



ALFA ON-LINE SOLAR PCU
Italian Technology

30% More Efficient than Ordinary PCU

ALFA ON-LINE PCU

FULL RANGE OF 10-100 KVA SOLAR PCU

100KVA
ONLINE PCU



*Tested as per IEC 61683 and

IEC 60068-2(1,2,14,30) standards.

*AC & DC Parameter configurable from LCD Display

* NLSD & Grid Charging Enable/Disable by LCD



Mfd. by :



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TECHNICAL SPECIFICATION OF HIGHER RATING ONLINE PCU

Parameters	Units	Rating		
System Rating	KVA	10 15 20	20 25 30 40 50	60 80 100
Operating DC Voltage	V	240/288 360		
Charging Voltage(Grid Mode)	V	260/312 390		
Charging Voltage(SPV Mode)	V	280/336 420		
Charging Current(Grid Mode)	A	2.5 - 10 (Adjustable)		
Charging Current(SPV Mode)	A	5 - 20		
Photovoltaic Input				
Input Voltage Range(Min-Max)	VDC	360-450	540-675	
Maximum PV Power recommended	KW	10 15 20	20 25 30 40 50	60 80 100
Number of charge controller		1		
MPPT Based charge controller				
Priority		Solar/Grid/Batt.		
Switching Element		IGBT		
Controller		DSP		
Type of charger		PWM with MPPT		
Peak Efficiency	%	95		
Input				
Input Voltage	V	330V to 480V 3 Phase 4 Wire		
Frequency	Hz	50±10%		
Input Power factor	Lag	>0.9		
Charger Topology		BUCK		
Electrical Connections R Y B	sq. mm	6 6 6	6 8 10 16 16	20 25 35
Neutral	sq. mm	2.5		
Output				
Voltage	V	220/230V Single Phase 3 Wire, 380/400/415V 3Phase 4 Wire		
Voltage Regulation	%	± 1		
Frequency	Hz	50		
Frequency Regulation	Hz	± 0.05		
Power factor	Lag	0.8		
Waveform		Pure Sine Wave		
Transient Response	%	<8 (10%-90% Linear Load)		
Voltage Harmonic	%	<3 (Linear Load)		
Overload Capacity	%	100-110% : 5 min; 150-200% : 1 Sec; 110-120% : 2 min; 200-300% : 50 ms; 120-150% : 30 sec; >300% : 20 ms, With 3 Retries		
Crest factor		3 : 1		
Audible Warning				
Battery Back-up Ending		Intermittent		
Overload		Continuous		
Display				
Switches		Reset for System On/Off # Scroll Switch		
LED		UPS On # Chg. On(spv/grid) # Overload(R,Y,B) # Output low/high(R,Y,B) # Input low/high(R,Y,B) # Batt. low/high		
LCD Display(20x4)		Input Voltage & Frequency - R,Y,B # Output Voltage and frequency - R,Y,B # Batt. Voltage # Load Level # Working Status # Fault Status # SPV Voltage # SPV Current # SPV Power		
Interface (Remote Monitoring)		Over GPRS(3G)/Wifi		
Protections		Overload,Batt. low/high, Output High/Low (R,Y,B), Output Short Ckt, Overheat, Under/Over frequency, Solar Panel reverse		
Others				
Battery Start		Standard		
Cabinet Wheels		Standard		
Extended Battery Charging		Optional		
Overall				
Peak Efficiency(AC-AC)	%	> 92		
Peak Efficiency(DC-AC)	%	> 93		
Transfer Time	ms	0		
Operating Temperature	*C	0-50		
Humidity	%	0-95%		
Dimension(LxWxH)	Inch	Standard		