

TECHNICAL SPECIFICATIONS
Q-LS 10 – 60 kVA (Single Wide)



MODEL	Q-LS 10	Q-LS 15	Q-LS 20	Q-LS 30	Q-LS 40	Q-LS 50	Q-LS 60
kVA	10	15	20	30	40	50	60
kW	8	12	16	24	32	40	48
Phase	Three-phase, split-phase, single-phase input or output combinations available upon request						
RECTIFIER							
INPUT VOLTAGE (Select upon order)	Three Phase (Delta) – 208, 380, 400, 415, 440, 480, 600, 690 Split Phase – 120/240 Single Phase – 110, 115, 120, 138, 220, 230, 240						
INPUT RANGE	+/- 16% (Changeable on request)						
INPUT FREQUENCY	50/60- Hz (35 – 75 Hz)						
INPUT POWER FACTOR	Three-Phase – 0.8 Single-Phase – 0.6						
POWER WALK-IN	15% - 100%: 15 sec						
VOLTAGE REGULATION	1%						
RIPPLE VOLTAGE	<0.5%						
PULSES	6 or 12						6 (Must have double-wide cabinet for 12)
BATTERY	Q-LS 10	Q-LS 15	Q-LS 20	Q-LS 30	Q-LS 40	Q-LS 50	Q-LS 60
BATTERY COMPATIBILITY	Sealed Lead Acid						
STRING SIZE	29 pcs. (12V ea.)						
VOLTAGE RANGE	296 – 405 VDC						
MAXIMUM CHARGE CURRENT (A)	4	6	8	12	16	25	26
FLOAT VOLTAGE	390 VDC						
DC COLD START	Yes						
INVERTER	Q-LS 10	Q-LS 15	Q-LS 20	Q-LS 30	Q-LS 40	Q-LS 50	Q-LS 60
DC INPUT RANGE	285-420 VDC						
WAVE FORM	Sinusoid						
OUTPUT VOLTAGE (Select upon order – May be different from input)	Three Phase (Wye) – 208, 380, 400, 415, 440, 480, 600, 690 Split Phase – 120/240 Single Phase – 110, 115, 120, 138, 220, 230, 240						
VOLTAGE REGULATION AT GIVEN DC VOLTAGE	+/- 2%						
VOLTAGE REGULATION FROM FULL DC TO EMPTY DC	+/- 3%						
FREQUENCY LOCK RANGE	48.5-51.5 Hz / 58.5-61.5 Hz						
OUTPUT FREQUENCY (FREE RUNNING)	50/60Hz +/- 0.1 Hz (Selectable)						
THD (LINEAR LOAD)	< 3%						
OVERLOAD	<115%		Continuous				
	116-124%		15 min				
	125-149%		5 min				
	> 150%		30 sec				
STATIC SWITCH	Q-LS 10	Q-LS 15	Q-LS 20	Q-LS 30	Q-LS 40	Q-LS 50	Q-LS 60
VOLTAGE RANGE	+ 10% / - 20% of input						
FREQUENCY RANGE	50/60- Hz +/- 2.5Hz						
TRANSFER TIME:							
MAINS > INVERTER	0.04 ms						
INVERTER > MAINS	0.04 ms						
ISOLATION WITH OUTPUT	Yes						
OVERALL CHARACTERISTICS	Q-LS 10	Q-LS 15	Q-LS 20	Q-LS 30	Q-LS 40	Q-LS 50	Q-LS 60
OVERALL EFFICIENCY	90%			91%		92%	
OPERATING ENVIRONMENT:							
TEMPERATURE	0-40° C (32 - 104° F)						
HUMIDITY	0% - 95% (Non-Condensing)						
ALTITUDE	< 1500 M Above Sea Level						
APPROX. WEIGHT (Kg / lb) (Base before customizations)	300 / 661	350 / 772	400 / 882	470 / 1036	520 / 1146	560 / 1235	630 / 1389
DIMENSIONS:							
HEIGHT(in/cm)	67 / 170 or 79 / 200						
WIDTH(in/cm)	26 / 65						
DEPTH(in/cm)	36 / 90						
AUDIBLE NOISE (AT 1m)	<63 dBA				<65 dBA		

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STANDARDS:	
EN50091-1,2	Yes
FCC CLASS A	Yes
UL 1778	Compliant
CSA	Compliant
PROTECTIONS:	
SHORT CIRCUIT	Rectifier, Reserve, Bypass NFB
LIGHTNING	MOV
EMC FILTER	Input & Output
GALVANIC ISOLATION	Between Input & Output
DATA DISPLAY BY LCD	Yes
INDICATIONS & ALARMS:	
LED, LCD, BUZZER	Yes
DRY CONTACT	Yes

* Most specifications are changeable upon request. Please speak with a sales representative.

