

SOLUTIONS GUIDE

OFFERING FOR LOW VOLTAGE ELECTRICAL PANELS





STANDARDS FOR ELECTRICAL PANELS

In IEC standard 61439 a builder of distribution and control boards – or panel builder – is recognized as a key player in the field of LV switchgear and controlgear.

The new standard, IEC 61439, superseded the old standard IEC 60439 in November 2014, and perfectly defines the lines of work and responsibilities of original manufacturers, assembly manufacturers and electrical contractors (see diagram).



Original switchgear manufacturers are legally liable for the switchgear they manufacture and ship throughout design and inspection. IEC standard 60947 and its headings IEC 60947-1, -2, -3, -4 set the rules.

Assembly manufacturers (panel builders) are legally liable for the assemblies they build throughout design and inspection, especially when they modify a subassembly shipped by an original manufacturer or use an untested component. IEC standard 61439 sets the rules. Panel builders, who may be assembly manufacturers, are legally liable for the installation. IEC standard 60364 (NF C 1500 in France) sets the rules on design and construction of electrical installations.

Mersen, formerly Ferraz Shawmut, is recognized in the world of power electronics as an expert in low voltage protection, both for current and voltage. Mersen is a global expert in protect against current surges, short-circuit currents and overloads, and also transient voltage surges due to lightning or switching. That expertise translates into a product portfolio that is exceptional for both the range and depth of the solutions it offers. Design and production of all those products are completely controlled within the company. Above and beyond the intrinsic quality of our products, the Mersen brand can rely on world-class technical support made available to customer to define and choose the most suitable solution for the need.

To meet the needs of manufacturers making electrical panels for control and instrumentation, Mersen proposes a wide range of fuse protection solutions covering all the leading technologies on the international market to meet the requirements of all the major international standards. Those fuses can be installed in panels using a range of devices, most of them mountable on DIN rails. Mersen's fusegear is renowned for its compact footprint and exceptional thermal performances thanks to the use of appropriate plastic materials - performances that are only enhanced by the low power dissipation of our fuses.

MERSEN IS ALSO A GLOBAL EXPERT IN SURGE PROTECTION

Mersen's position as a specialist in the safety & reliability of electrical power, especially in protection and control, and our commitment to compact, thermally efficient switchgear make us a valued partner for assembly manufacturers.

Original Manufacturer



Assembly Manufacturer (Electrical Panel Builder)

ELECTRICAL PANEL



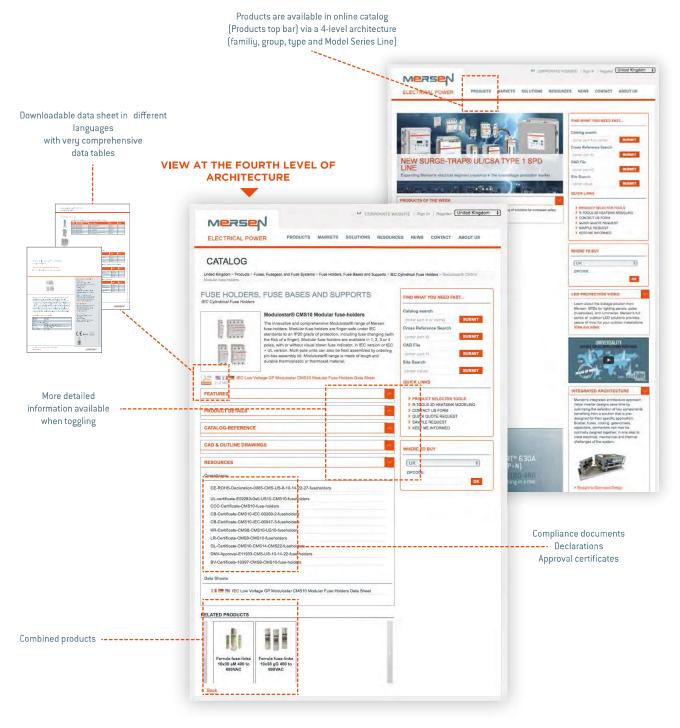
Installer



Approvals/ Standards



COMPLETE TECHNICAL INFORMATION AT EP.MERSEN.COM





MERSEN OFFERING FOR LOW VOLTAGE ELECTRICAL PANELS

	OFFERING			FUNCTION		
	PRODUCTS	RANGES	STANDARDS	ISOLATING	OVERCURRENT PROTECTION	
	Fuses and holders	Cylindrical fuses, Modulostar®	IEC, UL	•	•	
	Fuses and bases	NH Fuses, DO	DIN	•	•	
	Fuse Switch Disconnectors	Multivert®, Multibloc®, Multifix® 60	DIN	•	•	
	Switch Fuse Disconnectors	Switch Fuse Disconnectors, Linocur®	IEC, DIN, UL	•	•	
	Fuses and holders	BS88	BS	•	•	
	Surge Protective Devices	Surge-Trap®	IEC, UL			
3 0 0	Switch Disconnectors	Switch Disconnectors	IEC, UL	•		
	Power Distribution Blocks	FSPDB	IEC, UL	•		









			MOUNTI	NG		COMMUNICATION	
SHORT-CIRCUIT PROTECTION	OVERVOLTAGE PROTECTION	BREAKING	DIN RAIL	BUSBAR	SCREWING	MONITORING	PAGES
•		•	•			•	6-15
•			•	•	•		16-41
•		•	•	•	•	•	19-31
•		•	•	•	•	•	11-38
•							42-51
	•		•		•	•	52-62
		•	•		•	•	64-67
			•				63

Regarding electrical panels for PV systems refer to our HelioProtection $^{\! \otimes \! }$ Program brochure. It is available on ep.mersen.com

For electrical panels regarding drives please consult our website ep.mersen. com for IEC cylindrical, square-body and NH square-body high-speed fuses in Semiconductor Protection Fuses section. Related bases and holders are in Fuse $\label{thm:bound} \mbox{Holders, Fuse Bases and Supports section} \ .$