### SLC CUBE<sup>3</sup>: The most versatile solution in electrical protection

SALICRU, always faithful and committed to technological developments, has gone one step further and conceived a unit which, by bringing in state-of-the-art PWM-transformerless technology, can easily adapt to the most diverse and complicated loads, such as the non-linear systems (IT systems), strongly inductive or capacitive loads, discharge lamps, induction motors, ..., and gives numerous benefits at the same time, such as: improving reliability and tolerance to failure, being totally flexible and adaptable to any working environment, giving greater security to the supplied loads, extending the life span of the batteries, enhancing considerable savings in consumed energy, in operating costs and temperature control needs, and being more respectful of the environment.

The **SLC CUBE**<sup>3</sup> range, conceived with criteria of maximum efficiency and energy savings, covers power ratings from 7.5 to 80 kVA in a highly compact format making it easy to install and uses more than 60% recyclable materials. For highly critical installations or others in need of growth, the units can also be set up in parallel-redundant systems without any need for additional hardware, and each unit also has a wide range of communication possibilities and a large variety of options.

#### PERFORMANCES

- On-line double conversion technology with DSP (Digital Signal Processor) control.
- Output up to 95%.
- Adaptive Feed forward Cancellation advanced control.
- ▶ Very low input current distortion (THDi up to < 1%).
- ▶ Unity input power factor (PF=1.0).
- Control designed to withstand any kind of load.
- Parallel/redundant set-up up to 8 units.
- ► Eco-Mode function to increase energy savings.
- Batt-Watch battery monitoring and care.
- Calculation of the back-up available for lengthy power cuts.
- Space-saving compact format.
- Wide control and monitoring options.
- ▶ Total flexibility in single phase / three-phase input set-ups.
- Large variety of options available.
- Materials over 60% recyclable.
- SLC Greenergy solution.



## ► APPLICATIONS: The best protection for critical systems

The great flexibility and adaptability of the SALICRU SLC CUBE<sup>3</sup> series make it the best option for protection and security for a wide range of installations: data centres (computing centres, centralised sales/distribution systems, hosting, housing,...), IT-networks (server farms, local computer networks, network switches and hubs,...), financial services (bank offices, automatic cash dispensers, card payment authorisation systems,...), industrial processes (productive and control systems, industrial machinery, emergency and lighting systems,...), telecommunications (voice and data networks, radio and TV systems, repeater stations,...) and infrastructures (hospitals, airports, tunnels,...).



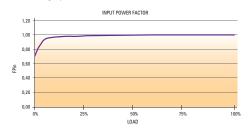


UNINTERRUPTIBLE POWER SUPPLIES (UPS)

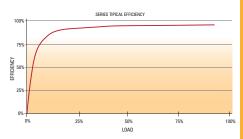
# SLC CUBE<sup>3</sup>

#### BENEFITS

► High power factor (FP=1,0)



► High output (>95%)



#### COMMUNICATIONS

- Interface to relays.
- ► RS-232/485 port.
- ▶ 1 x free slot.
- ► MODBUS/SEC protocol.
- ▶ 2 x connectors for parallel connection.

#### OPTIONS

- Extended autonomies.
- Separator transformer.
- ► SICRES adapter for remote telemanagement.
- WEB/SNMP or GPRS adapter.
- Monitoring and management software.
- Shutdown software.
- ▶ 1 x additional RS-232/485 serial port.
- Temperature and humidity sensors.
- External display.
- External manual Bypass.
- Frequency converter function.
- ▶ BACSII, monitoring, regulation and alarms for batteries.

# SERVICE & technical support

- Advisory service before and after the sale.
- Start up.
- Telephone technical support.
- Preventive / corrective interventions.
- Maintenance contracts.
- Tele-maintenance contracts (SICRES).
- Training courses.







# **UNINTERRUPTIBLE POWER SUPPLIES** FROM 7,5 TO 80 kVA

#### ► TECHNICAL CHARACTERISTICS

MODEL		SLC CUBE <sup>3</sup>		
TECHNOLOGY		On-line, double conversion, HF, DSP control		
INPUT	Nominal voltage		Single phase 220 / 230 / 240 V Three-phase 3 x 380 / 3 x 400 / 3 x 415 V (3Ph + N)	
	Voltage margin		+15% / -20 % (@ 3x400 V / 230 V Ph-N)	
	Frequency		50 / 60 Hz	
	Total harmonic distortion (THDi)	7,5 ÷ 20 kVA	100% load: <1.5% / 50% load: <2.5% / 10% load: <6.	
		30 ÷ 80 kVA	100% load: <1.0% / 50% load: <2.0% / 10% load: <5.0%	
	Power factor		>0.99 (above 10% load)	
OUTPUT	Nominal voltage		Single phase 220 / 230 / 240 V Three-phase 3 x 380 / 3 x 400 / 3 x 415 V (3Ph + N)	
	Precision	Steady state	±1%	
		Dynamic state	±2% (load variations 100% - 0% - 100%)	
	Frequency	Synchronised	50 / 60 Hz ±4%	
		Free running	50 / 60 Hz ±0.05%	
	Max. synchronisation speed		From 1 Hz/s to 10 Hz/s (programmable)	
	Total harmonic distortion (THDi)	Linerar load	<0.5%	
	,	Non-linear load	<1.5% (EN-62040-3)	
	Admissible overload		125% for 10 min. / 150% for 60 s.	
	Admissible crest factor		3.4:1 (7.5÷20 kVA)/3.2:1 (30÷60 kVA)/2.8:1 (80 kVA)	
	Admissible power factor		0.5 inductive to 0.5 capacitive (Totally capacitive or totally inductive in a single phase)	
	Efficiency		92.0% ÷ 95.0%	
STATIC BYPASS	Type and activation criteria		Solid state, microprocessor controlled	
2 IAIIC BAPA22	Voltage		• •	
	voltage		Single phase 220 / 230 / 240 V Three-phase 3 x 380 / 3 x 400 / 3 x 415 V (3Ph + N)	
	Frequency		50 / 60 Hz	
	Transfer time		Nil	
	Transfer to by-pass		Immediate for overloads of over 150%	
	Retransfer		Automatic after alarm disappearance	
MANUAL BYPASS	Туре		Without interruption	
	Voltage		Single phase 220 / 230 / 240 V Three-phase 3 x 380 / 3 x 400 / 3 x 415 V (3Ph + N)	
	Frequency		50 / 60 Hz	
RECTIFIER	Structure		Three-phase IGBT complete wave, soft start and PFC	
	Protection		Against transitory over-voltages	
BATTERIES	Туре		Acid lead, sealed, maintenance free	
	Recharging time		4 hours to 80% of capacity	
	Protection		Against over-voltages and under-voltages	
	Charge voltage regulation		Batt-Watch	
COMMUNICATION			RS-232 / 485	
	Interface to relays		AC failure, by-pass, low battery	
GENERALS	Operating temperature		0° C ÷ +40° C	
	Relative humidity		Up to 95% non-condensing	
	Operating altitude		2,400 m.a.s.l.	
	Acoustic noise at 1 metre		<52 dB at 1 metre (1)	
STANDARDS	Safety		EN-62040-1-2; EN-60950-1	
	Electromagnetic Compatibility (CEM)		EN-62040-2	
	Operating		VFI-SS-111 according to EN-62040-3	
	Marking		CE	
	Quality and Environmental Management		ISO 9001 and ISO 14001 TÜV	

#### **► RANGE**

MODEL	POWER (kVA / kW)	CABINETS No. (UPS + BAT)	UPS DIMENSIONS (D x W x H) mm.	WEIGHT (Kg)	BAT DIMENSIONS (D x W x H) mm.	WEIGHT (Kg)
SLC-7,5-CUBE3	7,5 / 6	1 + -	450 x 700 x 1100	360	-	-
SLC-10-CUBE3	10/8	1 + -	450 x 700 x 1100	364	-	-
SLC-15-CUBE3	15 / 12	1 + -	450 x 700 x 1100	368	-	-
SLC-20-CUBE3	20 / 16	1 + -	450 x 700 x 1100	370	-	-
SLC-30-CUBE3	30 / 24	1 + -	590 x 805 x 1320	720	-	-
SLC-40-CUBE3	40/32	1 + -	590 x 805 x 1320	725	-	-
SLC-50-CUBE3	50 / 40	1 + 1	590 x 805 x 1320	200	650 x 980 x 1320	710
SLC-60-CUBE3	60 / 48	1 + 1	590 x 805 x 1320	200	650 x 980 x 1320	710
SLC-80-CUBE3	80 / 64	1 + 1	590 x 805 x 1320	300	650 x 980 x 1320	710

