

Keys

Single-phase input and output	1:1	ورودی و خروجی تک فاز
Three-phase input, Single-phase output	3:1	ورودی ۳ فاز : خروجی تک فاز
Three-phase input and output	3:3	ورودی و خروجی ۳ فاز
Single-phase or three-phase input, single-phase output	1-3:1	ورودی تک فاز یا ۳ فاز : خروجی تک فاز
UPS VFD (Voltage Frequency Dependent)	VFD	یوپیاسهایی که ولتاژ و فرکانس خروجی به ولتاژ و فرکانس ورودی وابسته است
UPS Line Interactive (Voltage Independent)	VI	یوپیاسهایی که ولتاژ خروجی مستقل از ولتاژ ورودی است
UPS Online (Voltage Frequency Independent)	VII	یوپیاسهایی که ولتاژ و فرکانس خروجی مستقل از ولتاژ و فرکانس ورودی است
Tower		يو پي اس ايستاده
Rack		يو پی اس رک مونت
Rack / Tower		يو پی اس دوگانه: ايستاده / رک مونت
Modular system		يو پی اس ماژولار
UPS suitable for home - small office applications		یو پی اس مناسب منازل و دفاتر کوچک
UPS suitable for datacentre applications		یو پی اس مناسب دیتا سنتر
UPS suitable for electro-medical applications		یو پی اس مناسب مصارف بیمارستانی
UPS suitable for industrial applications	M	۔ یو پی اس مناسب کارخاتجات صنعتی
UPS suitable for transport applications (railways, airports, naval)		یو پی اس مناسب حمل و نقل عمومی (مترو، تجهیزات ریلی و فرودگاهی)
UPS suitable for emergency applications		۔ یو پی اس مناسب مصارف اضطراری

علائم



Protect 4.33 three phase output 160 – 600 kVA

3 x 400 VAC input 3 x 400 VAC output

The "Multi Purpose High Power" UPS



3:1 3:3 VFI

Protecting mission critical processes

AEG Power Solutions UPS systems assure the permanent availability of all your global applications including oil, gas & petrochemical, power generation, transportation and other infrastructures.

Designed for all applications

The Protect 4 is a highly reliable solution with a very long track record in system availability and use, providing safe and uninterrupted power back-up. It is a compact ready to install unit, with a maximum single unit capacity of up to 600 kVA, ensuring the safe operation of your critical loads.

It allows you to benefit from a proven design. The robust and easy to operate UPS has excellent overload capability, superior dynamic response and is easy to maintain. Tailoring to specific requirements is possible due to the high level of customization available. Operational expenditure is optimized with a complete and cost effective life cycle.

Robust and reliable design

Protect 4 is designed to meet the toughest application

requirements and offers high reliability with efficient 12 pulse rectifier technology for sinusoidal input current and for reduced input current harmonic distortion (THDi).

The Protect 4 can be used in parallel operation with up to 8 units. This increases the power capacity and allows for even greater safety via N1+ redundancy.

Other key features

- Short circuit proof
- Intelligent battery charging management
- Remote servicing
- Redundant fans
- Comprehensive service support
- Highest operating safety
- Optimum efficiency, even in the partial load range
- Fully loadable neutral conductor
- Integrated logbook function with real-time clock

UPS Specifications

Type power at cos φ 0,8 lag. in kVA	160	220	300	400	500	600				
RECTIFIER UNIT		1	1	1		1				
Nominal AC input voltage in V		3 x 400 (3 x 380, 3 x 415)								
Dperating range min./max. in V		340 / 460								
Frequency in Hz		50/60 ±10 %								
nput current in A at nominal load	259	259 357 486 649 811 973								
nput current in A at nominal load + battery charging	328	451	615	820	1025	1230				
Charging characteristic acc. IEC 478-10	IU									
Nominal DC voltage	384									
Max. charging voltage in V		480								
Fotal harmonic distortion standard /option (pulse)	6/12									
NVERTER UNIT						•				
Nominal DC input voltage in V		384 ±20 %								
Nominal AC output voltage in V		3 × 400 (3 × 380, 3 × 415)								
Output voltage static response		< ±1 %								
Output voltage dynamic response		0 % - 100 % - 0 % < ±5 %								
Correction time		2 ms								
Frequency in Hz		50/60								
Frequency tolerance without mains		±0,1 %								
Frequency synchronization range		±1 %								
Power factor range $\cos \phi$			0.0 lag to	o 0.0 lead						
Dutput phase current Inom in A	231	318	434	578	723	867				
/oltage wave form			sir	านร						
/oltage distortion	≤ 3 %									
Crest factor	3:1									
Dverload response		150 % for 1min, 125 % for 10 min								
Max short circuit current		>3 x Inom								
ITATIC BYPASS SWITCH										
Nominal AC voltage in V)		3 × 400 (3 × 380, 3 × 415								
Frequency in Hz		50/60 ±10 %								
Dverload	500 %									
GENERAL DATA										
Efficiency total up to	94 %									
ECO-Mode up to	98 %									
Noise level in dB(A) depending on type	> 69									
EMC compatibility acc. EN 60040-2	C3 / C2 on request									
Air cooling with redundant /monitored fans	yes									
「emperature range min./max. in °C Storage	-5 / +40 operating, -30 /+75									
nstallation height NN		1000 m								
Protection degree acc. IEC 529/EN 60529	IP 20									
Equipment colour	RAL 7035									
DIMENSIONS										
leight standard device in mm	1910	1915	1925	1915	1915	1960				
leight with max. options in mm	2015	2210	2210	2210	2210	2210				
Width in mm	1200	1200	1500	2100	2100	2400				
Depth in mm	960	960	960	960	960	960				
Weight in kg	1670	1670 1950 2030 3200 3480 3800								



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