

RATED SHORT CIRCUIT CURRENT - UPS

WITH INPUT FUSES	WITH INPUT BREAKERS
30kA SYMMETRICAL	30kA SYMMETRICAL

LEGEND:

---	AC CABLE - PROVIDED BY OTHERS.
---	DC CABLE - PROVIDED BY OTHERS.

DEVICE RATING FOR 150kVA- EXTERNAL BYPASS CABINET

Q4S,Q3BP,Q5N	250A 690V AC	SWITCH DISCONNECT 4 POLE	SCHNEIDER ELECTRIC	INS250 INTERPACT	1 NO AUX CONTACT
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TABLE-1

(QTY) AND WIDTH OF BATTERY CABINET FOR VARIOUS UPS RATINGS

Runtime	30kVA	40kVA	60kVA	80kVA	100kVA	120kVA
5min	-	-	-	(1)700	(1) 700	(1) 1000
10min	-	-	(1)700	(1)700	(1) 1000	(1) 1000
15min	-	-	(1)700	(1)1000	(1) 1000	(2) 700
30min	(1)700	(1)700	(1)1000	(2) 700	(1) 700 +(1) 1000	(2) 1000

- NOTES:**
1. INSTALLATION MUST COMPLY WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL REGULATIONS.
 2. PLEASE REFER TO Schneider Electric PRODUCT MANUALS FOR DETAILS PRIOR TO INSTALLATION AND SITE PREPARATION WORK
 3. DRAWING DEPICTS POWER SYSTEM CONNECTIONS AND IS NOT REPRESENTATIVE OF PHYSICAL LAYOUT, PLEASE REFER TO MECHANICAL DRAWINGS FOR PHYSICAL LAYOUT.
 4. 3x400/230V TN-S (PROVIDED BY OTHERS). FOR OTHER (TN-C, TN-C-S, TT, IT) EARTHING PRINCIPLES, PLEASE CONTACT Schneider Electric. RECOMMENDED UPSTREAM PROTECTION IS A MINIMUM RATING TO SUPPORT MAXIMUM CURRENT, WITHOUT SELECTIVITY. IF SELECTIVITY IS REQUIRED, PLEASE CONTACT Schneider Electric.
 5. ALL AC POWER CABLING IS L1, L2, L3, N, PE.
 6. DUAL MAINS CONFIGURATION IS A DEFAULT. FOR SINGLE MAINS INPUT PLEASE REFER SHEET-2.
 7. DC CABLING TO BE 600V RATED, 2 WIRE + PE, EACH CIRCUIT TO BE RUN IN SEPARATE CONDUITS, POSITIVE, NEGATIVE + PE.
 8. UPS INPUT AND OUTPUT CABLES SHOULD BE SEGREGATED.
 9. POWER WIRING AND CONTROL WIRING SHOULD BE SEGREGATED.
 10. FOR SYSTEM INPUT OVER CURRENT PROTECTION REFER TO SHEET-3.
 11. REFER TABLE-1 FOR NUMBER OF BATTERY CABINETS FOR VARIOUS RATINGS.
 12. FOR SKU NUMBERS/RATINGS REFER TO SHEET-3.
 13. BATTERY RUN TIME IS THEORETICAL AND CALCULATED BASED ON DATA PROVIDED BY BATTERY MANUFACTURER ASSUMING OPTIMUM ENVIRONMENT AND LOAD CONDITIONS.

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TITLE: MGE GALAXY 5500
 Input: 400V AC 3PH DUAL MAINS
 Output: 400V AC 3PH 30-120kVA
 2 Mod(N+1) WITH EB & W/O O/P XMR TWO EXTERNAL BATTERIES
 DUAL MAINS-SYSTEM ONE LINE DIAGRAM

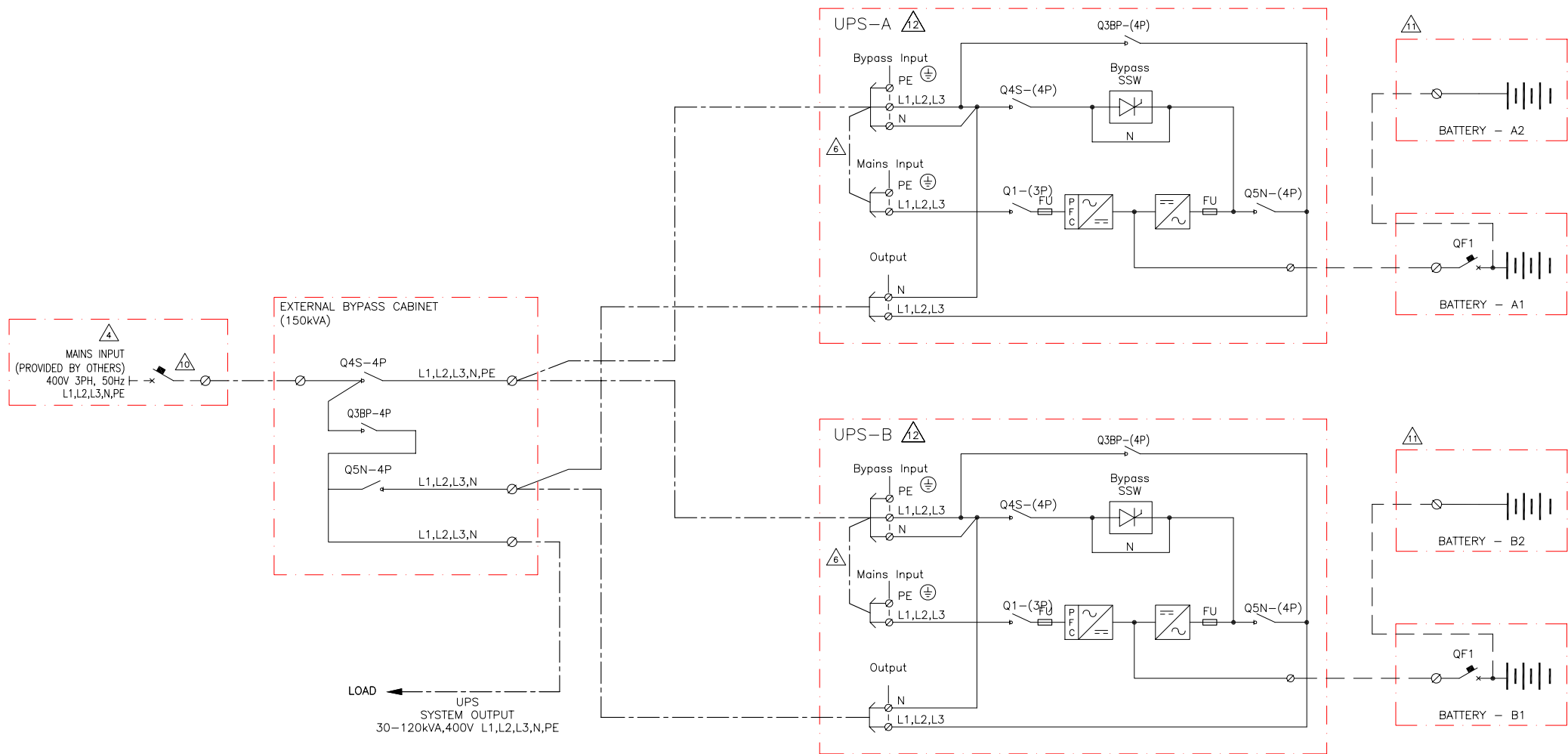
PROJECT: PROPOSAL DRAWINGS **SHEET 1 OF 3**

DWG NO: G55T30K120HR2-SD

DRAWN: NAGESH S 15-JUN-12
ENGINEER: PASCAL CHAPUIS 15-JUN-12
APPROVED: PASCAL CHAPUIS 15-JUN-12

REV: 0

ANGLE PROJECTION: N/A



- NOTES:**
1. INSTALLATION MUST COMPLY WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL ELECTRICAL REGULATIONS.
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 5. ALL AC POWER CABLING IS L1, L2, L3, N, PE.
 6. APPLICABLE ONLY FOR SINGLE MAINS INPUT, CABLING PROVIDED BY OTHERS. DUAL MAINS CONFIGURATION IS A DEFAULT.
 7. DC CABLING TO BE 600V RATED, 2 WIRE + PE, EACH CIRCUIT TO BE RUN IN SEPARATE CONDUITS, POSITIVE, NEGATIVE + PE.
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RATED SHORT CIRCUIT CURRENT - UPS

WITH INPUT FUSES	WITH INPUT BREAKERS
30kA SYMMETRICAL	30kA SYMMETRICAL

LEGEND:

---	AC CABLE - PROVIDED BY OTHERS.
---	DC CABLE - PROVIDED BY OTHERS.

DEVICE RATING FOR 150kVA- EXTERNAL BYPASS CABINET

Q4S, Q3BP, Q5N	250A 690V AC	SWITCH DISCONNECT 4 POLE	SCHNEIDER ELECTRIC	INS250 INTERPACT	1 NO AUX CONTACT
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TABLE-1

(QTY) AND WIDTH OF BATTERY CABINET FOR VARIOUS UPS RATINGS

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10min	-	-	(1)700	(1)700	(1) 1000	(1) 1000
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30min	(1)700	(1)700	(1)1000	(2) 700	(1) 700 +(1) 1000	(2) 1000

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TITLE: MGE GALAXY 5500
 Input: 400V AC 3PH SINGLE MAINS
 Output: 400V AC 3PH 30-120kVA
 2 Mod(N+1) WITH EB & W/O O/P XMR TWO EXTERNAL BATTERIES
 SINGLE MAINS-SYSTEM ONE LINE DIAGRAM

PROJECT: PROPOSAL DRAWINGS **SHEET 2 OF 3**

DWG NO: G55T30K120HR2-SD

DRAWN: NAGESH S 15-JUN-12
ENGINEER: PASCAL CHAPIUS 15-JUN-12
APPROVED: PASCAL CHAPIUS 15-JUN-12

REV: 0
ANGLE PROJECTION: N/A

Galaxy 5500® 2Module (N+1) UPS Site Planning Data

Battery voltage when charged at 20 deg C:
 Minimum Number of Cells=180, Ubat=396V (Vented lead acid); Ubat=408V (sealed lead acid)
 Minimum Number of Cells=216, Ubat=490V (sealed lead acid); Ubat=486V (Vented lead acid)
 Input Voltage : 400V AC, Output Voltage : 400V AC

UPS Rating	SKU Number	UPS Mains Input ¹		UPS Bypass Input ¹	UPS Output		Battery Discharge Current(A)		UPS - Recommended Over current Protection Device Ratings				UPS Mechanical Data			UPS Heat Loss (kW) ²³	Required air flow for UPS (m3/h)
		Nominal Current(A)	Maximum Current(A)	Nominal Current(A)	System output Power	Nominal Current(A)	Nominal Discharge Current (A)	Maximum Discharge Current (A)	UPS Upstream protection			UPS Downstream protection in reference with Upstream protection	Typical Dimensions H x W x D (mm) ¹⁴	Weight (Kg) ¹⁴	Floor Loading data in Kg/m ²		
									CB on separate Normal AC input (A)	CB on separate Bypass AC input (A)	CB on common Bypass and Normal AC input (A)						
30kVA/27kW	G55TUPSU30HS ²⁵	45	46	44	30kVA/27kW	44	84	101	C60L - 63A	NSX 100F 4P-TM100D	NSX 100F 4P-TM100D	C60N C 16A/ C60N B 25A	1900x712x850	400	660.94	2.68	1332
	G55TUPSU30HINS ²⁶																
40kVA/36kW	G55TUPSU40HS ²⁵	57	58	58	40kVA/36kW	58	112	135	NSX 100F 3P-TM80D	NSX 100F 4P-TM100D	NSX 100F 4P-TM100D	C60N C 16A/ C60N B 25A	1900x712x850	400	660.94	2.68	1332
	G55TUPSU40HINS ²⁶																
60kVA/54kW	G55TUPSU60HS ²⁵	87	88	87	60kVA/54kW	87	170	203	NSX 160F 3P-TM125D	NSX 160F 4P-TM125D	NSX 160F 4P-TM125D	C60N C 20A/ C60N B 32A	1900x712x850	400	660.94	4.26	1332
	G55TUPSU60HINS ²⁶																
80kVA/72kW	G55TUPSU80HS ²⁵	115	116	116	80kVA/72kW	116	226	270	NSX 160F 3P-TM160D	NSX 160F 4P-TM160D	NSX 160F 4P-TM160D	C60N C 25A/ C60N B 50A	1900x712x850	520	859.22	4.86	2556
	G55TUPSU80HINS ²⁶																
100kVA/90kW	G55TUPSU100HS ²⁵	143	145	145	100kVA/90kW	145	282	338	NSX 250F 3P- TM200D	NSX 250F 4P- TM250D	NSX 250F 4P- TM250D	C60N C 32A/ C120N B 63A/ NSX100 TMG 63A	1900x712x850	520	859.22	6.90	2556
	G55TUPSU100HINS ²⁶																
120kVA/108kW	G55TUPSU120HS ²⁵	171	173	174	120kVA/108kW	174	347	405	NSX 250F 3P- TM250D	NSX 250F 4P- TM250D	NSX 250F 4P- TM250D	C60N C 32A/ C120N B 63A/ NSX100 TMG 63A	1900x712x850	520	859.22	8.41	2556
	G55TUPSU120HINS ²⁶												1900x712x850	520	859.22		

Notes.

- Rated currents with battery float charging.
- At <150% for 10seconds.
- Input and bypass cables must be run in separate conduits from output cables. Not more than three conductors in raceway assumed; ambient temperature of 30°C (86°F) assumed.
- If initial load is less than UPS' rated output, it is recommended that AC input, battery, and AC output wiring and over current protection be sized to UPS' full load rating to accommodate possible future expansion.
- Only copper cables are considered.
- DC cables should be sized for a total maximum of less than 1% of CB rating.
- OC PD = Over current Protection Device. Recommended represents 125% of nominal full load current (continuous).
- Minimum-sized grounding conductors are recommended. Parity-sized ground conductors are recommended. Neutral conductors to be sized for full capacity.
- Wiring requirements:
 - AC Input/Output: 3Ø, 3 or 4 wire + ground, depending on UPS configuration.
- See Installation Manual and submittal drawings for specific instructions.
- DC Input: 2 wire (positive and negative) + ground
- All wiring to be in accordance with all applicable national and/or local electrical codes.
- Minimum access clearance per UPS drawings.
- The cable sizes are based on an environment with ambient max temperature of 35 degrees C.
- Control wiring and power wiring must be run in separate conduit.
- Weights and dimensions shown do not include battery cabinet(s) or other options
- Backup emergency generator must be properly sized for UPS application and equipped with an isochronous governor for frequency regulation, and a UPS-compatible voltage regulator for voltage stability.
- If site configuration requires an external maintenance bypass, phase parity between UPS input and UPS bypass must be ensured. Consult applications engineer.
- The terminals have minimum size requirements for cables.
- Each PFC or Boost pack contains a 63A fuse per phase. 10-20kVA Ups has one pack and 30-40kVA UPS have two packs.
- Average weight references installed weight with batteries.
- Temperature rating of conductors: 90°C (194°F), 75°C (167°F) cable terminal conductors assumed.
- Input : THDI < 3% at full load, <5% at 25-75%.
- Output : THDU ≤1% Phase to Phase, ≤1.5% Phase to Neutral for Linear Loads.
 - ≤2% Phase to Phase, ≤3.5% Phase to Neutral for Non Linear Loads.
- Heat losses refers to maximum loading and fully charged batteries
- Ratings of the cables and overcurrent devices supplied for information only. User to consult with their engineering services before adopting
- Applicable for IEC countries except Asia Pacific countries and Japan.
- Applicable for Asia Pacific countries and Japan.

EFFICIENCY DETAILS				
SYSTEM	25%LOAD	50%LOAD	75%LOAD	100%LOAD
30kVA 400V	83.45	89.73	91.66	92.37
40kVA 400V	85.86	91.56	92.43	92.65
60kVA 400V	89.73	92.58	92.73	92.47
80kVA 400V	90.23	93.14	93.58	93.42
100kVA 400V	90.22	93.08	93.62	93.56
120kVA 400V	90.51	93.60	93.78	93.16

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TITLE:	MGE GALAXY 5500 Input: 400V AC 3PH SINGLE/DUAL MAINS Output: 400V AC 3PH 30-120kVA 2 Mod(N+1) WITH EB & W/O O/P XMR TWO EXTERNAL BATTERIES SITE PLANNING DATA	DWG NO:	G55T30K120HR2-SD	REV.	0
DRAWN:	NAGESH S	15-JUN-12	ANGLE	PROJECTION: N/A	
ENGINEER:	PASCAL CHAPUIS	15-JUN-12	APPROVED:	PASCAL CHAPUIS	
PROJECT:	PROPOSAL DRAWINGS	SHEET 3 OF 3	15-JUN-12		