SLC CUBE3+ Uninterruptible power supply system from 7.5 to 200 kVA

SLC CUBE3+: Energy efficiency with superior electrical protection

Salicru's **SLC CUBE3+** series is a UPS range featuring high-performance, On-line double conversion (VFI) technology that provides a reliable, high-quality power supply and, at the same time, achieves significant energy and financial savings in terms of installation and operating costs.

Particularly noteworthy is the unit's input power factor (PF=1) and its extremely low distortion rate (THDi even lower than 1%), which help to reduce installation and operating costs, and contribute to improving the quality of the electrical network.

The output power factor (PF=0.9) also stands out, providing optimum electrical protection for computer systems and low harmonic output distortion (THDv even lower than 0.5%), enabling it to protect any type of load (inductive, resistive, capacitive or mixed). In addition, the performance achieved (up to 95% in On-line mode and 98% in Smart Eco-mode) produces significant energy consumption savings and reduces air conditioning needs.

For a full optimum solution, the **SLC CUBE3+** provides maximum adaptability (even with the standard model), the possibility of parallel redundant expansion and extensive communication options. Finally, also worth noting is the unit's lightweight design and reduced dimensions, enabling it to be easily installed and ensuring that footprint is minimal.

Performances

· On-line double conversion (VFI) technology with DSP control.
· Input power factor 1, for better performance.
· Very low input current harmonic distortion (THDi as low as <1%).
· Total flexibility in input/output voltage. (1)
· Designed to withstand any type of load.
· Batt-Watch function for monitoring and battery care.
· High output power factor (PF=0.9). (2)
· Very low output voltage distortion rate (THDv even lower than 0.5%).
· On-line mode efficiency of up to 95%.
· Smart Eco-mode efficiency of up to 98%.
· Very compact design with minimal footprint.
· Can be integrated into the most advanced IT environments.
· Parallel redundant configuration (N+1) for critical installations. (3)
· Built with 60% recyclable materials.
· Bluetooth application display for Android (up to 10 m).
· SLC Greenergy solution.

(1) Single/single, single/three and three/single configurations up to 60 kVA
(2) Up to 120 kVA
(3) Up to 4 units

SLC CUBE3 +

Applications: Designed to protect any type of environment

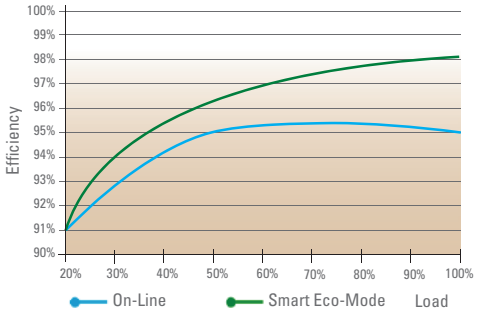
High-end design features plus great flexibility capacity (options, power upgrading, communications,…) make **SLC CUBE3+** series the best option to protect and secure a wide range of environments: data-centres, hosting, housing, IT-networks, server farms, voice and data networks,…

SLC CUBE3+

Uninterruptible power supply system from 7.5 to 200 kVA

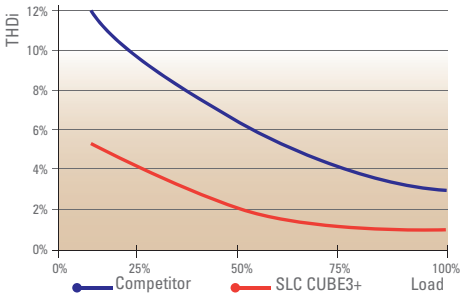
High efficiency

High performance in On-line and Smart Eco-mode operation.



Low harmonic distortion

The lowest harmonic distortion in the market.



Options

- Ethernet/SNMP adapter or GPRS modem.
- SICRES adapter for remote management.
- Android wireless link.
- Monitoring, management and shutdown software.
- 1 x additional RS-232/485 serial port.
- Extended backup times.
- Common battery set for parallel systems.
- BACS II, battery monitoring, regulation and alarms.
- Dual-level charger for NiCd batteries.
- Separate bypass line.
- Single/single, single/three and three/single configurations.(1)
- External manual bypass.
- Temperature and humidity sensors.
- External display.
- Frequency converter function.

(1) Up to 60 kVA

Technical support and service

- Pre and post-sales advice.
- Start-up.
- Telephone technical support.
- Preventative/corrective intervention.
- Maintenance contracts.
- SICRES remote maintenance contracts.
- Training courses.

TECHNICAL SPECIFICATIONS

MODEL			SLC CUBE3+
TECHNOLOGY			On-line, double conversion, HF, DSP control
INPUT	Nominal voltage (1)		Single-phase 120 / 127 / 220 / 230 / 240 V Three-phase 3 x 208 / 3 x 220 / 3 x 380 / 3 x 400 / 3 x 415 V (3P + N)
	Voltage margin		+15% / -20% (configurable)
	Frequency		50 / 60 Hz
	Total Harmonic Distortion (THDi)	7,5 ÷ 20 kVA	100% load: <1.5% / 50% load: <2.5% / 10% load: <6.0%
		30 ÷ 80 kVA	100% load: <1.0% / 50% load: <2.0% / 10% load: <5.0%
		100 ÷ 200 kVA	100% load: <2.0% / 50% load: <4.0% / 10% load: <8.0%
	Power factor		>0.99 from 10% load / 1 at 100% load
	Rectifier topology		Three-phase IGBT full wave, soft start, PFC, transformerless
OUTPUT	Nominal voltage (1)		Single-phase 120 / 127 / 220 / 230 / 240 V Three-phase 3 x 208 / 3 x 220 / 3 x 380 / 3 x 400 / 3 x 415 V (3P + N)
	Accuracy	State	± 1% steady / ± 2% dynamic
		Response time	20 ms for load steps 0% ÷ 100% and voltage drop up to -5%
	Frequency	Synchronised	50/60 Hz ±4% (selectable)
		Free running	50/60 Hz ±0.05%
	Maximum synchronisation speed		From 1 Hz/s to 10 Hz/s (programmable)
	Total Harmonic Distortion (THDv)	Linear load	<0.5%
		Nonlinear load	7.5 ÷ 80 kVA: <1.5% / 100 ÷ 200 kVA: <2% (EN-62040-3)
	Output Power Factor (2)		0.9
	Admissible overload		125% for 10 min / 150% for 60 s
	Admissible crest factor		>3:1
	Total efficiency in On-line mode		7.5÷60 kVA: 92.0%÷93.0% / 80÷200 kVA: 94.0%÷95.0%
	Efficiency in Smart Eco-mode		Up to 98%
STATIC BYPASS	Type and activation criteria		Solid state, controlled by microprocessor
	Transfer time	On-line mode	Nil
		Smart Eco-mode	4 ms (typical)
	Transfer to bypass		Immediate, for overloads exceeding 150%
	Retransfer		Automatic, after alarm deactivation
MANUAL BYPASS	Type		Without interruption
BATTERIES	Type (standard)		Lead acid, sealed, maintenance free
	Charge voltage regulation		Batt-Watch
COMMUNICATION	Ports		1 x RS-232/485, with MODBUS protocol
	Interface to relays		4 x AC failure, bypass, low battery and general
	Free slots		1, for SNMP/SICRES
	Parallel connection		2 x connectors
GENERAL	Operating temperature		0° C ÷ +40° C
	Relative humidity		Up to 95%, non-condensing
	Operating altitude		2,400 masl
	Acoustic noise at 1 metre		<52 dB(A) (3)
STANDARDS	Safety		EN-62040-1-2; EN-60950-1
	Electromagnetic Compatibility (EMC)		EN-62040-2
	Operating		VFI-SS-111 according to EN 62040-3
	Quality and Environmental Management		ISO 9001 and ISO 14001

(1) Single-phase 120 / 127 V available up to 30 kVA inclusive and three-phase 3 x 208 / 3 x 220 V available up to 100 kVA inclusive.
(2) Up to 120 kVA inclusive at three/three-phase configurations. (3) <65 dB(A) for 80 to 120 kVA models / <70 dB(A) for 160 and 200 kVA models.

Information subject to change without notice.

RANGE

MODEL	POWER (kVA / kW)	Nº CABINETS (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 / 6.75	1 + 0	770 x 450 x 1100	210	-	-
SLC-10-CUBE3+	10 / 9	1 + 0	770 x 450 x 1100	210	-	-
SLC-15-CUBE3+	15 / 13.5	1 + 0	770 x 450 x 1100	212	-	-
SLC-20-CUBE3+	20 / 18	1 + 0	770 x 450 x 1100	215	-	-
SLC-30-CUBE3+	30 / 27	1+ 0	770 x 450 x 1100	310	-	-
SLC-40-CUBE3+	40 / 36	1 + 0	770 x 450 x 1100	400	-	-
SLC-50-CUBE3+	50 / 45	1 + 1	770 x 450 x 1100	185	770 x 450 x 1100	510
SLC-60-CUBE3+	60 / 54	1 + 1	770 x 450 x 1100	185	770 x 450 x 1100	510
SLC-80-CUBE3+	80 / 72	1 + 1	880 x 590 x 1320	265	1050 x 650 x 1320	1020
SLC-100-CUBE3+	100 / 90	1 + 1	880 x 590 x 1320	290	1050 x 650 x 1320	1020
SLC-120-CUBE3+	120 / 108	1 + 1	880 x 590 x 1320	290	1050 x 650 x 1320	1020
SLC-160-CUBE3+	160 / 128	1 + 1	850 x 900 x 1900	540	850 x 1300 x 1900	1655
SLC-200-CUBE3+	200 / 160	1 + 1	850 x 900 x 1900	550	850 x 1300 x 1900	1690

Nomenclature, dimensions and weights for units with input voltage 3 x 400 V, output voltage 3 x 400 V and standard backup time.

(*) Spain only (**) Rest of the world
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