarters are located in Kvistgaard, Denmark, with subsidiaries in Tuam, Ireland; Malmö, Sweden and Manchester, UK.

The company has a leading innovative force with a global network of licensed assembly partners in more than 50 countries.



Logstrup is ISO9001/ISO14001 certified, and with our continuous work in quality and environmental management, we endeavour to deliver services and products of the highest quality and standards.

Logstrup acknowledges the importance of cooperation and the long-term relationships with our customers. We place emphasis on clear specifications and close communications.

The management system is regularly evaluated in order to assess its effectiveness and suitability.

Logstrup strives to;

- ensure that the delivered product is in accordance with the mutually agreed specifications (delivery time/technical specifications)
- conduct the quality management from a financial point-of-view (avoid waste)
- conduct the quality management from a competitive point-of-view (flexibility)







The Logstrup Switchgear and Controlgear System is a comprehensive modular system allowing the user to create a wide range of Switchboards and Motor Control Centres. Key benefits include:

- Minimal downtime, reliable supply and easy repair
- Re-configuration of units while live
- Interchangeability of different unit types
- Scalability and option for upgrades and extensions
- Free choice of devices and switchgear from major brands
- ProfiBus and DeviceNet and other industrial bus systems
- Compact design, up to 40 units per section

The system can be supplied as loose part kits or mechanically assembled and is suitable for a broad spectrum of industries including:

- Chemical
- Pharmaceutical
- Marine/Offshore
- Petrochemical
- Building Services
- Power Stations
- Paper Mills
- Water Treatment Plants
- Car Industry
- Mining Industry
- Energy
- Datacentre
- Commercial buildings
- Oil & Gas
- Infrastructure

Logstrup can provide a full customisation service to customer specification in painted or stainless steel using the latest 3D technology.

- 3D Concept model
- 3D Visualisation and Walk Through
- Detailed design
- CAD/CAM manufacturing
- Precision welding
- Choice of colours and textures

The Logstrup Switchgear and Controlgear System achieves the highest safety standards:

- Test verifications acc. IEC 61439-2&1
- Internal arc test acc. IEC/TR 61641
- Section Arc Protection Barriers
- Unit Arc Protection
- Thermographic inspection areas
- Mechanical safety interlocks
- IP20 internal protection

The Logstrup framework and cladding system provides the most robust flexible system available:

- High strength 5 bend profile
- 2mm Aluzinc material
- Modular in 3 axes
- Doors in 1.5mm or 2.0mm
- IP44 standard (IP54 optional)
- Special colours available
- Customised cut-out's

The busbar system forms the main power distribution within an assembly and is one of the critical elements determining the assembly's operational reliability and safety. Features of the system include:

- Main busbars in top or bottom of panel
- 2, 3 or 4 bar systems up to 8,500A
- Separate compartments, IP20
- Distribution bars up to 2000A
- Internal arc barriers (optional)



The Logstrup Switchgear and Controlgear System is available in a wide variety of configurations to cover all applications

- Fixed
- Removable (RMU)
- Withdrawable (MDU/WDU)
- Accommodates components from many manufacturers
- Inline
- Front Access
- Rear Access

#### Fixed

- Steel compartmentation up to Form 4
- Adjustable depth mounting plates
- Sizes: 4 widths, 16 heights, 6 depths
- Front or rear access

#### Removable Units

- High protection against contact with live parts
- Starters and feeders up to 630A, 500kW
- Fixed or hinged front panel
- Coding system
- Unique safety interlocking mechanism
- Fully re-configurable while live
- Sizes: X = 3, 4. Y = 1, 1½, 2, 2½, 3, 3½, 4.
- Up to 10 units per section

#### Mini-Withdrawable

- High personal protection
- Rating up to 80A, 55kW, 690V
- Auxiliary controls up to 46 control pins
- Front or rear access
- Removable interface box
- Interface box can be pre-wired
- Fully re-configurable while live
- Coding system
- DeviceNet & ProfiBus compatible
- Sizes: X = 1, 1½, 2, 3. Y = 1
- Up to 40 units per section

#### Withdrawable Units

- High operational safety
- Rating up to 630A, 500 kW, 690V
- Auxiliary controls up to 46 control pins
- Fully re-configurable while live
- Coding system
- Safe operation. IP20 protection in all positions
- Fixed or hinged front panel
- DeviceNet & ProfiBus compatible
- Sizes: X = 3, 4. Y = ½, 1, 1½, 2, 2½, 3, 3½, 4.
- Up to 20 units per section

#### Inline Units

- Accepts ABB Slimline Products
- Accepts Jean Muller Sasil Products
- Rating 160-630A
- Fully re-configurable while live
- Modular design
- Easy installation
- High operational safety
- High protection against contact
- High breaking capacity
- High short-circuit strength
- Up to 36 units per stack



## Mechanical interlocks

### Rotary Switch

- Mechanical interlock RMU/WDU/MDU, disconnecter type Kraus & Naimer
- Specified position of shaft
- No extra key

### Fixed Heights

- Mechanical interlock RMU/WDU/MDU
- Shaft position adjustable in X-axis
- Extra key required

### Adjustable Height

- Mechanical interlock RMU/WDU
- No specified position of shaft
- Extra key required





Logstrup is a major supplier to the marine and offshore industries for the following:

- Main switchboards
- Motorcontrol centres (Fixed/Withdrawable)
- Control panels
- Bridge control consoles
- Water-cooled drive panels

Logstrup is a major supplier to all types of vessels:

- Container vessels
- Private yachts
- Tankers
- Cruise liners
- Tug boats
- Ferries
- Offshore platforms
- Deepwater construction vessels



Logstrup Marine & Offshore Panels incorporate advanced features to ensure optimum use of space on the vessel while still maintaining the correct temperature within the panels.

- Front or rear access
- Ventilation front and back
- Raised roofs to IP31
- Interlacing of phases
- Fitting of stainless steel in busbar area to reduce magnetic effect

Logstrup provides customised solutions for Bridge Control Consoles using the latest 3D technology.

Services include:

- 3D Concept Model
- 3D Visualisation
- Detailed design
- CAD/CAM manufacturing
- Precision welding
- Manufactured in mild or stainless steel
- Choice of individual coating colours and finish



# “Technical

<b>Reference Standards</b>	Type-tested Switchgear and Controlgear Assembly	IEC 61439-2&1 / 60439-1, BS EN 61439-2&1/ 60439-1, EN 61439-2&1 / 60439-1, IEC 60529, IEC 62208, IEC/TR 61641, CSA-C22.2 No. 31 & 14, DIN VDE 0660 part 500, DIN 43671/12.75, Ships Classifications Societies	
<b>Electrical Data</b>	Rated Voltages	Rated impulse withstand voltage (U <sub>imp</sub> )	8 kV (up to 12kV)
		Rated insulation voltage (U <sub>i</sub> )	1000 V
		Rated operational voltage (U <sub>e</sub> )	690 V
Rated Currents	<b>Main Busbar System, Horizontal &amp; Vertical</b>		
		Rated current (I <sub>n</sub> )	up to 8500 A (main busbar)
		Rated Peak withstand current (I <sub>pk</sub> )	up to 363 kA
		Rated Short-time withstand current (I <sub>cw</sub> )	up to 165 kA 1 sec
	<b>Distribution Busbars, Fixed System</b>		
		Rated current (I <sub>n</sub> )	up to 2000 A
		Rated Peak withstand current (I <sub>pk</sub> )	up to 220 kA
		Rated Short-time withstand current (I <sub>cw</sub> )	up to 100 kA 1 sec
	<b>Distribution Busbars, Withdrawable &amp; Removable System</b>		
		Rated current (I <sub>n</sub> )	up to 1800 A
		Rated Peak withstand current (I <sub>pk</sub> )	up to 154 kA
		Rated Short-time withstand current (I <sub>cw</sub> )	up to 70 kA 1 sec
	Rated Conditional withstand current (I <sub>cc</sub> )	up to 100 kA 1 sec	

# Information”

<b>Mechanical Data</b>	Internal Separation	IEC 61439-2 / 60439-1 BS EN 61439-2 / BS EN 60439-1, National Annex	Up to Form 4A and 4B Type 1 to 7
	Degree of Protection	IEC 60529	IP2X up to IP44 (IP54 optional)
	Materials	Doors & Plates Framework Plinth  Mounting Plates Internal Plates Stainless Steel (optional) Rear Plates  Top Plates	Painted Steel 1.5mm or 2.0mm Painted Steel or Aluzinc 2.0mm Painted High Strength Steel 2.5mm with Magnelis Coating Aluzinc 2.0mm Aluzinc 1.0mm - 2.0mm ANSI 304 160/80 Aluzinc 1.5mm Painted Steel 1.5mm or 2.0mm Aluzinc 1.5mm
	Colour	Doors & Plates Plinth	RAL 7035 Fine Structure RAL 9005 Fine Structure
	Dimensions (mm)	With flat plates (AGP)	Height: 1995, 2185, 2375 Width: 440, 630, 820, 1010, 1200 Depth: 600, 790
	Service Conditions	Installation Ambient Temperature Relative Humidity Altitude	Indoor 0°C to +40°C Max 50% at 40°C ≤2000m



# Worldwide provider of low voltage *solutions*

#### **A/S Logstrup Steel**

T: +45 49 12 75 00  
F: +45 49 12 75 01  
E: [info@logstrup.dk](mailto:info@logstrup.dk)  
W: [www.logstrup.com](http://www.logstrup.com)

#### **Lögstrup Sweden AB**

T: +46 40 36 32 00  
F: +46 40 36 32 21  
E: [info@logstrup.se](mailto:info@logstrup.se)  
W: [www.logstrup.com](http://www.logstrup.com)

#### **Logstrup (Ireland) Ltd.**

T: +353 93 70900  
F: +353 93 70901  
E: [info@logstrup.ie](mailto:info@logstrup.ie)  
W: [www.logstrup.com](http://www.logstrup.com)

#### **Logstrup (U.K.) Ltd.**

T: +44 161 728 1261  
F: +44 161 794 9485  
E: [info@logstrup.co.uk](mailto:info@logstrup.co.uk)  
W: [www.logstrup.com](http://www.logstrup.com)