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DC UPS – COMPACT 1M-3M ECOLINE

These devices are the result of careful research and development carried out by our company, aimed at obtaining maximum reliability and the best performance in the field of DC emergency power supply system.

- Power device convertion: IGBT
- Control type: PWM HF
- Incoming isolation transformer at mains frequency: OK
- Electrostatic shield: OK
- uP of supervision
- LCD with backlit alphanumeric display
- High effeciency
- High reliability
- Extractable 5U rack-format AC/DC module for quick and easy assistance thanks to polarized extractable connectors.
- Easy maintenance with access from the front
- Low output ripple
- Extended frequency input range
- Output overload indication
- Acknowledgeable audible alarm

MAIN FEATURES

- Power element: IGBT
- Insulating transformer on AC input line complete with electrostatic screen between primary and secondary
- System control with industrial PLC
- High MTBF and low MTTR
- Easy maintenance with access from the front
- Low % ripple at output and batteries

- **FIELD of APPLICATION**

- Oil & Gas (Petrochemical, offshore, pipeline)
- Power generation (Power plant, hydropower, transmission, distribution, utilities)
- Transport (Airport, naval, railway)
- Process control (mining industry, steelwork, paper production, etc.)
- Desalination and water treatment plant

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GENERAL TECHNICAL DATA

ELECTRICAL CHARACTERISTICS				
		IGBT		
Output voltage (VDC)		24	48	110
Input voltage	**1-phase**	230V AC ± 10%		
	3-phase	400V AC ± 10%		
Input frequency		50–60 Hz ± 5%		
Input DC current		≤ 10kA RMS (with rated VAC — ref. CEI EN 60947-2)		
Input current distortion	**THD**	≤ 27 (with rated load)		
Input power factor		≥ 0.80 (with rated voltage, at 100% load)		
I/O isolation		4kV VIA TRANSFORMER		
OUTPUT CHARACTERISTICS				
Output current (IGBT)		**1-phase INP. power supply**	**3-phase INP. power supply**	
		10÷50 Amp	10÷50 Amp	
Battery charging voltage	**Floating**	2.27 V/cell for VRLA batteries		
Amount Internal batteries		Availability to be checked depending on model required.		
Current curve		CONSTANT		
Output voltage stability		1%		
Line regulation (VLine)		1%		
Load regulation (VLoad)		1%		
Output ripple	**RMS**	≤ 0.5% Vn		
Overcharge	(with no batteries)	2In x 5mS Shut down for 250mS - restart aut.		
ENVIRONMENTAL CHARACTERISTICS				
Noise level	**As for EN50091**	< 60 dBA (typical value with forced ventilation in operation)		
EMI		EN 61000-6-2 & EN 61000-6-4		
Operating temperature range	**°C**	-10° – +40°		
Storage temperature range	**°C**	-20° – +50°		
Relative humidity range	**Without condensation**	20 ……90%		
Ventilation	(on AC/DC conversion module)	Electronic speed control based on current supplied		
Altitude	**m.a.s.l.**	< 1000 (de-rating as per EN62040-3)		
MECHANICAL CHARACTERISTICS				
Degree of external protection	**As per IEC 60529**	IP 30 standard		
Colour		RAL 7035		
Dimensions (W x D x H) mm		600 x 650 x 1600		
IN/OUT cable connections		From the front, with cables entering from below		
Transporting		Base for moving unit using pallet jack		
Installation		Floor-mounted		
Access		Front		
PROTECTION				
Output		- 50% Vn + 10% Vn		
Overtemperature		hut down. Restart auto after temperature has recovered		
Led Status	SYSTEM WORKING (green)	SYSTEM FAILURE (red)		
Electrical Measurement on Display	Output voltage	Output current		
Display State Messages	Rectifier on - Overload - Vout.rect.max. - Battery mode - Low.volt.batt. - End.batt.aut - DC to eart pos./neg.			
Alarms Spdt (5Amp/250Vac)	INCOMING MAINS FAILURE	GENERAL FAILURE	LOW VOLTAGE BATTERIES	
AVAILABLE OPTIONS	Input Circuit breaker	Output Circuit breaker		
	Coil circuit breaker tripping	Aux circuit breaker contact (S/H)		
	End battery discharge power contactor	Battery reverse control (BRPCU)		
	E.P.O. (Emergency Power Off)	uP card for function: AUT./MAN.BATTERY TEST		

More details can be found in the technical document initialed STC01A_rev.2a

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