

AEG

Power supply systems

PROTECT 4.33

Online UPS systems
for data centres
and co-location sites
160-1000 kVA

Classification VFI SS 111
according IEC / EN62040-3



The PROTECT 4 - synonymous with a new dimension in the world of UPS systems

The PROTECT 4. is a compact ready-to-install unit, with a maximum single unit capacity of 1000 kVA available now for the first time and opening up completely new dimensions in protection.

Whether used to protect computer centres, file servers, telecommunications or industrial processes, the PROTECT 4. means additional safety and reliability for your systems.

Environmentally friendly

The PROTECT 4. offers the highest reliability with efficient modern technology and 12 pulse

rectifier for sinusoidal input current consumption to DIN 41773. Thanks to its excellent efficiency level of up to 94 %, up to 8000 € can be saved per year in every day online use.

Increased power and reliability through parallel operation

The PROTECT 4. can be used in parallel operation with up to 8 units.

This increases the power capacity to 8 MVA, or allows for even greater safety via N+1 redundancy.



| | | | | | | | | |
|---|-----|-----|-----|-----|-----|-----|-----|------|
| Type power at cos φ 0,8 lag. in kVA | 160 | 220 | 300 | 400 | 500 | 600 | 800 | 1000 |
|---|-----|-----|-----|-----|-----|-----|-----|------|

INVERTER UNIT

| | | | | | | | | |
|---|-------------|-----|-----|-----|-----|-----|------|------|
| Nominal DC voltage min./max. in V | 307 / 461 | | | | | | | |
| Nominal AC voltage in V | 3 x 400 | | | | | | | |
| Adjustable min./max. in V | 380 / 415 | | | | | | | |
| Static response | < \pm 1 % | | | | | | | |
| Dynamic response | < \pm 5 % | | | | | | | |
| Correction time | 2 ms | | | | | | | |
| Frequency in Hz | 50 / 60 | | | | | | | |
| Frequency tolerance without mains | \pm 0,1 % | | | | | | | |
| Frequency synchronisation range | \pm 1 % | | | | | | | |
| Power factor range cos φ | cap-1-ind | | | | | | | |
| Output phase current in A | 231 | 318 | 434 | 578 | 723 | 867 | 1156 | 1445 |
| Voltage wave form | sinus | | | | | | | |
| Voltage distortion | \leq 3 % | | | | | | | |
| Crest factor | max. 3 | | | | | | | |
| Overload response for 1 min. | 150 % | | | | | | | |
| Overload response for 10 min. | 125 % | | | | | | | |
| Short circuit response of I_{nom} typical | 300 % | | | | | | | |

STATIC BYPASS SWITCH

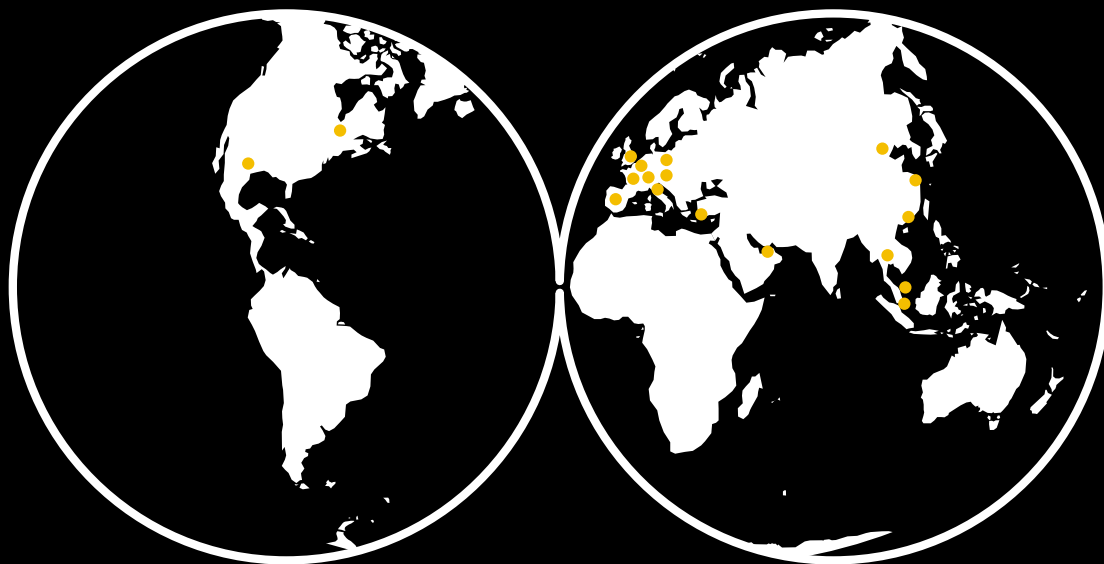
| | | | | | | | | |
|-----------------------------------|---------------------|-----|-----|-----|-----|-----|-----|------|
| AC voltage min./nominal/max. in V | 3 x 380 / 400 / 415 | | | | | | | |
| Frequency in Hz | 50 / 60 | | | | | | | |
| Nominal power in kVA | 160 | 220 | 300 | 400 | 500 | 600 | 800 | 1000 |
| Overload | 500 % | | | | | | | |

GENERAL DATA

| | | | | | | | | |
|---|-------------|--|--|--|--|--|--|--|
| Efficiency total up to | 94 % | | | | | | | |
| Noise level in dB(A) depending on type | > 69 | | | | | | | |
| EMC compatibility acc. EN 60040-2 | C 2 | | | | | | | |
| Air cooling with redundant/monitored fans | yes | | | | | | | |
| Operating-temperature range min./max. in $^{\circ}$ C | - 5 / + 40 | | | | | | | |
| Storage-temperature range min./max. in $^{\circ}$ C | - 30 / + 75 | | | | | | | |
| Installation height NN | 1000 m | | | | | | | |
| Protection degree acc. IEC 529 / EN 60529 | IP20 | | | | | | | |
| Equipment colour | RAL 7032 | | | | | | | |

DIMENSIONS

| | | | | | | | | |
|--------------------------------|------|------|------|------|------|------|------|------|
| Height standard device in mm | 1910 | 1915 | 1925 | 1915 | 1915 | 1960 | 2210 | 2210 |
| Height with max. options in mm | 2015 | 2210 | 2210 | 2210 | 2210 | 2210 | 2210 | 2210 |
| Width in mm | 1200 | 1200 | 1500 | 2100 | 2100 | 2400 | 4050 | 4850 |
| Depth in mm | 960 | 960 | 960 | 960 | 960 | 960 | 1060 | 1060 |
| Weight in kg | 1670 | 1950 | 2030 | 3200 | 3480 | 3800 | 5700 | 5900 |



Power Systems

Whenever wherever watever

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Saft power systems

Harmer+Simmons

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