

Power Conversion Product Range

	EBN3000	LUN700	EBN1000	EBI1000	EBI5000	RBN1000
Isolation	Non-isolated	Non-isolated	Non-isolated	Isolated	Isolated	Non-isolated
Topology	Buck boost	Buck	Buck boost	DAB	DAB	2-Level AFE
Direction	Bi-directional	Uni-directional	Bi-directional	Bi-directional	Bi-directional	Bi-directional
Quadrants	4 quadrant	2 quadrant	4 quadrant	2 quadrant	2 quadrant	N/A
Voltage Range	200 V - 2500 V	200 V - 2500 V	200 V - 2500 V	200 V - 2500 V	200 V - 2500 V	200 V - 2500 V
Max Current	3000 A	1000 A	1000A	650A	~5×650A	450A
Efficiency	99%	97%	99%	96%	96%	98%
Coolant	Water glycol mix	Water glycol mix	Water glycol mix	Water glycol mix	Water glycol mix	Water glycol mix
Maximum Coolant Inlet Temp	35 °C	30 °C	35 °C	35 °C	35 °C	35 °C
Transient Suppression	2.6 kV	2.6 kV	2.6 kV	2.6 kV	2.6 kV	2.6 kV
Mass	< 500 kg	< 150 kg	~200kg	~450kg	~5×450kg	~350kg
IP Rating	IP67	IP67	IP21	IP21	IP21	IP21
LV Supply	24 V	24 V	24 V	24 V	24 V	24 V
LV Connector	TE Connectivity M3472W22-41P	TE Connectivity M3472W22-41P	TE Connectivity M3472W22-41P	TE Connectivity M3472W22-41P	TE Connectivity M3472W22-41P	TE Connectivity M3472W22-41P
Key Features						
2.5 kV Operation	Yes	Yes	Yes	Yes	Yes	Yes
Continuous Power	4.5 MW	700 kW	1 MW	1 MW	5 MW	1 MW
Ambient Operation	-20°C to 60°C	-20°C to 60°C	~35C	~35C	~35C	~35C
Output overcurrent protection	Yes	Yes	Yes	Yes	Yes	Yes
Patented high-speed de-sat protection	Yes	Yes	Yes	Yes	Yes	Yes
Zero voltage self-test mode	Yes	Yes	Yes	Yes	Yes	Yes
Power module health monitoring	Yes	Yes	Yes	Yes	Yes	Yes
Smart thermal derate	Yes	Yes	Yes	Yes	Yes	Yes
Enhanced thermal monitoring	Yes	Yes	Yes	Yes	Yes	Yes
CANBus control	Yes	Yes	Yes	Yes	Yes	Yes
Software flash via CANBus / XCP	Yes	Yes	Yes	Yes	Yes	Yes
High-speed diagnostics via Ethernet / XCP	Yes	Yes	Yes	Yes	Yes	Yes
Voltage, current and power control	Yes	Yes	Yes	Yes	Yes	Yes

Using technology first developed for motorsport and mining applications, the Fortescue Zero Power Conversion product range is reliable, compact and enables high power applications to be decarbonised.