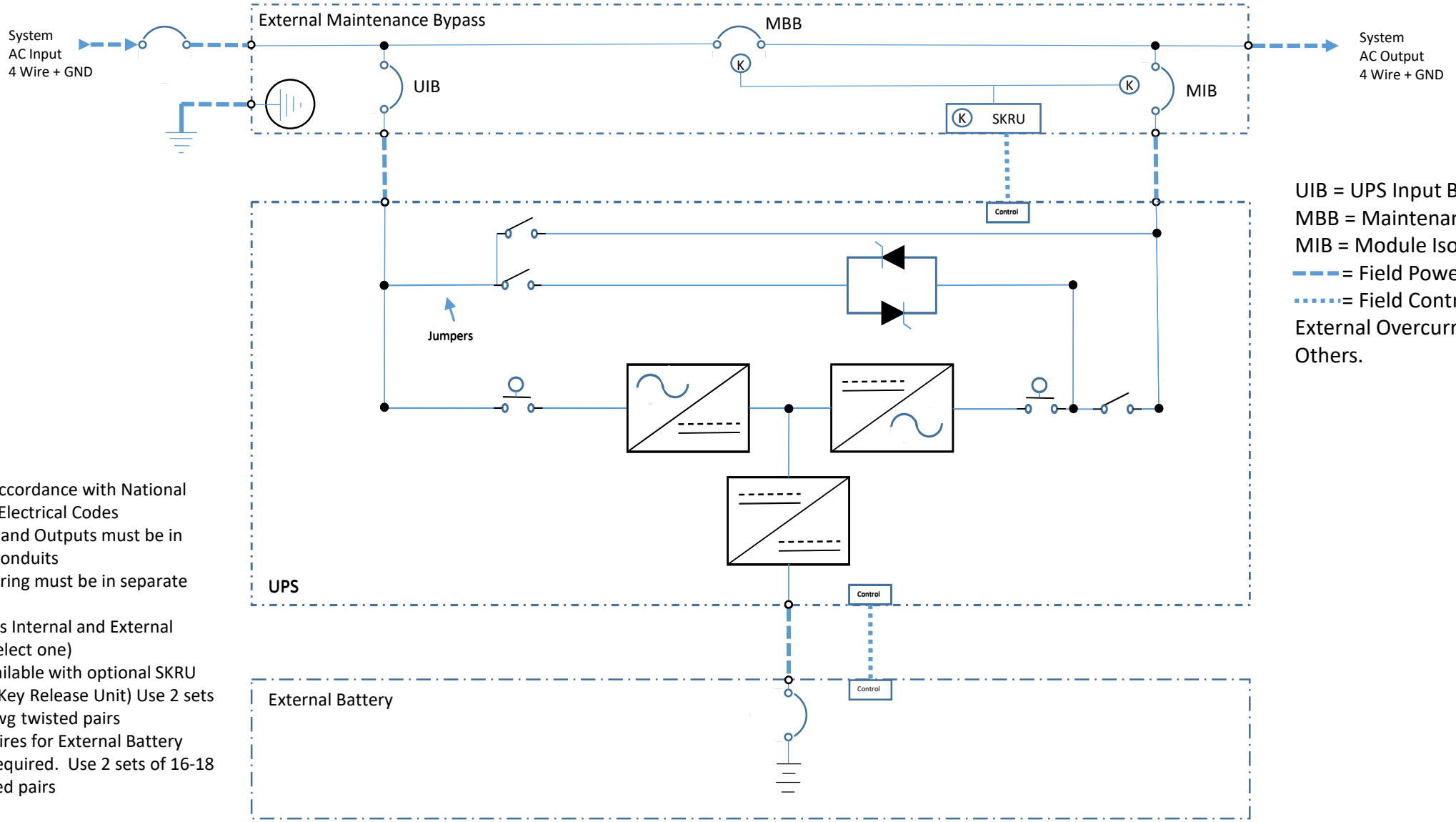
Site Planning Guide – STACO ENERGY – P Series UPS: 65-125kVA/kW, 60Hz, 480/277v Single Input, 480/277v Output



UIB = UPS Input Breaker
MBB = Maintenance Bypass Breaker
MIB = Module Isolation Breaker
= Field Power Wiring by others
= Field Control Wiring by others
External Overcurrent protection by Others.

Notes:

1. Install in accordance with National and Local Electrical Codes
2. UPS Input and Outputs must be in separate conduits
3. Control wiring must be in separate conduits
4. Dwg shows Internal and External Battery (select one)
5. MBS is available with optional SKRU (Solenoid Key Release Unit) Use 2 sets of 16-18awg twisted pairs
6. Control Wires for External Battery Cabinet Required. Use 2 sets of 16-18 awg twisted pairs

STACO ENERGY - P SERIES 65-125kVA, SINGLE MODULE SITE PLANNING GUIDE

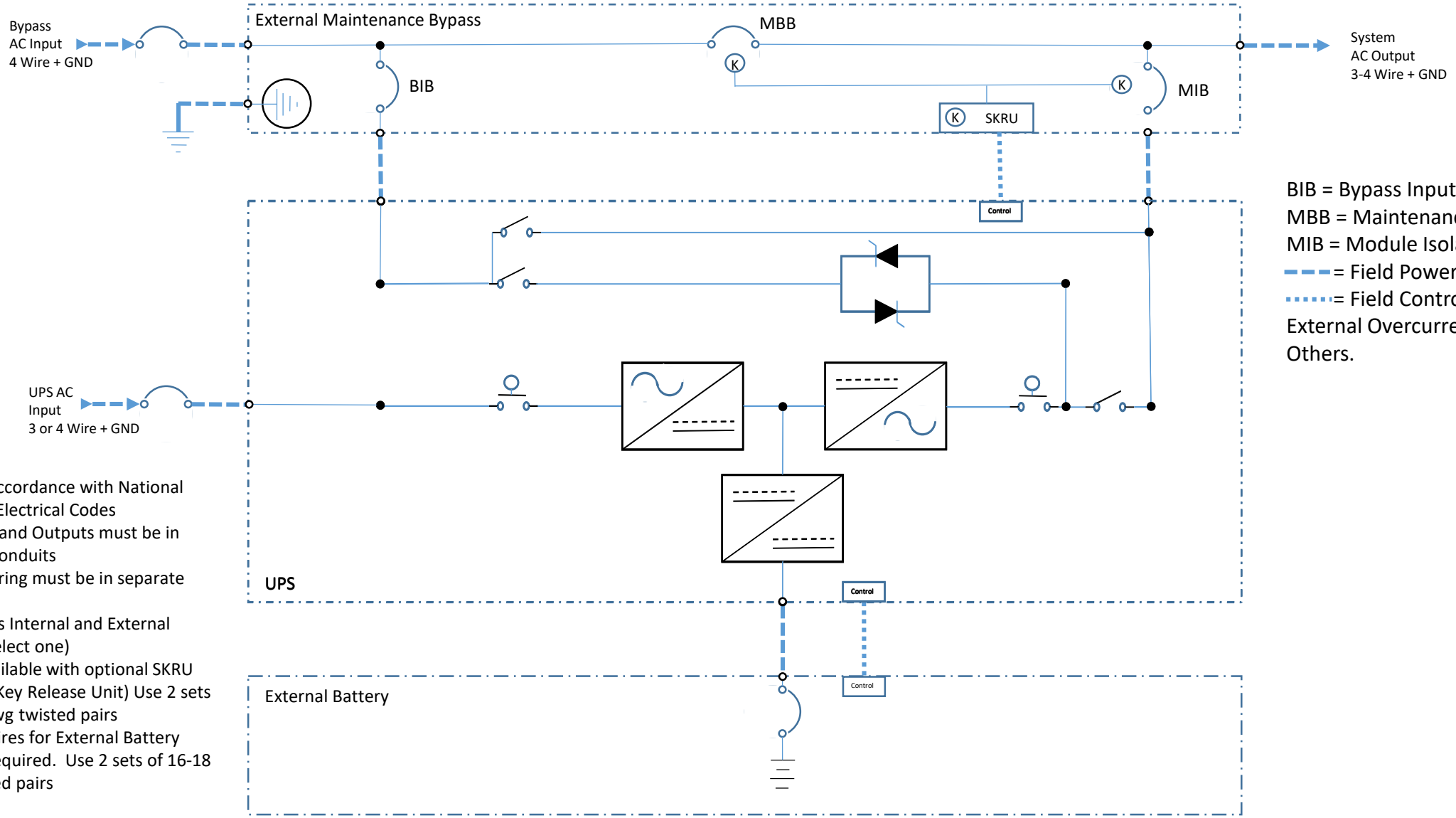
Site Planning Data – 65-125kVA 480v Input - 480v Output – Single Input

UPS Output Rating		Voltage		AC Input Rectifier Current in Amps			Bypass Input (Disregard with Single Input UPS)		AC Output Current		Battery		Max Heat Dissipation	Dimensions	Inverter Efficiencies
kVA	kW	Input	Output	Nom.	Max	External Breaker Trip	Nom	External Breaker Trip	Nom	External Breaker Trip	Nom VDC	Max. Discharge	Full Load BTU's / Hr.	WxDxH inches (mm)	Inverter DC-AC 100% Load
65	58.5	480/277v	480/277v	78.2	89	125	78.2	100	78.2	125	127	159.5	15,033	31.5 x 33.46 x 75.02 (800 x 850 x 1905)	95
80	72	480/277v	480/277v	96.3	109	175	96.3	125	96.3	125	156	196.4	18,500	31.5 x 33.46 x 75.02 (800 x 850 x 1905)	95
100	90	480/277v	480/277v	120.3	136	175	120.3	150	120.3	150	195	235.8	23,120	31.5 x 33.46 x 75.02 (800 x 850 x 1905)	95
125	112.5	480/277v	480/277v	150.4	160	200	150.4	200	150.4	200	244	294.8	28,900	31.5 x 33.46 x 75.02 (800 x 850 x 1905)	95

Notes:

- Nominal (Nom) current is based on full rated output load at nominal input voltage.
- Maximum (Max) current is short duration for battery recharge conditions
- UPS input and bypass cable must be run in separate conduit from output cables.
- Nominal battery voltage is shown at 2.0 volts/cell per NEC 480-2.
- Nominal rectifier AC input current (considered continuous) is based on full rated output load. Maximum current includes nominal input current and maximum battery recharge current (considered non-continuous)
- Minimum-sized grounding conductors to be per NEC 250-122. Parity-sized ground conductors are recommended. Neutral conductors to be sized for full capacity per NEC310-15 (b)(4)
- Wiring requirements: AC Input: 3-phase, 4-wire, plus ground. AC Output: 3-phase, 3 or 4–wire, plus ground.
- All wiring is to be in accordance with National and Local Electric codes.
- Minimum access clearance is 36" (914MM) front; ventilation clearance is 24" (610mm) above and 2" (51mm) rear.
- Control wiring and power wiring must be run in separate conduit.
- Power cables from UPS Module DC bus to battery should be sized for a total maximum of 2.0 volt line drop (voltage drop from UPS plus return voltage drop as measured back at the module) at maximum discharge current.
- If the UPS is to be fed from an ATS, the transfer time should be delayed by 100-200ms for transfers between two sources.

Site Planning Guide – STACO ENERGY – P Series UPS: 65-125kVA/kW, 60Hz, 480v Dual Input



BIB = Bypass Input Breaker
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External Overcurrent protection by Others.

Notes:

1. Install in accordance with National and Local Electrical Codes
2. UPS Input and Outputs must be in separate conduits
3. Control wiring must be in separate conduits
4. Dwg shows Internal and External Battery (select one)
5. MBS is available with optional SKRU (Solenoid Key Release Unit) Use 2 sets of 16-18awg twisted pairs
6. Control Wires for External Battery Cabinet Required. Use 2 sets of 16-18 awg twisted pairs

STACO ENERGY - P SERIES 65-125kVA, SINGLE MODULE SITE PLANNING GUIDE

Site Planning Data – 65-125kVA 480v Dual Input; 480v Output

UPS Output Rating		Voltage		AC Input Rectifier Current in Amps			Bypass Input		AC Output Current		Battery		Max Heat Dissipation	Dimensions	Inverter Efficiencies
kVA	kW	Input	Output	Nom.	Max	External Breaker Trip	Nom	External Breaker Trip	Nom	External Breaker Trip	Nom VDC	Max. Discharge	Full Load BTU's / Hr.	WxDxH inches (mm)	Inverter DC-AC 100%
65	58.5	480/277v	480/277v	78.2	89	125	78.2	100	78.2	100	127	159.5	15,033	31.5 x 33.46 x 75.02 (800 x 850 x 1905)	95
80	72	480/277v	480/277v	96.3	109	175	96.3	125	96.3	125	156	196.4	18,500	31.5 x 33.46 x 75.02 (800 x 850 x 1905)	95
100	90	480/277v	480/277v	120.3	136	175	120.3	150	120.3	150	195	235.8	23,120	31.5 x 33.46 x 75.02 (800 x 850 x 1905)	95
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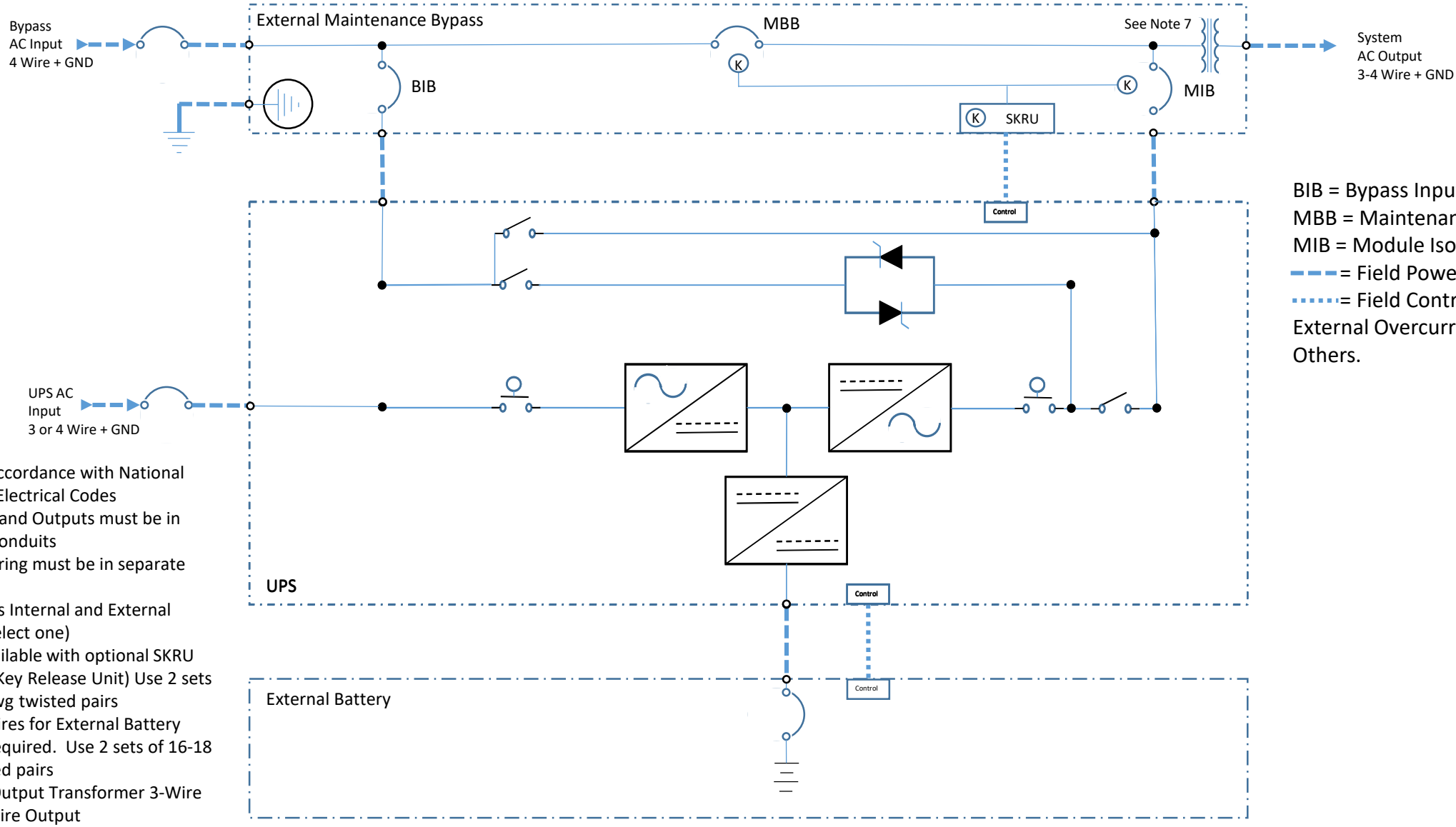
Notes:

- Nominal (Nom) current is based on full rated output load at nominal input voltage.
- Maximum (Max) current is short duration for battery recharge conditions
- UPS input and bypass cable must be run in separate conduit from output cables.
- Nominal battery voltage is shown at 2.0 volts/cell per NEC 480-2.
- Nominal rectifier AC input current (considered continuous) is based on full rated output load. Maximum current includes nominal input current and maximum battery recharge current (considered non-continuous)
- Minimum-sized grounding conductors to be per NEC 250-122. Parity-sized ground conductors are recommended. Neutral conductors to be sized for full capacity per NEC310-15 (b)(4)
- Wiring requirements: AC Input: 3-phase, 4-wire, plus ground. AC Output: 3-phase, 3 or 4–wire, plus ground.
- All wiring is to be in accordance with National and Local Electric codes.
- Minimum access clearance is 36" (914MM) front; ventilation clearance is 24" (610mm) above and 2" (51mm) rear.
- Control wiring and power wiring must be run in separate conduit.
- Power cables from UPS Module DC bus to battery should be sized for a total maximum of 2.0 volt line drop (voltage drop from UPS plus return voltage drop as measured back at the module) at maximum discharge current.
- If the UPS is to be fed from an ATS, the transfer time should be delayed by 100-200ms for transfers between two sources.

Site Planning Guide – STACO ENERGY – P Series UPS: 65-125kVA/kW, 60Hz, Dual Input, 480v - 208/120v Output



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6. Control Wires for External Battery Cabinet Required. Use 2 sets of 16-18 awg twisted pairs
7. Optional Output Transformer 3-Wire input, 4-Wire Output

STACO ENERGY - P SERIES 65-125kVA, SINGLE MODULE SITE PLANNING GUIDE

Site Planning Data – 65-125kVA 480v Dual Input; 208/120v Output

UPS Output Rating		Voltage		AC Input Rectifier Current in Amps 480/277v			Bypass Input 480/277v		UPS AC Output Current	AC Output Current	Battery		Max Heat Dissipation	Dimensions	Inverter Efficiencies
kVA	kW	Input	Output (xfmr)	Nom.	Max	External Breaker Trip	Nom	External Breaker Trip	Nom. 480/277v	Nom 208/120v	Nom VDC	Max Discharge	Full Load BTU's / Hr.	WxDxH inches (mm)	Inverter DC-AC 100%
65	58.5	480/277v	480/277v	78.2	89	125	78.2	100	78.2	181	127	159.5	15,033	31.5 x 33.46 x 75.02 (800 x 850 x 1905)	95
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