

M90 & M90L Modular Online Three-Phase UPS

15kVA, 20kVA, 30kVA, 40kVA, 45kVA, 60kVA Models

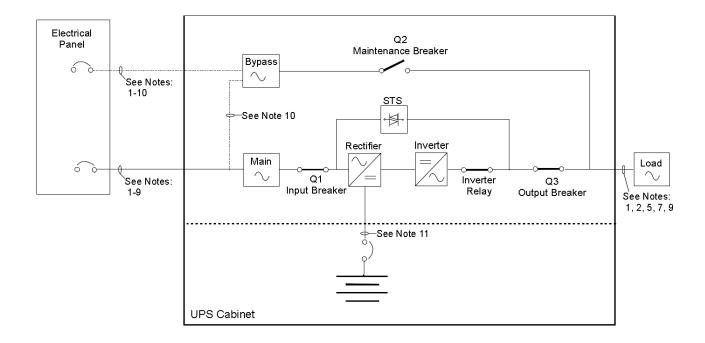
Site Planning Guide

M90 and M90L Site Planning Data 15 – 60kVA, 208VAC, 60Hz

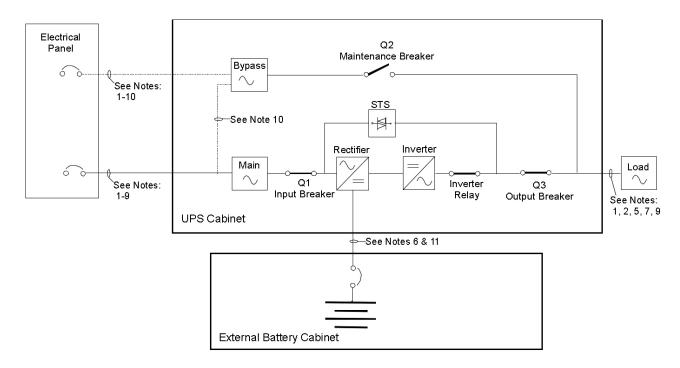
- 1. Manufacturer recommends sizing all cables for 45kVA or 60kVA system to allow for future expansion
- 2. UPS must be installed in accordance with all local, state, and national electrical codes
- 3. Nominal (Nom) current is based on full rated output load at nominal input voltage. Nominal current is considered continuous current as defined in NEC 215.
- 4. Maximum (Max) current is based on nominal current plus maximum battery recharge current. Battery recharge current is considered non-continuous current as defined in NEC 215.
- 5. Over Current Protective Device (OCPD) to be supplied by customer
- 6. Wiring Requirements: AC Rectifier and Bypass Input: Three-Phase, 4 wire plus ground, Battery: +, -, Center-Tap
- 7. Ground conductor to be sized per NEC 250. Neutral conductor to sized for full capacity per NEC 310
- 8. UPS accepts top, bottom, and side cable entry
- 9. Input and output cables to be in dedicated conduits
- 10. Remove Main Input to Bypass Input jumpers and add Bypass input circuit for dual input configuration. Main Input service and Bypass Input service must be in phase.
- 11. Weight includes UPS chassis, power modules, and standard internal battery (M90 only). Batteries are located in trays in UPS cabinet of XPC M90 Systems and are located in external cabinet on XPC M90L systems. Weight of external battery cabinet dependent on battery system selected.
- 12. Minimum ventilation clearance is 39" top, 16" back, and 36" front. Minimum service clearance is 39" top, 36" back, 36" front, and 36" sides. Manufacturer recommends using flexible conduit to allow moving UPS to provide required service clearance.
- 13. Operation in ECO-Mode will result in input current reflecting output current

		1		1			,	
UPS Rating	kVA	15	20	30	40	45	60	Notes
	kW	13.5	18	27	36	40.5	54	
Voltage	Input	208	208	208	208	208	208	6
	Output	208	208	208	208	208	208	6
AC Rectifier Input (A)	Nom.	41	54	82	109	122	163	1, 3, 7, 13
	Max	47	60	93	120	140	180	4
	Rec OCPD	60	70	125	150	175	225	1,2,5,9
AC Bypass Input (A)	Nom.	42	56	83	111	125	167	1,3,7
	Max	42	56	83	111	125	167	4
	Rec OCPD	60	70	125	150	175	225	1,2,5,9, 10
Battery	Nominal VDC	+/- 120	+/- 120	+/- 120	+/- 120	+/- 120	+/- 120	6
	Maximum Current (A)	75	98	150	196	225	294	11
AC Output (A)	Nom	42	56	83	111	125	167	1
	Rec. OCPD	60	76	125	150	175	225	1,2,5,7,9
Mechanical	Heat BTU/Hr	4007	5342	8013	10684	12020	16026	12
	Dimensions W x D x H	20.3 x 39.4 x 54 (M90) 20.3 x 39.4 x 30 (M90L)	u u	u u	u u	u u	u u	8
	Weight (lbs)	817 (M90) 299 (M90L)	819 (M90) 301 (M90L)	1150 (M90) 371 (M90L)	1154 (M90) 375 (M90L)	1483 (M90) 443 (M90L)	1489 (M90) 449 (M90L)	11

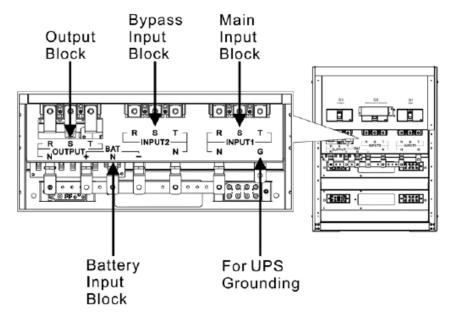
M90 Installation



M90L Installation



M90 and M90L Connections



Rear View & Wiring Terminal Block