DevPanel Main Distribution Board

The DevPanel main distribution board (MDB) is the low voltage switchboard that receives the full power from a facility's transformer or generator and distributes it to the sub-distribution boards. It is built on an enclosure and busbar system verified to IEC 61439-1 / IEC 61439-2; the main busbar, rated up to 6300 A, is configured for each project with Form 1 – Form 4b internal separation and air circuit breaker (ACB) solutions.

Technical Specifications

Applicable standard	IEC 61439-1 (general rules), IEC 61439-2 (power switchgear and controlgear assemblies)
Rated insulation voltage (Ui)	1000 V
Rated impulse withstand voltage (Uimp)	8 kV
Main busbar rated current	630 – 6300 A
Short-time withstand current / peak withstand current	65 – 100 kA (1 s) / 143 – 220 kA peak
Main breaker	Air circuit breaker (ACB) or molded case circuit breaker (MCCB); motor operator optional
Functional unit type	Fixed-connection, plug-in or withdrawable
Internal separation (forms)	Form 1, Form 2a/2b, Form 3a/3b, Form 4a/4b
Access direction	Front or front + rear access
Enclosure	Cold-rolled (DKP) sheet steel; frame 2 mm, doors and covers 1.5 – 2 mm
Surface treatment	Electrostatic powder coating, standard RAL 7035 (different RAL colors available upon request)
IP rating	IP31 / IP41 / IP54
Cable entry	Bottom or top; separate cable compartment
Measurement and monitoring	Energy analyzer, current transformers, ammeter/voltmeter, phase indicator lamps
Communication	Modbus RTU / Modbus TCP (optional)
Redundancy and transfer	Mains–generator transfer, dual transformer supply, interlocked breaker arrangement

Certification: Design verified to IEC 61439-1 and -2 · ISO 9001:2015 quality management system · CE (Low Voltage Directive 2014/35/EU). Type-test certificates with 65 kA Icw are available for 4000 A main distribution boards with ABB and Legrand incomers.