# **SLC TWIN PRO2**

## On-line double-conversion UPS 4 to 20 kVA

# SLC TWIN PRO2: Enhanced protection for mid-range systems with single-phase power supply

Salicru's **SLC TWIN PR02** series UPS systems feature on-line double conversion technology, currently the most advanced for the protection of critical systems as it provides a fully stabilised and filtered sinusoidal supply voltage. The systems come in a tower format and are available in power ratings of 4, 5, 6, 8, 10, 15 and 20 kVA.

The Salicru SLC TWIN PRO2's output voltage is always single-phase, featuring a single-phase input of 4 to 20 kVA and a three-phase input of 8 to 20 kVA. All devices with single-phase input provide a unitary output power factor <sup>(1)</sup>, the most optimum for systems and environments with high energy needs. Adaptability is another important feature thanks to the numerous operating modes available: On-line, Batteries, Eco-mode, Bypass, Frequency converter and Parallel redundant.

The possibilities of control and monitoring are varied: on the one hand, an LCD display + keypad for local operation of the device, and, on the other, various communication options (USB HID and RS-232 interfaces, and slot for SNMP, RS-485 and AS-400 cards) that enable the UPS to be integrated into standard or virtualised platforms for management, incident notification and remote maintenance.

(1) Except 15 and 20 kVA I / I models



# Applications: Maximum continuity protection for sensitive and critical systems

Salicru's **SLC TWIN PRO2** series is the best option for providing a secure power supply to ERP systems, Business Intelligence, CRM solutions, intranets/extranets and corporate networks in the event of a wide range of possible disturbances (micro power outages, voltage fluctuations, frequency variations, harmonics, transients, etc.), which can cause irreparable damage or incur high costs in all of these critical systems.











### Performances

- · On-line double conversion and DSP control technology.
- · Output power factor PF=1<sup>(1)</sup>.
- · Compact tower format for space saving.
- · Active power factor corrector for all input phases.
- · Multiple operating modes for better adaptability.
- · Equipped for parallel operation as standard, up to 3 devices.
- · USB and RS-232 interface for all models as standard.
- · Monitoring software for Windows, Linux, Unix and Mac (downloadable).
- · Intelligent slot for SNMP/RS-485/optocoupler cards.
- · Eco-mode operation for increased efficiency.
- · Backup extensions available for all power ratings.
- · Frequency conversion function.
- · EPO emergency power off.
- · Manual and/or automatic programmable battery test.
- · SLC Greenergy solution.

(1) PF=0.9 for devices with mono-phase input 15 and 20 kVA I/I, three-phase input SLC TWIN/3 PR02 models

























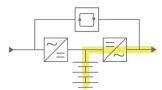
## Operating modes

#### On-line double-conversion

Double voltage conversion (AC/DC + DC/AC), providing the best degree of safety to loads.

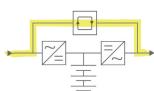
### **Batteries**

In the event of power failure, the loads continue to be powered by means of batteries.



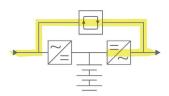
### Bypass

In the event of any eventuality (incident, overload, etc.), the loads continue to be powered by the input voltage.



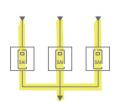
#### Eco-mode

Increased efficiency up to 99%, with immediate availability of full power.



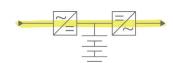
#### Parallel redundant

Increased safety (N+1) or capacity, with configurations of up to 3 devices.



#### Frequency converter

Adaptation of the output frequency to the needs of the load (50/60 Hz or 60/50 Hz).





# **I** Range

MODEL	CODE	POWER (VA / W)	DIMENSIONS (D × W × H mm)	WEIGHT (Kg)	INPUT/OUTPUT
SLC-4000-TWIN PRO2	699CB000001	4000 / 4000	592 × 250 × 576	81	1/1
SLC-5000-TWIN PRO2	699CB000002	5000 / 5000	592 × 250 × 576	82	1/1
SLC-6000-TWIN PRO2	699CB000003	6000 / 6000	592 × 250 × 576	83	1/1
SLC-8000-TWIN PRO2	699CB000004	8000 / 8000	592 × 250 × 576	84	1/1
SLC-8000-TWIN/3 PR02	699CC000001	8000 / 7200	592 × 250 × 576	84	III / I
SLC-10000-TWIN PR02	699CB000005	10000 / 10000	592 × 250 × 576	85	1/1
SLC-10000-TWIN/3 PR02	699CC000002	10000 / 9000	592 × 250 × 576	85	III / I
<b>SLC-15000-TWIN PR02</b>	699CD000001	15000 / 13500	815 × 250 × 826	164	1/1
SLC-15000-TWIN/3 PR02	699CC000003	15000 / 13500	815 × 250 × 826	164	III / I
SLC-20000-TWIN PRO2	699CD000002	20000 / 18000	815 × 250 × 826	166	1/1
SLC-20000-TWIN/3 PR02	699CC000004	20000 / 18000	815 × 250 × 826	166	III / I

Dimensions and weights for devices with standard backup with 230 V input voltage or 3 x 400 V, 230 V output voltage.

## Dimensions



SLC 4000÷10000 TWIN PRO2 SLC 8000/10000 TWIN/3 PRO2



SLC 15000/20000 TWIN PR02 SLC 15000/20000 TWIN/3 PR02

## **Connections**



SLC 4000÷10000 TWIN PRO2 SLC 8000/10000 TWIN/3 PRO2



SLC 15000/20000 TWIN PRO2 SLC 15000/20000 TWIN/3 PRO2

- 1. USB interface.
- 2. RS-232 interface.
- 3. Emergency stop (EPO).
- **4.** Intelligent slot for SNMP / AS400 / RS485-Modbus.
- 5. Manual Bypass.
- 6. Input protector.
- 7. Terminal cover.
- 8. Thermal rearmable input.
- 9. Socket IEC output.
- 10. Parallel ports.
- **11.** Earth connection.



# I Technical specifications

MODEL		SLC TWIN PRO2 4-10 kVA	SLC TWIN/3 PRO2 8-20 kVA	SLC TWIN PRO2 15-20 kVA	
TECHNOLOGY		On-line, double conversion, PFC with double DC bus			
FORMAT			Tower		
INPUT	Rated voltage	208 / 220 / 230 / 240 V <sup>(1)</sup>	3 × 380 / 400 / 415 V (3F +N)	208 / 220 / 230 / 240 V (1)	
	Voltage range	110 ÷ 276 V (2)	3 × 190 ÷ 478+N (2)	110 ÷ 276 V (2)	
	Rated frequency	50 / 60 Hz			
	Frequency range	±10%			
	Total harmonic distortion (THDi)	<4%	<5%		
	Power factor		≥0.99		
OUTPUT	Power factor	1	0.9		
	Rated voltage	208 / 220 / 230 / 240 V <sup>(1)</sup>			
	Voltage accuracy	±1%			
	Total harmonic distortion (THDv)	≤1% linear load; ≤4% non-linear load	≤2% linear load; ≤5% non-linear load		
	Synchronised frequency		±4 Hz		
	Free running frequency	±0.1 Hz	±0.05	Hz	
	Total performance in On-line mode	93% ÷ 94%	88% ÷ 90%		
	Admissible overloads	Up to 110% for 10 min; 130% for 1 min			
	Crest factor	3 a 1			
	Parallel	Yes, up to 3 units <sup>(3)</sup>			
BYPASS	Туре	Hybrid			
	Transfer time	Nil			
MANUAL BYPASS	Туре	No breaks			
BATTERY	Protection	Against power surges, undervoltages and alternating current components			
	Battery type	Pb-Ca sealed, AGM, maintenance-free			
	Charge type	I/U (constant current/constant voltage)			
	Recharge time	7 ÷ 9 hours to 90% 9 hours to 90%			
CHARGER	Temperature voltage compensation	Yes			
COMMUNICATION	Ports	USB, RS-232 and relay			
	Intelligent slot	Yes, ready for SNMP / AS400 / RS485-Modbus			
	Monitoring software	Downloadable for Windows, Unix, Linux and Mac			
OTHER FUNCTIONS	Cold start (start-up from batteries)	Yes			
OPERATING MODES	Eco-mode		Yes		
	Frequency converter (CVCF)	Yes (4)	Yes	Yes <sup>(5)</sup>	
GENERAL	Operating temperature		0° C ÷ 40° C		
	Relative humidity	Up to 95%, non-condensing			
	Maxium operating altitude	2,400 masl (power degradation up to 5,000 m)			
	Acoustic noise at 1 metre	<58 dB ÷ <60 dB			
STANDARDS	Safety	EN-IEC 62040-1			
	Electromagnetic compatibility (EMC)	EN 62040-2 (C3)			
	Operation	VFI-SS-11 (EN-62040-3)			
	Quality and environmental management	ISO-9001 & ISO-14001			

<sup>(1)</sup> Power reduction to 90% for 208 V input (2) With 50% load

<sup>(5)</sup> Power reduction to 40%







<sup>(3)</sup> Power reduction to 90%

<sup>(4)</sup> Power reduction to 60%