

PROTECT 4.33

160-1000kVA

On line UPS systems for Data Centres and Co-location sites 160-1000kVA

Protect 4 - synonymous with a new dimension in the world of UPS systems.

The Protect 4 range are compact ready to install units, 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 range means additional safety and reliability for your systems.

Environmentally friendly

Protect 4 offers the highest reliability with efficient modern technology and 12 pulse rectifier for sinusoidal input current consumption to DIN 41773.

Increased power and reliability through parallel operation

The Protect 4 range can be used in parallel operation with up to 8 units. This increases the total power capacity to 8 MVA, or allows for even greater safety via N+1 redundancy.

For more information on our full range of UPS systems or for a full quotation, please telephone AVK | SEG (UK) LTD on 01628 503900.

Up to
1 MVA
unit

Unique control capability with three custom microprocessors.

A key feature of the unit's design are the three control microprocessors. These were specially developed for use in UPS. They monitor and control the rectifier, inverter and static switch units simultaneously. Nothing should be left to chance, an opinion we are certain that you will share.

Key features

- Highest operating safety
- Optimum efficiency, even in the partial load range
- Fully loadable neutral conductor
- Short circuit proof
- Overload capacity available
- Standardised components
- Intelligent battery charging management
- Integrated logbook function with real time clock



- Terminal emulation/VT100 via S232
- Security thanks to internal redundancy: separate microprocessor for control of rectifiers, inverters and static bypass
- Ergonomic full graphical display for ease of operation (in 10 different languages)
- Integrated network interface incl. SNMP agent for network management (optional)
- Reliable shutdown and reboot using network software
- CompuWatch via RS232-C bridge
- Manufactured to DIN ISO 9001
- CE - compliant
- Low maintenance requirement
- Remote servicing via modem
- Comprehensive service support
- Redundant fans

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Specification

Type Project 4.33	160	220	300	400	500	600	800	1000
Type power at cos ϕ 0,8 lag.(kVA)	160	220	300	400	500	600	800	1000
RECTIFIER UNIT								
Nominal voltage (V)	3 x 400							
Operating range min/ max (V)	340 / 460							
Frequency (HZ)	45 - 66							
Input current at nominal load (A)	259	357	486	649	811	973	1300	1624
Input current at nominal load + battery charging (A)	328	451	615	820	1025	1230	1600	2000
Charging characteristics	IU to IEC 478-10							
Nominal DC voltage (V)	384							
Max charging voltage (V)	461							
Total Harmonic Distortion standard / option (pulse)	6/12	12	12	12	12	12	12	12
INVERTER UNIT								
Nominal DC voltage min/max (V)	384/408							
Nominal AC voltage (V)	3 x 400							
Adjustable min/ max (V)	380/415							
Static stability	< \pm 1%							
Dynamic response	< \pm 5%							
Correction time	2 ms							
Frequency (Hz)	50/60							
Frequency tolerance without mains	\pm 0.1%							
Frequency tolerance (synch. range)	\pm 1%							
Power factor range (cos ϕ)	cap-1-ind							
Output phase current (A)	231	318	434	578	723	867	1156	1445
Voltage wave form	Sinusoidal							
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 (V)	3 x 380/400/415							
Frequency (Hz)	50/60							
Nominal power (kVA)	160	220	300	400	500	600	800	1000
Overload	500%							
GENERAL DATA								
Overall Efficiency	<94%							
Noise level depending on type (dBA)	>69							
EMC compatibility	C 2 to EN 60040-2							
Air cooling with redundant, monitored fans	yes							
Operating-temperature range min/max (°C)	-5 / +40							
Storage-temperature range min/ max (°C)	-30 / +75							
Installation height	Max 1000m. above sea level with no adverse performance							
Protective system	IP20 to IEC 529 / EN 60529							
Equipment colour	RAL 7032							
DIMENSIONS								
Height standard device (mm)	1910	1915	1925	1915	1915	1960	2210	2210
Height with max options (mm)	2015	2210	2210	2210	2210	2210	2210	2210
Width (mm)	1200	1200	1500	2100	2100	2400	4050	4850
Depth (mm)	960	960	960	960	960	960	1060	1060
Weight (Kg)	1670	1950	2030	3200	3480	3800	5700	5900