

INNOVATIVE CONSTRUCTION & DESIGN SOLUTIONS, LLC

DRAWING INDEX

CS1.0 COVER SHEET E1.0 ELECTRICAL PV INTERCONNECT SINGLE LINE DIAGRAM PV1.0 ELECTRICAL PARTIAL PV ROOF PLAN & ELEC. PARTIAL PLAN PV1.1 ELECTRICAL PARTIAL PV ROOF PLAN & ELEC. PARTIAL PLAN PV1.2 ELECTRICAL PARTIAL PV ROOF PLAN & ELEC. PARTIAL PLAN ELECTRICAL GENERAL NOTES AND SPEC. SHEETS PV2.0 PV3.0 PHOTOVOLTAIC SYSTEM LABELING REQUIREMENTS

ACES - WINTERGREEN INTERDISTRICT MAGNET SCHOOL INTERDISTRICT MAGNET SCHOOL 670 WINTERGREEN AVE, HAMDEN CT Bomodian 670 WINTERGREEN AVE, HAMDEN CT Bomodian Bomodian <tr< th=""><th></th><th></th><th></th><th>ISSUED FOR UTILITY INTERCONNECTION</th><th>Description</th></tr<>				ISSUED FOR UTILITY INTERCONNECTION	Description
ACES - WINTERGREEN INTERDISTRICT MAGNET SCHOOL 670 WINTERGREEN AVE, HAMDEN CT 670 WINTERGREEN AVE, HAMDEN CT 670 WINTERGREEN AVE, HAMDEN CT 670 WINTERGREEN AVE, HAMDEN CT 670 Winte Vood Lane Naanford, CT 06471 Naanford, CT 064711 Naanford, CT 0647				05/12/25	Date
ACES - WINTERGREA INTERDISTRICT MAGNET SCHOOL 670 WINTERGREEN AVE, HAMDEN CT 670 WINTERGREEN AVE, HAMDEN CT 670 WINTERGREEN AVE, HAMDEN CT 670 Mine Wood Lane N.Banford, CT 06471 N.Banford, CT 06471 N.Banfor				A	Rev.
ACES - WINTERGREEN INTERDISTRICT MAGNET SCHOOL 670 WINTERGREEN AVE, HAMDEN CT 670 WINTERGREEN AVE, HAMDEN CT 670 WINTERGREEN AVE, HAMDEN CT 670 WINTERGREEN AVE, HAMDEN CT 873 Sign Solutions, LLC COVER SHEET COVER SHEET COVER SHEET	CONNINUMIUM MILLION CONNINUMIUM ACONNINUMIUM ACONNINUMIUMA ACONNINUMIUMA ACONNINUMIUMA ACONNINUMIUMA A		11.00 NAL ENGLY		A MAR
ACES - WINTERGREEN INTERDISTRICT MAGNET SCHOOL 670 WINTERGREEN AVE, HAMDEN CT 670 WINTERGREEN AVE, HAMDEN CT ERMERGREEN AVE, HAMDEN CT ELECTRICAL ELECTRICAL ELECTRICAL EDECTRICAL	Syster 463.3 k 348.0 k	n Size (W (D (W (A	e: C) C)		
ACES - WINTERGREEN INTERDISTRICT MAGNET SCHOOL 670 WINTERGREEN AVE, HAMDEN CT ELECTRICAL COVER SHEET	10 White Wood I N. Branford, CT 06	Phone: (203) 453-8 Email: info@icdsllc.	Innovative Construction & Design Solutions, L		
	HOOL DEN CT				
	ACES - WINTERGREEN ACES - WINTERGREEN INTERDISTRICT MAGNET SCH bate: 02/12/2022	Drawn			COVER SHEEL
Scale: Check By: N.T.S. DSF Drawing No.:	HAME BACES - WINTERGREEN ACES - WINTERGREEN ACES - WINTERGREEN ANGNET SCH Date: 05/12/2025 Scale: N.T.S. Drawing No.:	Drawn Desigr Check	ELECTRICAL BALANCE BAL		COVER SHEEL





		2/25 ISSUED FOR UTILITY INTERCONNECTION te Description
		v. Da
CONNECTION AND A CONNEC		Re R
Sys 463. 348.	tem Size: 3 kW (DC 0 kW (AC	
10 White Wood N. Branford, CT 0	Phone: (203) 453-	Innovative Construction & Design Solutions, L
ACES - WINTERGREEN INTERDISTRICT MAGNET SCHOOL		PV INTERCONNECT SINGLE LINE DIAGRAM
Project No.: Date: 05/12/2025 Scale:	Drawn I Design Check I	By: KFH By: KFH By:
N.T.S.		DSF

PROTECTIVE DEVICE SETTINGS									
AS	PER NPCC A-03 / U	L 1741 (TYP. F0R A	LL)						
PROTECTION DEVICE	SETTING VALUE	TRIP TIME							
27-1	50%	240.0	.16 SEC						
27-2	88%	422.4	2.0 SEC						
59-1	110%	528.0	1.0 SEC						
59-2	120%	576	.16 SEC						
81U-1	58.0 Hz	@	32 SEC						
81U-2	57.0 Hz	@	.16 SEC						
810	60.5 Hz	@	.16 SEC						

TY :	4	3
	60,000 Watts	36,000 Watts
	72.2 A	43.3 A
	480 V - 3Ø	480 V - 3Ø







Scale: 3/32" = 1'-0"

STRING LAYOUT SUMMARY							
NVERTER No.	MPPT No.	STRING No.	MODULES PER STRING				
	1	1 2	17 17				
	2	1 2	17 17				
TYPICAL FOR INV-1	3	1	17				
INV-2 INV-3 INV-4	4	1 2	11 11				
	5	1 2	11 11				
	6	1 2	11 11				
	1	1 2	14 14				
INV-5	2	1 2	14 14				
	3	1 2	14 14				
	1	1 2	17 17				
TYPICAL FOR INV-6 INV-7	2	1 2	17 17				
	3	1	17				















PV MODULE SPECIFICATION SHEET

Hi-M0 🖬

						1					I ype designation
Additional Yaluc											Max. PV input voltage
				—							Min. PV input voltage / Start-up input voltage
30-Year Power Warranty											Nominal PV input voltage
L00%											MPP voltage range
989e											No. of independent MPP inputs
											No. of PV strings per MPPT
2.134				2							Max. PV input current
87.7%	800.		/ /								Max. PV short-circuit current per MPPT
84 596		~%									Output (AC)
		6.50	%								AC output power
30.7%											Max. AC output current
											Nominal AC voltage
4 5 4 0	1 5 .20	25	30		I				11	^t iat ^t inin,	AC voltage range
						Γ	r	ī 4			Nominal grid frequency / Grid frequency
Machanical Paramatare											Harmonic (THD)
	144 (8~24)			_			,८ <u>२</u>			ر الدينية (DC current injection
	L177 (UX27)			_							Power factor at nominal power / Adjustable power factor
Juncuon Isox	iros, three diode	<u>a</u>		_						l l	Feed-in phases / Connection phases
Output Cable 4mm	-,+400,-200 mm/±	:1400mm									Efficiency
	engin can be custor	mizea		_	3						Max. efficiency
Glass Dual glass,	2.0+2.0mm heat str	engthened g	ass	_							CEC efficiency
Frame Ano	dized aluminum all	loy frame		_							Protection
Weight	32.3kg										DC reverse polarity protection
Dimension	2256×1133×35n	nm		—				7			AC short circuit protection
Packaging 31 pcs per pallet / 155 pcs	cr20 GP/620pcsor5	558ccs(Only for	·USA) per 40° HC	_		Tolerance: Longth: ±2mm			M 1	4 1	Leakage current protection
				_	•	Width: ±2mm	The second secon	The second secon		13	Grid monitoring
Flectrical Characteristic	STC:AMI	5 1000W/a	2 25°C	NOCT	ANH 5 800W/:	m² 20°C I	me/et ⊺onti	annialah (Sar Da		**	DC switch
Modulo Typo		0 290M		7 595M	1.05 731		10000 10000		1 10 2 791		AC switch
		NOCT	ENG-IZIU	NOCT		NOCT	-LIG-12	NOCT	LIG-IZI	NOCT	PV string monitoring
	510		510				510		510		Arc fault circuit interrupter (AFCI)
	530	396.2	535	399.9	540	403.6	545	407.4	550	41.4.4	PID Recovery function
	49.20	46.26	49.35	45.40	49.50	46.54	49.65	46.68	49.80	46.82	Overvoltage protection
Short Circuit Current (Isc/A)	13.71	11.07	1.3.78	11.12	13.85	11.17	13.92	11,23	1.3.99	11.29	Rapid Shutdown
Voltage at Maximum Power (Vmp/V)	4L.35	38.58	4L .50	38.72	41.65	38.86	41.80	39.00	41.95	39.14	General Data
Current at Maximum Power (Imp/A)	12,82	10.27	12,90	10.33	12.97	10.39	13.04	10.45	13.12	10.51	
Module Efficiency(%)	20.	.7	20.	9	2	21.1		21.3		21.5	Dimensions (W ^ H ^ D)
Electrical characteristics with a	ifferent mereide			- 540W	fmath						Weight
		1 Dower Shir	Trelerence	N 010 1	nong						Topology
	VOC/V		ISC/A		Vmp/v		//cmi	\	Pit	nax gain	Ingress protection rating
567	49.50		14.54		41.65		13.61			5%	Night power consumption
594	49.50		15.23		41.65		14.26			1.0%	Operating ambient temperature range
621	49.60		15.92		4L.75		14.91			1.5%	Allowable relative humidity range
648	49.60		16.62		4L.75		15.56			20%	Cooling method
675	49.60		17 .3 1		41.75		16.21		-	25%	Max. operating altitude
											Display
Operating Parameters					Mechanic	al Loadi	۱g				Communication
Operational Temperature	-40%	C~+85°C			Front Side Max	imum Static	Loading		5400Pa		Third-Party communication protocol
Power Output Tolerance	0)~3%			Rear Side Maxi	mum Static I	oading		24002		DC connection type
Voc and iss Toloranco		+306			Hallstono Tost			25mm H	eiletono et tho	spood of 23m/s	AC connection type
	DC150							2.9			
Maximum System Voltage	DCaSU			_							Compliance
Maximum Series Fuse Raung		304		_							Grid Support
Nominal Operating Cell Temperatur	с 4:)±2°C		_	Temperat						
	C	Jassil		_ ·	USAN DE MOI		1559 (JIC)				Notes: * Night power consumption excludes the optional power from PID re-
Protection Class	70	0±5%		·	Temperature C	ocificient of	ISC		+0.050%/	<u>°C</u>	
Protection Class Bifaciality		ty ce 29			Temperature Cr	oefficient of	Voc		-0.265%/	с	
Protection Class Bifaciality Fim Rating	UL:	•					•		0.0400/ /		-
Protection Class Bifaciality Fire Rating		Class C			Temperature G	oefficient of	Pmax		-0.34070/*	τ	

LR5-72H 8D 530~550M

GOOD QUALITY EQUIPMENT, WORKMANSHIP AND SKILL.

GOVERN.

- 6. DC VOLTAGE FROM THE ARRAY IS ALWAYS PRESENT AT THE DC DISCONNECT ENCLOSURE AND THE DC TERMINALS OF THE INVERTER DURING DAYLIGHT HOURS. ALL PERSONS WORKING ON OR INVOLVED WITH THIS PHOTOVOLTAIC SYSTEM MUST BE WARNED THAT SOLAR MODULES ARE ENERGIZED WHEN EXPOSED TO DAYLIGHT. THE LINE AND LOAD TERMINALS ON THE DC DISCONNECTS MAY BE ENERGIZED IN THE OPEN POSITION AND THE SWITCH IS TO BE LABELED TO COMPLY WITH ARTICLE 690.17 OF THE NEC REFLECTING THIS.
- 7. ALL PORTIONS OF THIS SOLAR ELECTRIC SYSTEM SHALL BE CLEARLY MARKED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE ARTICLE 690 PART VI.
- 8. THE ELECTRICAL CONTRACTOR SHALL PERFORM INITIAL HARDWARE CHECKS AND PV/WIRING CONTINUITY CHECKS PRIOR TO TERMINATING ANY WIRES.
- 9. FOR PROPER MAINTENANCE AND ISOLATION OF INVERTERS, REFER TO ISOLATION PROCEDURE IN INVERTER MANUAL. CONTRACTOR PERFORMING THE MAINTENANCE IS RESPONSIBLE TO FOLLOW ALL LOCKOUT/TAGOUT PROCEDURES.

GENERAL NOTES

1. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR INSTALLING ALL EQUIPMENT AND FOLLOWING ALL MANUFACTURER'S OR ENGINEER'S DIRECTIONS AND INSTRUCTIONS SHOWN HERE.

- 2. THE ELECTRICAL CONTRACTOR IS ADVISED THAT ALL DRAWINGS, COMPONENT MANUALS, ESPECIALLY THE INVERTER MANUALS, ARE TO BE READ AND UNDERSTOOD PRIOR TO INSTALLATION OR ENERGIZING OF ANY EQUIPMENT. THE CONTRACTOR IS ALSO ADVISED TO HAVE ALL COMPONENTS SWITCHED IN THE OFF (OPEN) POSITION AND FUSES REMOVED PRIOR TO INSTALLATION OF FUSE-BEARING COMPONENTS.
- 3. THIS SOLAR PHOTOVOLTAIC SYSTEM IS TO BE INSTALLED FOLLOWING THE CONVENTIONS OF THE NATIONAL ELECTRICAL CODE. ANY LOCAL CODE WHICH MAY SUPERCEDE THE NEC SHALL
- 4. ALL COMPONENTS TO BE INSTALLED WITH THIS SYSTEM ARE TO BE LISTED BY A THIRD PARTY TESTING AGENCY (UL, ETI, ETC.). EQUIPMENT SHALL BE NEMA 3R OUTDOOR RATED OR BETTER, UNLESS LOCATED INDOORS.
- 5. THE CONTRACTOR IS RESPONSIBLE FOR SELECTING AND PURCHASING EQUIPMENT THAT WILL LAST THE LIFETIME OF THE PV SYSTEM. ALL ENCLOSURES, CONDUIT, STRAPS PAINTED METAL SURFACES, CONCRETE, GROUNDING EQUIPMENT AND OTHER PRODUCTS SHALL BE SELECTED TO LAST THE LIFETIME OF THE PV SYSTEM. THE ENGINEER SPECIFIES THE MINIMUM REQUIRED EQUIPMENT AND SPECIFICATIONS TO ACCOMPLISH THE PROJECT AND THE ELECTRICAL CONTRACTOR IS RESPONSIBLE TO ENSURE THAT THESE SPECIFICATIONS ARE MET OR EXCEEDED WITH

- 10. THIS PHOTOVOLTAIC SYSTEMS UTILITY CONNECTION POINT SHALL MEET THE SPECIFIC REQUIREMENTS OF ARTICLE 705.12, NATIONAL ELECTRICAL CODE PLEASE FOLLOW THE SPECIFIC INSTRUCTIONS IN THIS DRAWING SET TO MEET THIS REQUIREMENT.
- 11. THE GROUNDING OF THE PHOTOVOLTAIC SYSTEM SHALL COMPLY WITH THE NEC 690.45 AND NEC 690.47. IF THE REQUIREMENTS DESCRIBED IN THIS DRAWING SET ARE CLOSELY FOLLOWED, THE GROUNDING REQUIREMENT WILL BE MET. ANY CHANGES WILL NEED TO BE REVIEWED AND DEEMED ACCEPTABLE BY THE ENGINEER, MANUFACTURER AND LISTING AGENCY FOR PRODUCT SAFETY.
- 12. THE CONTRACTOR IS RESPONSIBLE FOR MOUNTING ALL EQUIPMENT PER MANUFACTURER'S SPECIFICATIONS. IF SPECIFICATIONS ARE NOT APPARENT, THE CONTRACTOR SHALL USE DILIGENT EFFORTS TO MOUNT EQUIPMENT SUCH THAT IT WILL BE CLEAN, LEVEL AND SOLID IN ORDER TO LAST THE LIFETIME OF THIS SOLAR ELECTRIC SYSTEM.
- 13. THESE DRAWINGS ARE SCHEMATIC IN NATURE AND ARE NOT INTENDED TO SHOW ALL POSSIBLE CONDITIONS. IT IS INTENDED THAT COMPLETE ELECTRICAL SYSTEMS BE PROVIDED WITH ALL NECESSARY EQUIPMENT, APPURTENANCES, AND CONTROL, COMPLETELY COORDINATED WITH ALL DISCIPLINES.
- 14. ALL 1000VDC PHOTOVOLTAIC EQUIPMENT/ CIRCUITS PROVIDED SHALL BE INSTALLED OUTDOORS. AT NO POINT SHALL 1000VDC SYSTEMS PENETRATE THE ENVELOPE OF THE BUILDING. NO EXCEPTIONS. ALL ROOFTOP ACCESS SHALL BE LOCKED AND ACCESSIBLE ONLY TO AUTHORIZED, QUALIFIED PERSONNEL. ALL POINTS OF ACCESS SHALL BE LABELED "DANGER - HIGH VOLTAGE - KEEP OUT" WITH MECHANICALLY AFFIXED, PERMANENT WEATHERPROOF LABEL.
- 15. PULL BOXES, JUNCTION BOXES, CONDUIT BODIES AND GUTTERS UTILIZED FOR ROUTING OF 1000VDC CONDUCTORS SHALL BE PROVIDED IN ACCORDANCE WITH NEC ARTICLE 314 PART IV AND MARKED "DANGER - HIGH VOLTAGE!" WITH PERMANENT WEATHERPROOF LABEL. TAKE CARE IN AFFIXING THIS LABEL AS NOT TO VOID UL LISTING OF THE BOX, ITSELF. COORDINATE EXACT METHOD WITH MANUFACTURER, PRIOR TO INSTALL.
- 16. WIRE BEND RADIUS OF 1000VDC CONDUCTORS SHALL BE PERFORMED IN ACCORDANCE WITH NEC ARTICLE 300.34.
- 17. SUPPORT OF ALL EMT CONDUIT BODIES SHALL BE PERFORMED IN ACCORDANCE WITH NEC ARTICLE 358.30. SUPPORT OF ALL RMC CONDUIT BODIES SHALL BE PERFORMED IN ACCORDANCE WITH NEC ARTICLE 344.30.
- 18. PROVIDE GROUND BUSHING AT BOTH ENDS OF STRING HOMERUNS, BONDED TO EQUIPMENT GROUNDING CONDUCTOR.

- 19. THE LAYOUT OF CONDUIT IS INDICATIVE ONLY. CONTRACTOR SHALL ROUTE AND LOCATE THE CONDUITS TO SUIT SITE CONDITIONS BUT SHALL NOT EXCEED CONDUCTOR LENGTHS SHOWN ON DRAWINGS. CONTRACTOR SHALL COORDINATE ALL CHANGES IN WIRING AND CONDUIT WITH THE ENGINEER.
- 20. WHERE WIRE AND CABLE ROUTING IS NOT SHOWN, AND DESTINATION ONLY IS INDICATED, CONTRACTOR SHALL DETERMINE EXACT ROUTING AND LENGTHS REQUIRED. A SHOP DRAWING OF PROPOSED INSTALLATION SHALL BE SUPPLIED PRIOR TO INSTALLATION.
- 21. BENDS SHALL NOT DAMAGE RACEWAY OR SIGNIFICANTLY CHANGE THE INTERNAL DIAMETER OF RACEWAYS (NO KINKS).
- 22. SUPPORT CONDUCTORS IN VERTICAL CONDUITS IN ACCORDANCE WITH REQUIREMENTS IN NEC 300.19.
- 23. INSTALL ALL WIRING MATERIALS IN A NEAT WORKMANLIKE MANNER. USE GOOD TRADE PRACTICES AS REQUIRED BY CHAPTER 3 OF THE NEC.
- 24. INSTALL CONDUIT TO MAINTAIN PROPER CLEARANCES AND IN A NEAT INCONSPICUOUS MANNER. RUN PARALLEL AND AT RIGHT ANGLES TO STRUCTURAL MEMBERS OR OTHER CONDUITS. PROVIDE BOXES, FITTINGS AND BENDS FOR CHANGES IN DIRECTION. FASTEN CONDUIT SECURELY IN PLACE.
- 25. SUPPORT CONDUIT USING STEEL PIPE STRAPS, LAY-IN ADJUSTABLE HANGERS, CLEVIS HANGERS OR SPLIT-HANGERS. HANGER SPACING SHALL BE INSTALLED PER NEC REQUIREMENT FOR THE TYPE OF CONDUIT BEING INSTALLED. USE APPROVED BEAM CLAMPS FOR CONNECTION TO STRUCTURAL MEMBERS.
- 26. PROVIDE PULL, JUNCTION, OR PRECAST CONCRETE UTILITY BOXES WHERE REQUIRED TO FACILITATE THE INSTALLATION OF WIRING IN ADDITION TO THOSE SHOWN ON DRAWINGS. BENDS I CONDUITS BETWEEN PULL BOXES SHALL NOT EXCEED THE EQUIVALENT OF FOUR 90 DEGREE BENDS.
- 27. WHEN FIELD CUTTING IS REQUIRED, THE CONDUIT SHALL BE CU SQUARE AND DEBURRED.
- 28. CONDUIT SIZES NOT SPECIFIED SHOULD CONFORM TO NEC SPECIFICATIONS, INCLUDE FILL FACTOR AND DERATING FOR NUMBER OF CONDUCTORS.
- 29. ALL DC CONDUCTORS SHALL COPPER PV WIRE OR SINGLE CONDUCTOR CABLE MARKED SUNLIGHT RESISTANT AND TYPE USE-2/RHW-2
- 30. ALL AC CONDUCTORS SHALL BE ALUMINUM TYPE XHHW-2
- 31. THE WIRING MINIMUM SIZE SHOULD BE #12 AWG.
- 32. SAFETY REGULATIONS (LOCK OUT TAG OUT, ETC.) IS THE FULL RESPONSIBILITY OF THE CONTRACTOR DURING CONSTRUCTION

SLNMRZK

Clean power for all

	SG60CX-US 1000 V	Type designation
	1000 V	Input (DC)
	1000 V	input (DO /
		Max. PV input voltage
	200 V / 250 V	Min. PV input voltage / Start-up input
	710 V	Nominal PV input voltage
	200 V – 1000 V	MPP voltage range
	6	No. of independent MPP inputs
	2	No. of PV strings per MPPT
	26 A * 6	Max. PV input current
	45 A	Max. PV short-circuit current per MPF
		Output (AC)
	60 KVA @ 113*F (45 °C) / 50 KVA @ 122*F (50 °C)	AC output power
	/2.2 A 3 / N / PE 277 / 480 \/	Max. AC output current
	3/ N / FE, 2/ / 400 V	
	422 V = 526 V 60 Hz / 55 = 65 Hz	Nominal grid frequency / Grid frequen
	< 3 % (at nominal power)	Harmonic (THD)
	< 0.5 % In	DC current injection
	> 0.99 / 0.8 leading – 0.8 lagging	Power factor at nominal power / Adjus
	3/3	Feed-in phases / Connection phases
		Efficiency
	98.80 %	Max. efficiency
	98.00 %	CEC efficiency
		Protection
	Yes	DC reverse polarity protection
	Yes	AC short circuit protection
	Yes	Leakage current protection
	Yes	Grid monitoring
	Yes	DC switch
	Yes	AC SWITCH
	Vac	Arc fault circuit interrupter (AFCL)
	Yes *	PID Recovery function
	DC Type II / AC Type II	Overvoltage protection
	Yes	Rapid Shutdown
		General Data
	Inverter: 782 mm * 645 mm * 310 mm (30.7" * 25.4" * 12.2")	Dimensions $(W * H * D)$
	Wire-Box: 231 mm * 295 mm * 234 mm (9.1" * 11.6" * 9.2")	
	65 kg (143.3 lbs)	Weight
	Transformerless	Topology
	Type 4X(NEMA 4X, IP66)	Ingress protection rating
	$< 2W^*$	Night power consumption
	-30 to 60° C (> 45 C derating) -22 to 140 F (> 113 F derating)	Operating ambient temperature range
	Smart forced air cooling	Allowable relative numidity range
	4000 m / 13123.4 ft (> 3000 m / 9842.5 ft derating)	Max operating altitude
	LED. Bluetooth + APP	Display
	RS485 / optional: WiFi and Ethernet	Communication
	SunSpec Modbus	Third-Party communication protocol
	MC4 (#12 - #10AWG)	DC connection type
	OT (#5 - 2/0AWG, Cu or Al)	AC connection type
UL17 169	741, UL 1741 SA, CA Rule 21, IEEE 1547, IEEE 1547.1, CSA C22.2, No.107.1-01, UL 9B and FCC Part 15, UL1998, Rule 14, NEC 2023, Sunspec Rapid Shutdown	Compliance
L۱	/RT, HVRT, active & reactive power control and power ramp rate control	Grid Support
wery. © 2023 Sun	ngrow Power Supply Co., Ltd. All rights reserved. Subject to change without notice. Version	Notes: * Night power consumption excludes the

	SG36CX-US
Input (DC)	
Max. PV input voltage	1000 V
Min. PV input voltage / Start-up input voltage	200 V / 250 V
Nominal PV input voltage	710 V
MPP voltage range	200 V - 1000 V
No. of independent MPP inputs	4
No. of PV strings per MPPT	2
Max. PV input current	26 A * 4
Max. PV short-circuit current per MPPT	45 A
Output (AC)	
AC output power	36 kVA @ 113°F(45 °C)/ 30 kVA @ 122°F(50 °C)
Max. AC output current	43.3 A
Nominal AC voltage	3 / N / PE, 277 / 480 V
AC voltage range	422 V – 528 V
Nominal grid frequency / Grid frequency	60 Hz / 55 – 65 Hz
Harmonic (THD)	< 3 % (at nominal power)
DC current injection	< 0.5 % In
Power factor at nominal power / Adjustable power factor	> 0.99 / 0.8 leading - 0.8 lagging
Feed-in phases / Connection phases	3/3
Efficiency	
Max. efficiency	98.60 %
CEC efficiency	98.00 %
Protection	
DC reverse polarity protection	Yes
AC short circuit protection	Yes
Leakage current protection	Ves
Grid monitoring	Ves
DC switch	Ves
AC switch	Vec
PV string monitoring	Vec
Arc fault circuit interrupter (AFCI)	Vec
PID Recovery function	Ves *
Overvoltage protection	DC Type II / AC Type II
Rapid Shutdown	Ves
General Data	
Conordi Data	Inverter: 702 mm * 595 mm * 310 mm (27 6'' * 23 4'' * 12 2'')
Dimensions(W * H * D)	Wire-Box: 231 mm * 295 mm *234mm (91" * 11 6" * 92")
Weight	54 kg (119 0 lbs)
Topology	Transformerless
Ingress protection rating	Type 4X (NFMA 4X IP66)
Night power consumption	< 2 W/*
	~ 2 vv -30 to 60 °C (> 45 °C derating) - 22 to 140 °E (> 113°E derating)
	-50 10 00 0 (243 0 defaulty) - 22 10 140 1 (2 1151 defaulty)
	0 % - 100 %
Max operating altitude	4000 m / 13123.4 ft (> 3000 m / 9242.5 ft dorating)
Nax. operating attitude	
Display	PS495 (optional: WiEi and Ethernot
Communication	
AC connection type	$\nabla (\# (2 - \#) \nabla (2 + \pi))$
AC connection type	
Compliance	0L1741, 0L 1741 SA, CA Rule 21, IEEE 1547, IEEE 1547.1, USA C22.2, No.107.1-01, 0L 1699B and FCC Part 15, UL1998, Rule 14, NEC 2023, Sunspec Rapid Shutdown
Grid Support	LVRT, HVRT, active & reactive power control and power ramp rate control

INVERTER SPECIFICATION SHEET

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Model

Input Data (DC)

Output Data (DC)

Mechanical Data

Cable Length

Enclosure Rating

Safety Compliance

EMC Compliance

Connector

Input operating Voltage Range

Output operating Voltage Range

Maximum Cont. Output Current

Maximum System Voltage

Cable Cross Section Size

Over temperature protection

Features & Compliance Communication Compliance

Maximum Cont. Input Current (Imax)

Operating Ambient Temperature Range

Dimensions (without cable & connectors)

INVERTER SPECIFICATION SHEET

	33.	THE WIRING SIZE IS BASED ON ESTIMATED CONDUIT ROUTING AS SHOWN IN THIS DRAWING PACKAGE. SHOULD THE CONDUITS LENGTH INCREASE DUE TO RELOCATION OF SOURCE AND/OR ROUTING, THE CONDUITS AND THE CONDUCTORS MAY NEED TO BE RESIZED. PLEASE CONTACT THE ENGINEER PRIOR TO MAKING ANY FIELD CHANGES.
	34.	ELECTRICAL CONTRACTOR TO PROVIDE SIGNAGE TO ALL ELECTRICAL BOXES, JUNCTION BOXES, PULL BOXES, DC DISCONNECTS, CONDUIT RUNS, AC DISCONNECTS, SUB PANELS AND MAIN SERVICES PER NEC ARTICLE 690.
CE	35.	 MODULE INSTALLATION: A. REFER TO THE MODULE MANUAL FOR MORE DETAILS ON RIGGING, UNPACKING, HANDLING, PLANNING & INSTALLATION. B. THE MODULES MAY BE SHIPPED WITH SEVERAL MODULES PER BOX. TAKE CARE WHEN OPENING THE BOX TO ENSURE THAT ALL MODULES ARE SECURELY HANDLED. C. NEVER LEAVE A MODULE UNSUPPORTED OR UNSECURED. CONTRACTOR IS RESPONSIBLE FOR ALL MATERIAL HANDLING ON THE JOB SITE.
TS = N	36.	 SOLAR COMMISSIONING - BEFORE CLOSING DISCONNECTS OR ATTEMPTING TO ENERGIZE THE INVERTERS, THE FOLLOWING COMMISSIONING PROCEDURE SHALL BE COMPLETED: A. CHECK THE OPEN CIRCUIT VOLTAGE (Voc) AND POLARITY (+/-) OF EACH SOURCE CIRCUIT. RECORD THE VALUES ON COMMISSIONING RECORD DOCUMENTS. B. CHECK THE SHORT CIRCUIT CURRENT (Isc) FOR EACH SOURCE CIRCUIT, RECORD THE VALUES ON COMMISSIONING RECORD DOCUMENTS. C. CHECK THAT ALL FUSES, DISCONNECTS AND OTHER BALANCE OF SYSTEM COMPONENTS ARE RATED FOR 600 VDC AND THE APPROPRIATE CURRENT CAPACITY. D. COMPLETE A VISUAL INSPECTION OF ALL THE MODULES TO CHECK FOR BROKEN GLASS, FRAYED WIRES, EXPOSED CONDUCTORS AND ANY OTHER PROBLEMS THAT MAY CAUSE A FAULT.
JT - N.	37.	 INVERTER COMMISSIONING - BEFORE TURING ON, OR CLOSING ANY OF THE INVERTER DISCONNECTS, THE FOLLOWING COMMISSIONING PROCEDURE SHALL BE COMPLETED: A. CHECK THAT THE INVERTER IS PROPERLY GROUNDED, AS DESCRIBED BY THE MANUFACTURER & THESE INSTRUCTIONS. B. CHECK THE INVERTER DC INPUT VOLTAGE (Voc) FROM THE SOLAR ARRAY FOR PROPER POLARITY INSIDE THE INVERTER CABINET. C. CHECK DC INPUT VOLTAGE (Voc) IS WITHIN THE PROPER RANGE IN THE INVERTER CABINET AS DEFINED BY THE INVERTER RATING LABEL AND ACCOMPANIED MANUAL. D. CHECK AC INPUT VOLTAGE IS IN THE PROPER PHASE SEQUENCE (CLOCKWISE) IF APPLICABLE. E. CHECK THAT THE AC GRID VOLTAGE, AT THE INVERTER AC TERMINALS, IS WITHIN THE PROPER RANGE AS DEFINED BY THE INVERTER RATING LABEL AND ACCOMPANIED MANUAL. F. FOLLOW THE START-UP SEQUENCE IN MANUFACTURER'S OPERATION AND MAINTENANCE MANUAL.
		Raising the bar in innovative DC MLPE solar power systems
		Meets NEC 2017 & 2020 (690.12) requirements



- Meets SunSpec requirements
- Dual-input channel



20A

RSD-D-15

15A

8-80V Per Channel

15A Per Channel 20A Per Channel

16-160V

1000V/1500V

-40 oF to +167 oF (-40 °C to + 75 °C) 5.5" x 2" x 0.8"(140 mm x 50.6 mm x 20 mm) Input 500mm/Output 2200mm TUV:4mm²/UL:12AWG MC4 or Customize NEMA Type 6P/IP68 Yes

PLC NEC 2017 & 2020 (690.12); UL1741; CSA C22.2 No. 330-17; IEC/EN62109-1 FCC Part15; ICES-003

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Rev1.3 2021-5-25

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RAPID SHUTDOWN TRANSMITTER SPECIFICATION SHEET



LABELING REQUIREMENTS FOR ARTICLE 690

NEC 690.13(B) EACH PV SYSTEM DISCONNECTING MEANS SHALL PLAINLY INDICATE WHETHER IN THE OPEN (OFF) OR CLOSED (ON POSITION AND BE PERMANENTLY MARKED "PV SYSTEM DISCONNECT" OR EQUIVALENT. ADDITIONAL MARKINGS SHALL BE PERMITTED BASED UPON THE SPECIFIC SYSTEM CONFIGURATION. FOR PV SYSTEM DISCONNECTING MEANS WHERE THE LINE AND LOAD TERMINALS MAY BE ENERGIZED IN THE OPEN POSITION, THE DEVICE SHALL BE MARKED WITH THE FOLLOWING WORD OR EQUIVALENT: "TERMINALS ON THE LINE AND LOAD SIDES MAY BE ENERGIZED IN THE OPEN POSITION."

NEC 690.15(B) AN ISOLATING DEVICE SHALL BE RATED TO OPEN THE MAXIMUM CIRCUIT CURRENT UNDER LOAD OR BE MARKED 'DO NOT DISCONNECT UNDER LOAD" OR "NOT FOR CURRENT INTERRUPTING."

NEC 690.31(B)(1) PV SYSTEM CIRCUIT CONDUCTORS SHALL BE IDENTIFIED AT ALL TERMINATION, CONNECTION, AND SPLICE POINTS BY COLOR CODING, MARKING TAPE, TAGGING, OR OTHER APPROVED MEANS. CONDUCTORS RELYING ON OTHER THAN COLOR CODING FOR POLARITY IDENTIFICATION SHALL BE IDENTIFIED BY AN APPROVED PERMANENT MARKING MEANS SUCH AS LABELING, SLEEVING OR SHRINK-TUBING THAT IS SUITABLE FOR THE CONDUCTOR SIZE.

NEC 690.31(D)(2) UNLESS LOCATED AND ARRANGED SO THE PURPOSE IS EVIDENT, THE FOLLOWING WIRING METHODS AND ENCLOSURES THAT CONTAIN PV SYSTEM DC CIRCUIT CONDUCTORS SHALL BE MARKED WITH THE WORDING PHOTOVOLTAIC POWER SOURCE OR SOLAR PV DC CIRCUIT BY MEANS OF PERMANENTLY AFFIXED LABELS OR OTHER APPROVED PERMANENT MARKING: (1) EXPOSED RACEWAYS, CABLE TRAYS, AND OTHER WIRING METHODS (2) COVERS OR ENCLOSURES OF PULL BOXES AND JUNCTION BOXES (3) CONDUIT BODIES IN WHICH ANY OF THE AVAILABLE CONDUIT OPENINGS ARE UNUSED.

THE LABELS OR MARKINGS SHALL BE VISIBLE AFTER INSTALLATION. ALL LETTERS SHALL BE CAPITALIZED AND SHALL BE A MINIMUM HEIGHT OF 9.5 MM (3/8 IN.) IN WHITE ON A RED BACKGROUND. LABELS SHALL APPEAR ON EVERY SECTION OF THE WIRING SYSTEM THAT IS SEPARATED BY ENCLOSURES, WALLS, PARTITIONS, CEILINGS, OR FLOORS. SPACING BETWEEN LABELS OR MARKINGS, OR BETWEEN A LABEL AND A MARKING, SHALL NOT BE MORE THAN 3 M (10 FT). LABELS REQUIRED BY THIS SECTION SHALL BE SUITABLE FOR THE ENVIRONMENT WHERE THEY ARE INSTALLED.

NEC 690.31(E) SOLIDLY GROUNDED BIPOLAR PV SYSTEMS SHALL BE CLEARLY MARKED WITH A PERMANENT, LEGIBLE WARNING NOTICE INDICATING THAT THE DISCONNECTION OF THE GROUNDED CONDUCTOR(S) MAY RESULT IN OVERVOLTAGE ON THE EQUIPMENT.

NEC 690.33(D)(2) INTERRUPTION OF CIRCUIT. CONNECTORS SHALL BE A TYPE THAT REQUIRES THE USE OF A TOOL TO OPEN AND MARKED "DO NOT DISCONNECT UNDER LOAD" OR "NOT FOR CURRENT INTERRUPTING." NEC 690.52 ALTERNATING-CURRENT MODULES SHALL BE MARKED WITH IDENTIFICATION OF TERMINALS OR LEADS AND WITH

IDENTIFICATION OF THE FOLLOWING RATINGS. NEC 690.53 A PERMANENT READILY VISIBLE LABEL INDICATING THE HIGHEST MAXIMUM DC VOLTAGE IN A PV SYSTEM.

CALCULATED IN ACCORDANCE WITH 690.7, SHALL BE PROVIDED BY THE INSTALLER AT ONE OF THE FOLLOWING LOCATIONS: (1) DC PV SYSTEM DISCONNECTING MEANS (2) PV SYSTEM ELECTRONIC POWER CONVERSION EQUIPMENT (3) DISTRIBUTION EQUIPMENT ASSOCIATED WITH THE PV SYSTEM.

NEC 690.54 ALL INTERACTIVE SYSTEM(S) POINTS OF INTERCONNECTION WITH OTHER SOURCES SHALL BE MARKED AS AN ACCESSIBLE LOCATION AT THE DISCONNECTING MEANS AS A POWER SOURCE AND WITH THE RATED AC OUTPUT CURRENT AND THE NOMINAL OPERATING AC VOLTAGE.

NEC 690.55 THE PV SYSTEM OUTPUT CIRCUIT CONDUCTORS SHALL BE MARKED TO INDICATE POLARITY WHERE CONNECTED TO ENERGY STORAGE SYSTEMS.

NEC 692.56 A FUEL CELL SYSTEM THAT STORES ELECTRICAL ENERGY SHALL REQUIRE THE FOLLOWING WARNING SIGN, OR EQUIVALENT, AT THE LOCATION OF THE SERVICE DISCONNECTING MEANS OF THE PREMISES: WARNING FUEL CELL POWER SYSTEM CONTAINS ELECTRICAL ENERGY STORAGE DEVICES.

NEC 690.56(B) PLAQUES OR DIRECTORIES SHALL BE INSTALLED IN ACCORDANCE WITH 705.10 AND 712.10.

NEC 690.56(C) THE TYPE OF PV SYSTEM IS SHOWN IN FIGURE 690.56 (C).

NEC 690.56(C)(2) A RAPID SHUTDOWN INITIATION DEVICE SHALL HAVE A LABEL LOCATED ON OR NO MORE THAN 1 M (3 FT) FROM THE INITIATION DEVICE THAT INCLUDES THE FOLLOWING WORDING: RAPID SHUTDOWN FOR SOLAR PV SYSTEM THE LABEL SHALL BE REFLECTIVE, WITH ALL LETTERS CAPITALIZED AND HAVING A MINIMUM HEIGHT OF 9.5 MM (3/8 IN.), IN WHITE ON RED BACKGROUND.

NEC 690.59 PV SYSTEMS CONNECTED TO OTHER SOURCES SHALL BE INSTALLED IN ACCORDANCE WITH PARTS I AND II OF ARTICLE 705.

NEC 705.12(B)(3)(3) THE SUM OF THE AMPERE RATINGS OF ALL OVERCURRENT DEVICES ON PANELBOARDS, BOTH LOAD AND SUPPLY DEVICES, EXCLUDING THE RATING OF THE OVERCURRENT DEVICE PROTECTING THE BUSBAR, SHALL NOT EXCEED THE AMPACITY OF THE BUSBAR. THE RATING OF THE OVERCURRENT DEVICE PROTECTING THE BUSBAR SHALL NOT EXCEED THE RATING OF THE BUSBAR. PERMANENT WARNING LABELS SHALL BE APPLIED TO DISTRIBUTION EQUIPMENT DISPLAYING THE FOLLOWING OR EQUIVALENT WORDING: WARNING: THIS EQUIPMENT FED BY MULTIPLE SOURCES. TOTAL RATING OF ALL OVERCURRENT DEVICESHALL NOT EXCEED AMPACITY OF BUSBAR.

NEC 705.12(D) SUITABLE FOR BACKFEED. FUSED DISCONNECTS, UNLESS OTHERWISE MARKED, SHALL BE CONSIDERED SUITABLE FOR BACKFEED.

NEC 706.15(C) EACH ESS DISCONNECTING MEANS SHALL PLAINLY INDICATE WHETHER IT IS IN THE OPEN (ON) OR CLOSED (OFF) POSITION AND BE PERMANENTLY MARKED "ENERGY STORAGE SYSTEM DISCONNECT" THE DISCONNECTING MEANS SHALL BE LEGIBLY MARKED IN THE FIELD TO INDICATE THE FOLLOWING: NOMINAL ESS AC VOLTAGE AND MAXIMUM ESS DC VOLTAGE AVAILABLE FAULT CURRENT DERIVED FROM THE ESS AN ARC-FLASH LABEL APPLIED IN ACCORDANCE WITH ACCEPTABLE INDUSTRY PRACTICE DATA CALCULATION WAS PERFORMED.

REQUIREMENTS FOR ELECTRICAL INSTALLATIONS

(FIELD MARKING)

NEC 110.16 ELECTRICAL EQUIPMENT THAT ARE IN OTHER THAN DWELLING UNITS SHALL BE FIELD MARKED TO WARN QUALIFIED PERSONS OF A POTENTIAL ARC FLASH HAZARD.

NEC 110.16(A) ARC FLASH: ELECTRICAL EQUIPMENT, SUCH AS SWITCHBOARDS, SWITCHGEAR, PANELBOARDS, INDUSTRIAL CONTROL PANELS, METER SOCKET ENCLOSURES, AND MOTOR CONTROL CENTERS, THAT IS IN OTHER THAN DWELLING UNITS, AND IS LIKELY TO REQUIRE EXAMINATION, ADJUSTMENT, SERVICING, OR MAINTENANCE WHILE ENERGIZED, SHALL BE FIELD OR FACTORY MARKED TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS. THE MARKING SHALL MEET THE REQUIREMENTS IN 110.21(B) AND SHALL BE LOCATED SO AS TO BE CLEARLY VISIBLE TO QUALIFIED PERSONS BEFORE EXAMINATION, ADJUSTMENT, OF THE EQUIPMENT.

NEC 110.16(B) IN OTHER THAN DWELLING UNITS, IN ADDITION TO THE REQUIREMENTS IN (A), A PERMANENT LABEL SHALL BE FIELI OR FACTORY APPLIED TO SERVICE EQUIPMENT RATED 1200 AMPS OR MORE. THE LABEL SHALL MEET THE REQUIREMENTS OF 110.21(B) AND CONTAIN THE FOLLOWING INFORMATION: 1. NOMINAL SYSTEM VOLTAGE.

 AVAILABLE FAULT CURRENT AT THE SERVICE OVERCURRENT PROTECTIVE DEVICES.
 THE CLEARING TIME OF SERVICE OVERCURRENT PROTECTIVE DEVICES BASED ON THE AVAILABLE FAULT CURRENT AT THE SERVICE EQUIPMENT.
 THE DATE THE LABEL WAS APPLIED.

EXCEPTION: SERVICE EQUIPMENT LABELING SHALL NOT BE REQUIRED IF AN ARC FLASH LABEL IS APPLIED IN ACCORDANCE WITH ACCEPTABLE INDUSTRY PRACTICE.

NEC 110.21(B)(1) FIELD APPLIED HAZARD MARKINGS: THE MARKING SHALL WARN OF THE HAZARDS USING EFFECTIVE WORDS, COLORS, SYMBOLS, OR ANY COMBINATION THEREOF.

NEC 110.21(B)(3) THE LABEL SHALL BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED.

NEC 110.22(B) ENGINEERED SERIES COMBINATION SYSTEMS: EQUIPMENT ENCLOSURES FOR CIRCUIT BREAKERS OR FUSES APPLIED IN COMPLIANCE WITH SERIES COMBINATION RATINGS SELECTED UNDER ENGINEERING SUPERVISION IN ACCORDANCE WITH 250.86(A) SHALL BE LEGIBLY MARKED IN THE FIELD AS DIRECTED BY THE ENGINEER TO INDICATE THE EQUIPMENT HAS BEE APPLIED WITH A SERIES COMBINATION RATING. THE MARKING SHALL MEET THE REQUIREMENTS IN 110.21(B).

NEC 110.24(A) FIELD MARKING: SERVICE EQUIPMENT AT OTHER THAN DWELLING UNITS SHALL BE LEGIBLY MARKED IN THE FIELD WITH THE MAXIMUM AVAILABLE FAULT CURRENT. THE FIELD MARKING(S) SHALL INCLUDE THE DATE THE FAULT-CURRENT CALCULATION WAS PERFORMED AND BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED. THE CALCULATION SHALL BE DOCUMENTED AND MADE AVAILABLE TO THOSE AUTHORIZED TO DESIGN, INSTALL, INSPECT, MAINTAIN, OR OPERATE THE SYSTEM.

NEC 110.27(C) ENTRANCES TO ROOMS OR OTHER GUARDED LOCATIONS THAT CONTAIN EXPOSED LIVE PARTS SHALL BE MARKED WITH CONSPICUOUS WARNING SIGNS FORBIDDING UNQUALIFIED PERSONS TO ENTER.

NEC 210.5(C)(1)(B) POSTING OF IDENTIFICATION MEANS: THE METHOD UTILIZED FOR CONDUCTORS ORIGINATING WITHIN EACH BRANCH-CIRCUIT PANELBOARD OR SIMILAR BRANCH CIRCUIT DISTRIBUTION EQUIPMENT SHALL BE DOCUMENTED IN A MANNER THAT IS READILY AVAILABLE AND SHALL BE PERMANENTLY POSTED AT EACH BRANCH-CIRCUIT PANELBOARD OR SIMILAR BRANCH-CIRCUIT DISTRIBUTION EQUIPMENT. THE LABEL SHALL BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED AND SHALL NOT BE HANDWRITTEN.

NEC 230.2(E) IDENTIFICATION: WHERE A BUILDING OR STRUCTURE IS SUPPLIED BY MORE THAN ONE SERVICE, OR ANY COMBINATION OF BRANCH CIRCUITS, FEEDERS, AND SERVICES, A PERMANENT PLAQUE OR DIRECTORY SHALL BE INSTALLED AT EACH SERVICE DISCONNECT LOCATION DENOTING ALL OTHER SERVICES, FEEDERS, AND BRANCH CIRCUITS SUPPLYING THAT BUILDING OR STRUCTURE AND THE AREA SERVED BY EACH.

NEC 408.4(B) SOURCE OF SUPPLY: ALL SWITCHBOARDS, SWITCHGEAR, AND PANELBOARDS SUPPLIED BY FEEDER(S) IN OTHER THAN ONE- OR TWO-FAMILY DWELLINGS SHALL BE PERMANENTLY MARKED TO INDICATE EACH DEVICE OR EQUIPMENT WHERE THE POWER ORIGINATES. THE LABEL SHALL BE PERMANENTLY AFFIXED, OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED AND NOT BE HANDWRITTEN.

NEC 705.10 A PERMANENT PLAQUE OR DIRECTORY SHALL BE INSTALLED AT A BUILDING SUPPLIED BY A STAND-ALONE SYSTEM A EACH SERVICE EQUIPMENT LOCATION, OR AT AN APPROVED READILY VISIBLE LOCATION. THE PLAQUE OR DIRECTORY SHALL DENOTE THE LOCATION OF EACH POWER SOURCE DISCONNECTING MEANS FOR THE PREMISES OR BE GROUPED WITH OTHER PLAQUES OR DIRECTORIES FOR OTHER ON-SITE SOURCES. THE MARKING SHALL COMPLY WITH 110.21(B).

NEC 705.12(C) EQUIPMENT CONTAINING OVERCURRENT DEVICES IN CIRCUITS SUPPLYING POWER TO A BUSBAR OR CONDUCTOR SUPPLIED FROM MULTIPLE SOURCES SHALL BE MARKED TO INDICATE THE PRESENCE OF ALL SOURCES.

NEC 705.12(B)(3)(3) PERMANENT WARNING LABELS SHALL BE APPLIED TO DISTRIBUTION EQUIPMENT DISPLAYING THE FOLLOWINC OR EQUIVALENT WORDING: THIS EQUIPMENT FED BY MULTIPLE SOURCES: TOTAL RATING OF ALL OVERCURRENT DEVICES EXCLUDING MAIN POWER SUPPLY SHALL NOT EXCEED AMPACITY OF BUSBAR.

NEC 705.12(B)(3)(2) A PERMANENT WARNING LABEL SHALL BE APPLIED TO THE DISTRIBUTION EQUIPMENT ADJACENT TO THE BACK-FED BREAKER FROM THE INVERTER POWER SOURCE THAT DISPLAYS THE FOLLOWING OR EQUIVALENT WORDING: "WARNING: POWER OUTPUT CONNECTION. DO NOT RELOCATE THIS OVERCURRENT DRIVE."

NEC 710.15(C) STAND-ALONE SYSTEMS SHALL BE PERMITTED TO SUPPLY 120 VOLTS TO SINGLE-PHASE, 3-WIRE, 120/240-VOLT SERVICE EQUIPMENT OR DISTRIBUTION PANELS WHERE THERE ARE NO 240-VOLT OUTLETS AND WHERE THERE ARE NO MULTIWIRE BRANCH CIRCUITS. IN ALL INSTALLATIONS, THE SUM OF THE RATINGS OF THE POWER SOURCES SHALL BE LESS THAN THE RATING OF THE NEUTRAL BUS IN THE SERVICE EQUIPMENT. THIS EQUIPMENT SHALL BE MARKED WITH THE FOLLOWING WORDS OR EQUIVALENT: "WARNING: SINGLE 120-VOLT SUPPLY - DO NOT CONNECT MULTIWIRE BRANCH CIRCUITS."

NFPA 2012 130.5(C) SAME AS NEC110.16 BUT INCLUDES ADDITIONAL LABEL INFORMATION THAT IS REQUIRED AFTER 9/30/2011. CHECK LATEST 2012 NFPA ARC FLASH REQUIREMENTS.

OSHA 1910.145(F)(7) WARNING TAGS ARE USED TO REPRESENT A HAZARD LEVEL BETWEEN "CAUTION" AND "DANGER."

ACES - WIN LEKGKEEN INTERDISTRICT MAGNET SCHOOL 670 WIN WILKGREEN AVE, HAMDEN CT 670 WIN WILKGREEN AVE, HAMDEN CT 670 WIN WILKGREEN AVE, HAMDEN CT 670 WIN WILKGREEN AVE, HAMDEN CT 10 Wite Wood Lang N. Baniford, CT 06471 N. Baniford, CT 06471 N								ISSUED FOR UTILITY INTERCONNECTION	Description	
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