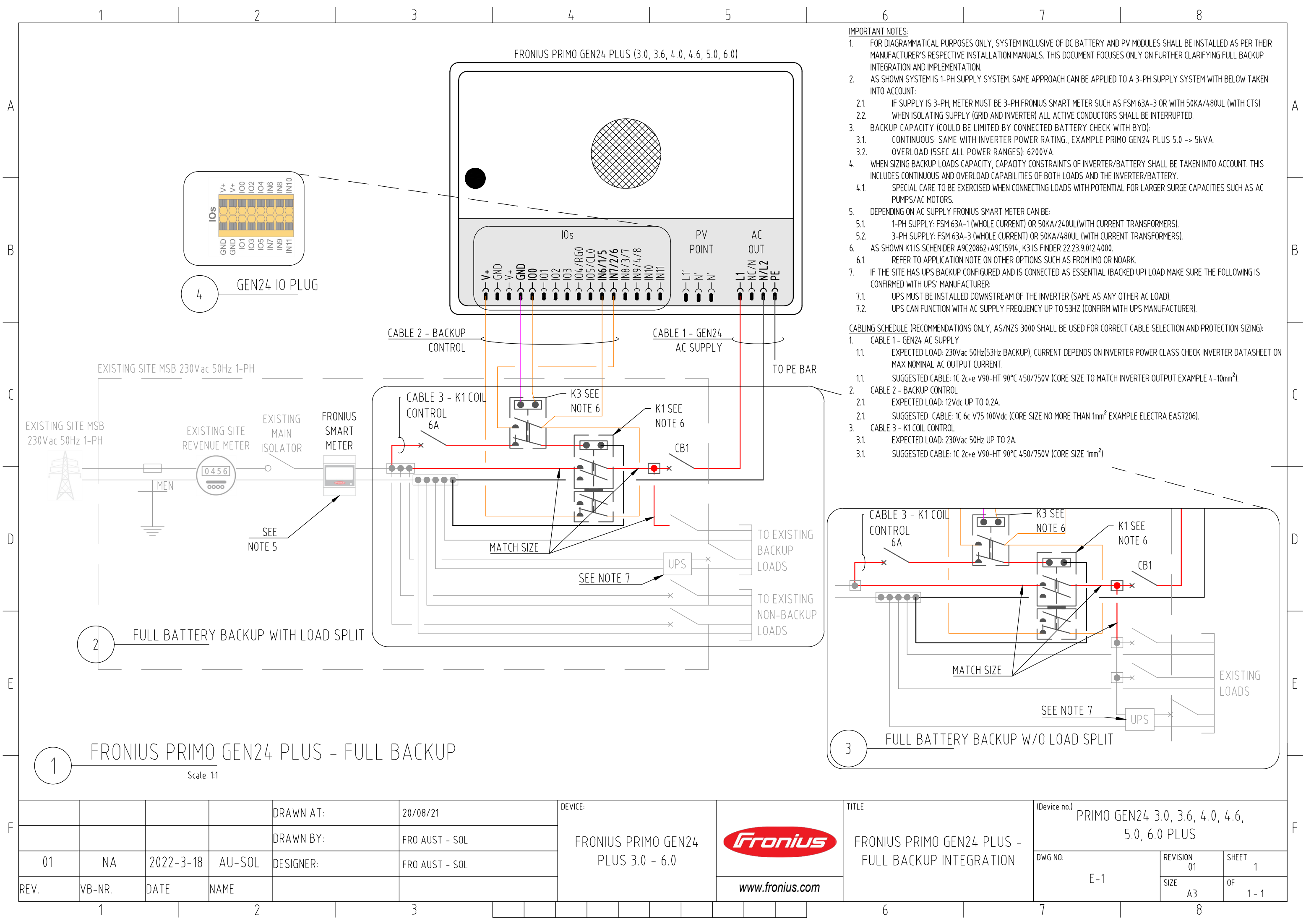
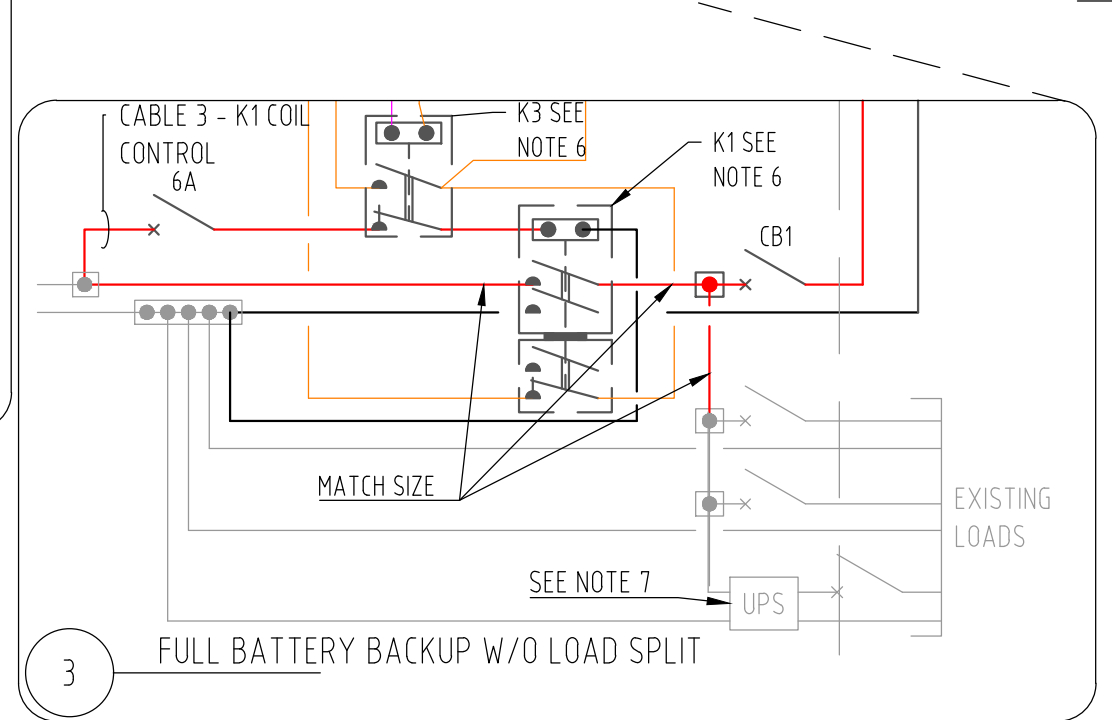




- IMPORTANT NOTES:**
- FOR DIAGRAMMATICAL PURPOSES ONLY, SYSTEM INCLUSIVE OF DC BATTERY AND PV MODULES SHALL BE INSTALLED AS PER THEIR MANUFACTURER'S RESPECTIVE INSTALLATION MANUALS. THIS DOCUMENT FOCUSES ONLY ON FURTHER CLARIFYING FULL BACKUP INTEGRATION AND IMPLEMENTATION.
 - AS SHOWN SYSTEM IS 1-PH SUPPLY SYSTEM. SAME APPROACH CAN BE APPLIED TO A 3-PH SUPPLY SYSTEM WITH BELOW TAKEN INTO ACCOUNT:
 - IF SUPPLY IS 3-PH, METER MUST BE 3-PH FRONIUS SMART METER SUCH AS FSM 63A-3 OR WITH 50KA/480UL (WITH CTS)
 - WHEN ISOLATING SUPPLY (GRID AND INVERTER) ALL ACTIVE CONDUCTORS SHALL BE INTERRUPTED.
 - BACKUP CAPACITY (COULD BE LIMITED BY CONNECTED BATTERY CHECK WITH BYD):
 - CONTINUOUS: SAME WITH INVERTER POWER RATING, EXAMPLE PRIMO GEN24 PLUS 5.0 -> 5kVA.
 - OVERLOAD (5SEC ALL POWER RANGES): 6200VA.
 - WHEN SIZING BACKUP LOADS CAPACITY, CAPACITY CONSTRAINTS OF INVERTER/BATTERY SHALL BE TAKEN INTO ACCOUNT. THIS INCLUDES CONTINUOUS AND OVERLOAD CAPABILITIES OF BOTH LOADS AND THE INVERTER/BATTERY.
 - SPECIAL CARE TO BE EXERCISED WHEN CONNECTING LOADS WITH POTENTIAL FOR LARGER SURGE CAPACITIES SUCH AS AC PUMPS/AC MOTORS.
 - DEPENDENT ON AC SUPPLY FRONIUS SMART METER CAN BE:
 - 1-PH SUPPLY: FSM 63A-1 (WHOLE CURRENT) OR 50KA/240UL (WITH CURRENT TRANSFORMERS).
 - 3-PH SUPPLY: FSM 63A-3 (WHOLE CURRENT) OR 50KA/480UL (WITH CURRENT TRANSFORMERS).
 - AS SHOWN K1 IS SCHNIDER A9C20862+A9C15914, K3 IS FINDER 22.23.9.012.4000.
 - REFER TO APPLICATION NOTE ON OTHER OPTIONS SUCH AS FROM IMO OR NOARK.
 - IF THE SITE HAS UPS BACKUP CONFIGURED AND IS CONNECTED AS ESSENTIAL (BACKED UP) LOAD MAKE SURE THE FOLLOWING IS CONFIRMED WITH UPS' MANUFACTURER:
 - UPS MUST BE INSTALLED DOWNSTREAM OF THE INVERTER (SAME AS ANY OTHER AC LOAD).
 - UPS CAN FUNCTION WITH AC SUPPLY FREQUENCY UP TO 53HZ (CONFIRM WITH UPS MANUFACTURER).

- CABLING SCHEDULE (RECOMMENDATIONS ONLY, AS/NZS 3000 SHALL BE USED FOR CORRECT CABLE SELECTION AND PROTECTION SIZING):**
- CABLE 1 - GEN24 AC SUPPLY
 - EXPECTED LOAD: 230Vac 50Hz(53Hz BACKUP), CURRENT DEPENDS ON INVERTER POWER CLASS CHECK INVERTER DATASHEET ON MAX NOMINAL AC OUTPUT CURRENT.
 - SUGGESTED CABLE: 1C 2c+e V90-HT 90°C 450/750V (CORE SIZE TO MATCH INVERTER OUTPUT EXAMPLE 4-10mm²).
 - CABLE 2 - BACKUP CONTROL
 - EXPECTED LOAD: 12Vdc UP TO 0.2A.
 - SUGGESTED CABLE: 1C 6c V75 100Vdc (CORE SIZE NO MORE THAN 1mm² EXAMPLE ELECTRA EAS7206).
 - CABLE 3 - K1 COIL CONTROL
 - EXPECTED LOAD: 230Vac 50Hz UP TO 2A.
 - SUGGESTED CABLE: 1C 2c+e V90-HT 90°C 450/750V (CORE SIZE 1mm²)



1 FRONIUS PRIMO GEN24 PLUS - FULL BACKUP

Scale: 1:1

F				DRAWN AT:	20/08/21	DEVICE:		TITLE	FRONIUS PRIMO GEN24 PLUS - FULL BACKUP INTEGRATION	(Device no.) PRIMO GEN24 3.0, 3.6, 4.0, 4.6, 5.0, 6.0 PLUS			F				
				DRAWN BY:	FRO AUST - SOL					DWG NO:	REVISION 01	SHEET 1					
	01	NA	2022-3-18	AU-SOL	DESIGNER:									FRO AUST - SOL	E-1	SIZE A3	OF 1 - 1
	REV.	VB-NR.	DATE	NAME													
1		2		3									6		7	8	