

# CL100D

## 6-15kVA

Rack and Tower Design

IGBT Rectifier

DSP Control



Cyclone CL100 DSP Series UPS are single phase in/single phase out, IGBT rectifier, Intelligent Power Module technology based, high input power factor, low THDI and DSP controlled.

## GENERAL SPECIFICATIONS

- Transformerless UPS topology
- IPM power module
- High input power factor > 0,98
- DSP controlled system
- Full digital control system
- Tower and rack type options (6kVA/10kVA)
- PID control system
- Low input current value (THDI < 5%)
- High efficiency
- Cold start function
- Static by-pass system
- Maintenance by-pass switch
- Optional split by-pass system
- VAT transfer (voltage adaptive transfer)
- Output overload and short circuit protection
- External REPO input
- 128 events (5000 alarms) memory
- Clock, calender and operating hourmeter
- Advanced automatic battery test
- Boost charge system
- Temperature compensated charge system
- RS232 port and dry contact relays
- Easy output voltage and frequency selection
- Optional SNMP adaptor
- 2 years warranty
- 5 years spare parts support
- Manufactured according to EC Directive; EN62040

## TECHNICAL SPECIFICATIONS

MODEL	CL106D	CL106DL	CL106DR	CL110D	CL110DR	CL115D
Power (kVA)	6			10		15
<b>INPUT</b>						
Voltage	220/230 VAC 1P + N + G					
Input voltage range	170 - 275 VAC					
Frequency	50Hz / 60Hz					
Frequency tolerance	40Hz - 65Hz					
Power factor (at 100% load)	> 0.98					
THDI (at 100% load)	< 5%					
By-pass voltage / frequency	220/230 VAC , ± 10% / 50Hz or 60Hz					
By-pass frequency tolerance	Adjustable (for synchronization)					
Maintenance by-pass connection	Please ask	Standard	Please ask	Standard	Please ask	Standard
<b>OUTPUT</b>						
Power (kW)	4,2			7		10,5
Voltage	220/230 VAC 1Phase + N, ± 1%					
Frequency	50Hz / 60Hz					
Frequency tolerance	Line synchronized: ± 1% / Free running: ± 0,1%					
Efficiency	Up to 92%					
Crest factor	3:1					
Voltage THD	< 3% (linear load) < 5% (non-linear load)					
Overload protection	100% - 125% load 10 min, 126%-150% load 1 min, >150% load: by pass					
<b>BATTERIES</b>						
Type	Sealed Lead Acid-Maintenance free					
Number of batteries	20x12V standard (16-24 selectable)					
Number of internal batteries	20x12V 4,5Ah/5Ah	20x12V 7Ah/9Ah	20x12V 4,5Ah/5Ah	20x12V 7Ah/9Ah	-	-
Float charging voltage (adjustable)	270 VDC (20x12V for battery)					
End of discharge voltage (adjustable)	200 VDC (20x12V for battery)					
Boost charge	Available					
Battery test	Automatic or Manual, available					
<b>GENERAL</b>						
Standards	EN 62040-1,EN62040-2					
Communication	RS232 standart-RS485 optional					
Software	Standard T-Mon UPS Management Software (3 clients + 1 server management)					
Alarm relays	3 standard (+2 programmable optional)					
Remote EPO input	Available as standard					
Operating temperature	0°C - 40°C					
Storage temperature	-10°C to 50°C					
Protection degree	IP20					
Relative humidity	95% max (non-condensing)					
Altitude	< 2000m above sea level					
Acoustic noise	< 50 dBA					
Weight without batteries (kg)	23	39	23	39	27	40
Dimensions (mm) HxWxD	430x215x600	590x215x780	430x600x215 (19" rack version)	590x215x780	430x600x215 (19" rack version)	590x215x780
<b>OPTIONS</b>						
Different input / output voltage	Please ask					
Heat Compensation System	Please ask					
Galvanic isolation transformer	Please ask					
Adaptors	SNMP, RS485, Remote monitoring panel, MODBUS (RS485 veya TCP/IP)					