

CF CUBE3+

Frequency converter from 7.5 to 200 kVA

CF CUBE3+: Energy efficiency with superior electrical protection

Salicru's **CF CUBE3+** series is a Frequency Converters 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 grid.

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%) produces significant energy consumption savings and reduces air conditioning needs.

For a full optimum solution, the **CF CUBE3+** provides maximum adaptability with 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.



Applications: Designed to protect any type of environment

High-end design features plus great flexibility capacity (options, communications,...) make **CF 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,...



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SMART
SOLUTIONS

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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 if required.
- High output power factor (PF=0.9).
- Very low output voltage distortion rate (THDv even lower than 0.5%).
- Efficiency of up to 95%.
- Touch screen 7" color. ⁽²⁾
- Very compact design with minimal footprint.
- Can be integrated into the most advanced IT environments
- Built with 80% recyclable materials.
- SLC Greenergy solution.

(1) Single/single, single/three and three/single configurations up to 60 kVA

(2) According to model

ON
LINE

OPF=
0.9



SNMP
SLOT



EPO

SLC
GREENERGY
SOLUTIONS



Technical support and service

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

Options

- Ethernet/SNMP adapter.
- Adapter for remote management.
- Monitoring, management and shutdown software.
- 1 x additional RS-232/485 serial port.
- Extended backup times.
- BACS II, battery monitoring, regulation and alarms.
- Single/single, single/three and three/single configurations. ⁽¹⁾
- Touch screen 7" color. ⁽¹⁾
- External manual bypass.
- Temperature and humidity sensors.
- External display.

(1) Up to 60 kVA

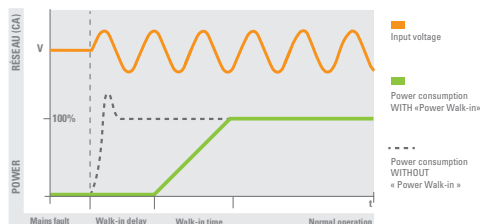


Range

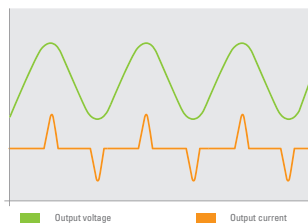
MODEL	CODE	POWER (VA / W)	DIMENSIONS (D × W × H mm)	WEIGHT (Kg)
CF-7,5-CUBE3+	681LM000001	7500 / 6750	775 × 450 × 1100	100
CF-10-CUBE3+	681LM000003	10000 / 9000	775 × 450 × 1100	100
CF-15-CUBE3+	681LM000005	15000 / 13500	775 × 450 × 1100	102
CF-20-CUBE3+	681LM000008	20000 / 18000	775 × 450 × 1100	105
CF-30-CUBE3+	681LM000009	30000 / 27000	775 × 450 × 1100	150
CF-40-CUBE3+	681LM000011	40000 / 36000	775 × 450 × 1100	175
CF-50-CUBE3+	681LM000013	50000 / 45000	775 × 450 × 1100	185
CF-60-CUBE3+	681LM000015	60000 / 54000	775 × 450 × 1100	185
CF-80-CUBE3+	681TK000004	80000 / 72000	880 × 590 × 1325	265
CF-100-CUBE3+	681TK000001	100000 / 90000	880 × 590 × 1325	290
CF-120-CUBE3+	681TK000005	120000 / 108000	880 × 590 × 1325	290
CF-160-CUBE3+	681TK000006	160000 / 144000	850 × 900 × 1905	540
CF-200-CUBE3+	681TK000003	200000 / 180000	850 × 900 × 1905	550

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

Power walk-in

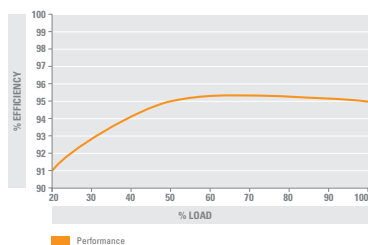


Excellent THDv output distortion



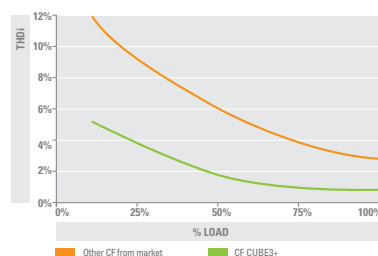
High efficiency

High performance.



Low harmonic distortion

The lowest harmonic distortion in the market.



Technical specifications

MODEL		CF CUBE3+
TECHNOLOGY		On-line, double conversion, HF, DSP control
INPUT	Rated voltage	Single-phase 120 / 127 / 220 / 230 / 240 V ⁽¹⁾ / Three-phase 3 × 208 / 3 × 220 / 3 × 380 / 3 × 400 / 3 × 415 V (3P + N) ⁽¹⁾
	Voltage range	+15% / -20% (configurable)
	Rated frequency	50 / 60 Hz
	Total harmonic distortion (THDi)	100% load: <1.5% / 50% load: <2.5% / 10% load: <6.0%
	Power factor	1 from 10% load
	Rectifier topology	Three-phase IGBT full wave, soft start, PFC, transformerless
OUTPUT	Power factor	0.9
	Rated voltage	Single-phase 120 / 127 / 220 / 230 / 240 V ⁽¹⁾ / Three-phase 3 × 208 / 3 × 220 / 3 × 380 / 3 × 400 / 3 × 415 V (3P + N) ⁽¹⁾
	Dynamic accuracy	± 2% dynamic
	Static accuracy	± 1% steady
	Response time accuracy	20 ms for load steps 0% ÷ 100% and voltage drop up to -5%
	Total harmonic distortion (THDv) Linerar load	<0.5%
	Total harmonic distortion (THDv) Non-li-near load	<1.5% (EN-62040-3)
	Frequency	50/60 Hz ±0.05%
	Total performance in On-line mode	7.5÷60 kVA: 92.0%÷93.0% / 80÷200 kVA: 94.0%÷95.0%
	Admissible overloads	125% for 10 min / 150% for 60 s / >150% for 20ms
	Crest factor	>3:1
BATTERY	Battery type	Lead acid, sealed, maintenance free
	Charging voltage regulation	Batt-Watch
COMMUNICATION	Ports	1 × RS232/RS485 + 1xUSB,with Modbus protocol
	Relay interface	4 × AC failure, bypass, low battery and general
	Intelligent slot	1, for SNMP
	Monitoring software	For Windows, Linux and Mac
GENERAL	Operating temperature	0° C ÷ +40° C
	Relative humidity	Up to 95%, non-condensing
	Maxium operating altitude	2,400 masl ⁽³⁾
	Acoustic noise at 1 metre	52 dB(A) ⁽²⁾
STANDARDS	Safety	EN-IEC 62040-1
	Electromagnetic compatibility (EMC)	EN-62040-2
	Corporate cerification	ISO 9001, ISO 14001, ISO 45001

(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) <65 dB(A) for 80 to 120 kVA models / <70 dB(A) for 160 and 200 kVA models.

(3) Power derating for higher altitudes up to 5000 masl.

Information subject to change without notice.



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