Conext CL three-phase grid-tie inverters

Ideal solution for commercial buildings, carports and decentralised power plants

The Conext™ CL Series is a new line of three phase string inverters designed for high efficiency, maximum flexibility and easy installation and service. Electrolyte-free design with Schneider Electric's rigorous reliability test procedures improve the long term reliability. Five configuration options of integrated wiring box allow for easy, flexible and low cost installations. Decentralised architecture, full grid support features and system capability together with Schneider Electric's broad range of medium voltage products make Conext CL the ideal choice for medium and large PV plants. Backed by Schneider Electric's global service infrastructure, leading manufacturing facilities and its expertise in energy management, the Conext CL Series is the inverter you should trust for quality and reliability.

Why choose Conext CL?

True bankability

- Warranty from a trusted partner with 178 years of experience
- World leader in industrial power drives, UPS and electrical distribution
- Strong service infrastructure worldwide to support your global needs

Higher return on investment

- High conversion efficiency: 98.3% peak efficiency, 98.0% Euro efficiency
- Great value for money: integrated wiring box saves the cost of external DC combiner box*
- Overpaneling capability to allow for maximizing energy harvest

Designed for reliability

- Robust design through rigorous Multiple Environmental Over Stress Testing (MEOST), Highly Accelerated Life Test (HALT) and Temperature Humidity and Bias testing (THB)
- Electrolyte-free design to guard against dried cap issue and help to improve long term reliability
- Designed and qualified for applications in tropical environments through salt fog testing and use of conformal coating

Flexible

- Five options of wiring box (base, essential, essential+, optimum and optimum+) to fit different applications
- Conformal coating and 600 hours salt fog tests allow for salty environments applications
- Easy to connect to third party monitoring systems

Easy to service

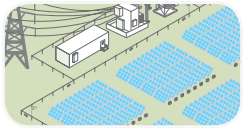
- Touch-safe fuse holder available for easy and protective fuse replacement
- Easily replaceable fan, easy firmware upgrade via USB
- Both DC and AC Surge Protection Device (SPD) with included monitoring to help to protect inverter from lightning threat (optimum model)

Easy to install

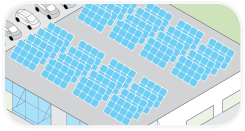
- Detachable inverter to allow for easy installation and upgrades
- Light weight with integrated handles for 2 persons installation
- Conext CL EasyConfig tool to allow for fast commissioning

Products shown:
Schneider Electric Conext CL with wiring box

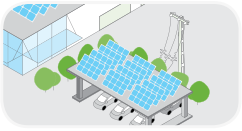
Product applications



PV power plants decentralised



Commercial grid-tie decentralised



Carports

*An external fuse protection shall be installed if base model from available product variants is chosen.

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Schneider Electric™

Device short name	CL20000 E	CL25000 E
Electrical specifications		
Input (DC)		
Full power MPPT voltage range	350 - 800 V	430 - 800 V
Operating voltage range at nominal AC voltage	250 - 1000 V	250 - 1000 V
Max. input voltage, open circuit	1000 V	1000 V
Number of MPPT / strings per MPPT	2 / 4	2 / 4
Max. DC input current per MPPT	31.0 A	31.0 A
Max. array short circuit current per MPPT	40.0 A	40.0 A
Nominal DC input power	21.5 kW	26.5 kW
Max. DC input power per MPPT*	12.9 kW	15.9 kW
DC connection (in the wiring box)	Base model: spring cage clamp connector Essential model and optimum model: fuse holder	Base model: spring cage clamp connector Essential model and optimum model: fuse holder
Output (AC)		
Rated output power (PF=1)	20.0 kW	25.0 kW
Max. apparent power	20.0 kVA	25.0 kVA
Nominal output voltage	230 / 400 V	230 / 400 V
AC voltage range	184 - 276 V / 319-478 V	184 - 276 V / 319-478 V
Frequency	50 / 60 Hz	50 / 60 Hz
Frequency range (adjustable)	50 +/- 3 Hz, 60 +/- 3Hz	50 +/- 3 Hz, 60 +/- 3Hz
Max. output current	30 A	37 A
Total harmonic distortion	< 3 %	< 3 %
Power factor (adjustable)	0.8 lead to 0.8 lag	0.8 lead to 0.8 lag
AC connection (in the wiring box)	spring cage clamp connector	spring cage clamp connector
Efficiency		
Peak	98.3 %	98.3 %
European	98.0 %	98.0 %
General specifications		
Power consumption at night time	< 3.0 W	< 3.0 W
Enclosure rating	IP65 (electronics) / IP54 (rear portion)	IP65 (electronics) / IP54 (rear portion)
Cooling	Fan cooled	Fan cooled
Inverter weight	54 kg (119 lb)	54 kg (119 lb)
Wiring box weight	15 kg (33 lb)	15 kg (33 lb)
Inverter dimensions (H x W x D)	71.4 x 67.4 x 26.8 cm (28.1 x 26.5 x 10.5 in)	71.4 x 67.4 x 26.8 cm (28.1 x 26.5 x 10.5 in)
Wiring box dimensions (H x W x D)	36.1 x 67.4 x 26.8 cm (14.2 x 26.5 x 10.5 in)	36.1 x 67.4 x 26.8 cm (14.2 x 26.5 x 10.5 in)
Ambient air temperature for operation	-25 to 60ºC (-13 to 140ºF)	-25 to 60ºC (-13 to 140ºF)
Max. operating altitude without derating	2000 m (6560 ft)	2000 m (6560 ft)
Relative humidity %	4...100 condensing	4...100 condensing
Noise emission (at 1 m distance)	< 58 dBA	< 58 dBA
Features and options		
Embedded data logger	Yes	
User interface	Graphic display, key pad	
Communication interface	RS485 (MODBUS RTU), Ethernet / MODBUS TCP (Ethernet), USB, dry contact and key pad	
Monitoring	Easy to connect to third party solution, Surge Protection Device (SPD) monitoring available with device	
Remote power off	Yes	
Regulatory approval		
Electrical safety	CE marked for the Low Voltage Directive EN / IEC 62109-1 / EN / IEC 62109-2, AS3100	
Grid interconnection (pending)	BDEW, VDE0126-1-1, VDE-AR-N 4105, CEI 0-21, CEI 0-16, G59/3, UTE C15-712-1, AS4777, IEC 62116, IEC 61727, PEA & MEA for Thailand**	
Environmental	RoHS, REACH and 4K4H	
EMC	CE marked for the EMC directive 2004-108-EC Emissions: EN 61000-6-3 (residential) Immunity: EN 61000-6-2 (industrial)	
Available product variants		
Base: AC connector and DC connector	PVSCL20E100	PVSCL25E100
Essential: Touch-safe fuse holder DC switch and AC connector	PVSCL20E200	PVSCL25E200
Essential+: Essential with MC4 connector	PVSCL20E201	PVSCL25E201
Optimum: Essential + DC SPD and AC SPD	PVSCL20E300	PVSCL25E300
Optimum+: Optimum with MC4 connector	PVSCL20E301	PVSCL25E301

Specifications are subject to change without notice. *Under unbalanced condition. **Country certification is subject to modification.