PROTECT 4

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

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 N+1 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

AEG
POWER SOLUTIONS

PROTECT 4
SPECIFICATION

Type power at cos φ 0,8 lag. in kVA	160	220	300	400	500	600
RECTIFIER UNIT						
Nominal AC input voltage in V	3x400 (3x380, 3x415)					
Operating range min./max. in V	340/460					
Frequency in Hz	50/60 ±10%					
Input current in A at nominal load	259	357	486	649	811	973
Input 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					
Total harmonic distortion standard/option (pulse)	6/12	12	12	12	12	12
INVERTER UNIT						
Nominal DC input voltage in V	384 ±20%					
Nominal AC output voltage in V	3x400 (3x380, 3x415)					
Output voltage static response	< ±1%					
Output voltage dynamic response 0%–100%–0%	< ±5%					
Correction time	2ms					
Frequency in Hz	50/60					
Frequency tolerance without mains	±0,1%					
Frequency synchronisation range	±1%					
Power factor range cos φ	0.0 lag to 0.0 lead					
Output phase current I_{nom} in A	231	318	434	578	723	867
Voltage wave form	sinus					
Voltage distortion	≤ 3%					
Crest factor	3:1					
Overload response	150% for 1min, 125% for 10min					
Max short circuit current	>3xI_{nom}					
STATIC BYPASS SWITCH						
Nominal AC voltage in V	3x400 (3x380, 3x415)					
Frequency in Hz	50/60 ±10%					
Overload	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					
Temperature range min./max. in °C	-5/+40 Operating, -30/+75 Storage					
Installation height NN	1000m					
Protection degree acc. IEC 529/EN 60529	IP 20					
Equipment colour	RAL 7035					
DIMENSIONS						
Height standard device in mm	1910	1915	1925	1915	1915	1960
Height 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	1950	2030	3200	3480	3800