



REDUNDANT OPERATION
N+1 CONFIGURATION ENSURES YOUR LOADS ARE ALWAYS FED



FULL GALVANIC ISOLATION
FULL ISOLATION BETWEEN INPUT & OUTPUT WITH AL OR CU TRANSFORMERS



FULL FRONT ACCESS
EASY MAINTENANCE AND REPAIR. ALL COMPONENTS ACCESSIBLE FROM FRONT



INTEGRATED TOPOLOGY
ALL IN ONE DESIGN WITH INTEGRABLE FEATURES LIKE DISTRIBUTION SYSTEM

ENCLOVE Energy: Industrial DC to AC Converters (Inverters)

ENCLOVE Energy EVR Series, engineered for the most demanding environments, the Enclove EVR Series is a robust industrial inverter that converts DC source voltages ranging from 24VDC to 600VDC into a precision-stabilized AC supply. With power capacities available from 5kVA up to 500kVA, the series utilizes advanced IGBT technology and a high-speed DSP controller to ensure laboratory-grade signal purity and seamless fault recovery.

Featuring a standard internal output isolation transformer and a ruggedized structure with up to IP55 protection, the EVR Series is purpose-built to withstand the high vibration and harsh electrical conditions found in oil and gas, marine, and mining operations. Its modular board structure simplifies maintenance and repair, guaranteeing uncompromising operational continuity where power failure is simply not an option.

Key Features

Industrial Resilience: Robust construction with optional ingress protection up to IP55 ensures operational continuity in high-temperature, dusty, or humid environments.

Galvanic Protection: A standard internal output isolation transformer creates a complete electrical barrier to protect sensitive AC loads from DC-side disturbances

Grid Independence: A wide $\pm 25\%$ input DC voltage range eliminates the need for additional voltage adjustment facilities at the battery or DC source.

Heavy-Duty Powering: High overload capability (up to 200%) makes the system perfectly suited for the demanding inrush currents of heavy industrial machinery.



MODEL	EVRI SERIES	EVRI3 SERIES
Output Phase	Single Phase	Three Phase
Conversion Topology	Insulated Gate Bipolar Transistor (IGBT)	
Control	DSP Controller	
INPUT		
Voltage	24VDC to 220VDC	24VDC to 600VDC
Bypass Voltage	110VAC to 600VAC (Defined on order)	
Bypass Frequency	50, 60 or 400 Hz	
OUTPUT		
Power	Up to 200kVA	Up to 500kVA
Voltage	110VAC to 600VAC (Defined on order)	
Voltage Tolerance	±1% (Static), ±5% (Dynamic 100% load change 50ms)	
Frequency	50Hz, 60Hz or 400Hz (±1% sync, ±0,5 not sync)	
Waveform	Pure Sine Wave	
Output Power Factor	0.8	
Efficiency	Up to 90%	Up to 93%
Crest Factor	3:1	
Switch to Bypass	<5ms	
Switch to Inverter	0 ms (Re-Transfer delay adjustable)	
Total Harmonic Distortion (THDu)	Lineer Load ≤ %2 Non Lineer Load ≤ %5	
Inverter Overload Characteristics	125% load - 10mins / 150% Load - 1min / 200% Load - 1sec	
Bypass Overload Characteristics	110% load - Continuous / 150% Load - 1min / 1000% Load - 50msewc	
PHYSICAL CHARACTERISTICS		
Cabinet Type	Rack / Tower / Wall Mounted	
Cabinet Color	RAL7032, RAL7035 (Others Optional)	
Ingress Protection	IP20 (up to IP55 - Optional)	
Cooling System	Fan Forced Cooling (Natural Cooling, Water Cooling, Smart Fans Optional)	
Cable Entry	Bottom (Others Optional)	
ENVIRONMENTAL CHARACTERISTICS		
Storage Temperature	-25 to 70°C	
Operating Temperature	-10 to 50°C	
Relative Humidity	0 to 95% (Non-Condensing)	
Operating Altitude	1000m from MSL (1% derate each 100m after 1000m)	
Acoustic Noise	55dB to 80dB	
COMMUNICATIONS		
Standard Communications	ModBus RTU RS232 (OPT: RS485, ModBus TCP/IP, SNMP and IEC61850), Dry Contact x4 (OPT: to x16)	
Parallel Operation	Up to 2 Units (Dual Redundant or Capacity)	
HMI	LED/LCD Panel (OPT: Touch Screen Panel, Mimic Panel)	
Languages	Turkish, English, German, Dutch, Portuguese, Spanish, Russian	
FEATURES		
Protections	MCB or MCCB for Input and Output Line Failure, AC Synchronization, Short Circuit Output Current Limiting, Overload, Over Voltage, UnderVoltage, Over Temperature	
Maintenance Bypass	Full Isolation of the Unit with Maintenance Bypass	
Gauges	Input, Output, Bypass Analog/Digital Gauges (V, A, Hz, VA, THD, PF)	
DC Power Supply	Output & Battery Monitoring Continue (when AC Fails)	
Protections	Fan Failure, SCR Fuse Failure, Breaker Off, External Block, Parallel Fault	
Others	Cabinet Heater, Cabinet Lighting, Service Plug	
STANDARDS		
EN 62040-1	General and Safety Requirements for UPS	
EN 62040-2	Electromagnetic Compatibility (EMC) Requirements fo UPS	
ISO14001 - ISO9001	Quality Assurance	

* Our company has the right to change the model, visual and technical specification information of the products without prior notice.