

Q-on

3-Series UPS

The Q-on 3-Series is a high-specification 3-phase UPS designed for midrange enterprises. Ideally suited for the small data centre, departmental workspace and point-of-sale aisle applications.

The high-power Q-on 3 Series UPS features 3rd generation design and the very latest componentry, providing world class reliability and extremely efficient operation. The advanced design of the Q-on 3-Series architecture ensures input power regulation without the need for bulky isolation transformers setting a new benchmark for price performance.

True Double Conversion On-line Topology

The Q-on 3 Series range features double conversion topology. This means that the critical load is always isolated from potentially unstable utility power by means of the rectifier & inverter providing isolation on the UPS's output. This ensures that poor power conditions, such as low voltage dips and power surges are regulated without switching to battery power. This is a crucial factor for reliable operation with generators. Tightly regulated output power ensures that equipment is protected, even if subjected to a current in-rush on start up. This results in smooth start up of critical equipment under any conditions.

Design features:

- 10-80 kVA
- True on-line technology
- Distortion free input
- Fault tolerant architecture
- Compact footprint
- Integrated battery bank
- Input Power Factor Correction (PFC)
- Power surge stabilization
- 2 Year warranty, 1st Year on-site*

*subject to T&C's



User friendly operation

The Q-on 3 Series user friendly interface presents information and instructions, in a clear and unambiguous manner. Also displayed are alarm/event logs and detailed system status information.

Generator friendly technology

The 3-Series uses the very latest design and IGBT (Insulated Gate Bipolar Transistor) rectifier technology to eliminate input harmonics (< 3%THD). This ensures tight generator compatibility and eliminates bulky input filters. This results in significant cost savings as UPS power consumption is reduced by up to 20% and generators can be accurately matched and no longer have to be significantly oversized to operate reliably. In addition, wide frequency shifts produced when generators are subjected to unstable loads are negated by the wide frequency tolerance inherent in the 3-Series architecture. This ensures the output frequency is maintained at all times without unnecessary switching to and from battery mode as large frequency deviations occur.

powermode

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3-Series UPS

	Q310K	Q315K	Q320K	Q330K	Q340K	Q360K	Q380K
Nominal power (kVA)	10	15	20	30	40	60	80
INPUT							
Nominal Voltage	3 x 400V (3Ph + N)						
Acceptable Voltage Range	+15% or -20%						
Frequency	50 / 60 Hz \pm 5 %						
Total Harmonic Distortion (THDi)	< 1.5% @ 100% load			< 1.0% @ 100% load			
	< 2.5% @ 50% load			< 2.0% @ 50% load			
	< 6.0% @ 10% load			< 5.0% @ 10% load			
Current Limitation	High overload: PFC Limit (discharging batteries)						
Power Factor	1						
INVERTER							
Nominal Voltage	3 x 400V (3Ph + N)						
Output Power Factor	.8						
Precision	Stationary: \pm 1% Transitory: \pm 2% (load variations 100-0-100%)						
Frequency	50/60 Hz synchronised \pm 4 %						
Max. Synchronisation Speed	\pm 1 Hz/s						
Waveform	Pure Sinewave						
Total Harmonic Distortion (THDv)	<0.5% (Linear Load) <1.5% (Non-linear Load)						
Phase Displacement	120° \pm 1% (balanced load) 120° \pm 2% (imbalances 50% of the load)						
Dynamic Recovery Time	10 ms. at 98 % of the static value						
Admissible Overload	125% for 10 min., 150% for 60 s						
Admissible Crest Factor	3.4: 1			3.2 : 1			
Admissible Power Factor	0.1 inductive to 0.1 capacitive						
Imbalance Output Voltage @ 100% Unbalanced Load	< 1 %						
Current Limit	High overload, short-circuit: RMS Voltage Limit						
STATIC BYPASS							
Type	Solid state						
Voltage	3x400V (3Ph + N)						
Frequency	50/60 Hz						
Activation criterion	Microprocessor control						
Transfer time	Zero						
Admissible overload	400% for 10 sec						
Transfer to bypass	Immediate, for overloads above 150%						
Retransfer	Automatic after alarm clear						
MANUAL BYPASS (MAINTENANCE)							
Type	Without interruption						
Voltage	3 x 400V (3Ph + N)						
Frequency	50 / 60 Hz						
Overall Efficiency (Line mode)	90,0 %	90,5 %	91,0 %	92,0 %	92,5 %	93,05 %	94,0 %
PHYSICAL							
Dimensions, D x W x H(mm)	700 x 450 x 1100			980 x 650 x 1320			
Net Weight (without batteries) (Kg)	120			190	200	300	
Built-in Batteries Type (2x31)	12V 7Ah	12V 7Ah	12V 7Ah	12V 12Ah	12V 17Ah	-	-
Net Weight (w/built-in batteries) (Kg)	250		250	250		-	
EXTERNAL BATTERY CABINET 1							
Dimensions, D x W x H (mm)	700 x 450 x 110			980 x 650 x 1320			
Built-in Battery Type (2x31)	12V 7 or 17Ah			12V 26 or 40Ah			
Net Weight (Kg)	250			710			
Net Weight (Kg)	410			1020			