Rating (kVA)	10	15	20
Nominal power (kW)	9	13.5	18
UPS dimensions WxHxD (mm)	450x1200x670		
UPS weight (kg)	100	110	110
UPS weight with internal battery (kg)	Min.175 Max.285	Min.260 Max.275	Min.260 Max.275
External battery module dimensions WxHxD	500x1200x670		
Battery configuration	Internal or external, 360÷372 cells, VRLA (other options)		

Input

Connection type	Hardwired 4w (rectifier), 2w (bypass)		
Nominal voltage	380/400/415 Vac 3-phase with neutral (rectifier) 220/230/240 Vac 1-phase (bypass)		
Voltage tolerance	-20%, +15%		
Frequency and range	50/60 Hz (45÷65 Hz)		
Power factor	0.99		
Current distortion (THDi)	<3%		

Output

Connection type	Hardwired 2w		
Nominal voltage	220/230/240 Vac 1-phase		
Frequency	50/60 Hz		
Voltage regulation	±1% static; dynamic: IEC EN 62040-3 Class 1		
Power factor	up to 0.9, lagging or leading without power derating		
Overload capacity	Inverter: 101÷125% for 10 min, 126÷150% for 30 s, >150% for 10 s; bypass: 150% continuous, 1000% for 1 cycle		
Efficiency (AC/AC)*	up to 98%		
Classification as per IEC EN 62040-3	VFI-SS-111		

Connectivity and function extensions

Front panel	Graphic display, mimic LED panel and keyboard, local EPO		
Remote communication	Serial RS232 and USB; terminal block for battery breaker auxiliary contact. Optional: input terminal block (remote emergency power off, battery circuit breaker aux. cont., external maintenance bypass circuit breaker aux. cont., diesel mode aux. cont.); SNMP adapter (Ethernet), Web interface (Ethernet), ModBus-TCP/IP (Ethernet); ModBus-RTU (RS485); ModBus-RTU to PROFIBUS DP adapter; SPDT contact relay board; remote system monitoring panel; UPS managing and server shutdown software		
Optional function extensions	Isolation transformer; transformers/autotransformers for voltage adjustment; external maintenance bypass; custom battery cabinets; wall-mounted battery fuse switch box; battery thermal probe; parallel kit		

System

Protection degree	IP 20		
Colour	RAL 7016		
Installation layout	10 cm wall-gap, side by side installation allowed		
Accessibility	Front and top access, bottom cable entry		

*according to IEC EN 62040-3

Other features

Environmental

Operating temperature range	0 °C ÷ +40 °C		
Storage temperature range	-10 °C ÷ +70 °C		
Altitude	<1000 m		
Audible noise at 1m (dBA)	<62		

Standards and certifications

Quality assurance, environment, health and safety	ISO 9001:2008, ISO 14001:2004, GOST, BS OHSAS 18001:2007		
Safety	IEC EN 62040-1		
EMC	IEC EN 62040-2		
Test and performance	IEC EN 62040-3 (VFI-SS-111)		
Protection degree	IEC 60529		
Marking	CE		