

	PITCH: 45° (12:12) ARRAY PITCH: 45° (12:12	
	MP1 AZIMUTH: 174 ARRAY AZIMUTH: 174 MATERIAL: Solar Roof STORY: Two	
	Record Set Stamp	
	05/10/2022	
	LEGEND	
	(E) UTILITY METER & WARNING LABEL	
	INVERTER W/ INTEGRATED DC DISCO	
	DC DISCONNECT & WARNING LABELS	
	AC DISCONNECT & WARNING LABELS	
	B DC JUNCTION/COMBINER BOX & LABELS	
	DISTRIBUTION PANEL & LABELS	
	LOAD CENTER & WARNING LABELS	
DEDICATED PV SYSTEM METER		
	RESID RAPID SHUTDOWN	
	CONDUIT RUN ON EXTERIOR CONDUIT RUN ON INTERIOR	
	HEAT PRODUCING VENTS ARE RED	
	INTERIOR EQUIPMENT IS DASHED	
	$\frac{\text{Scale: 3/32'' = 1'}}{\text{Scale: 3/32'' = 1'}}$	
DESIGN:	S S	
SHEET:	rev: date: 4/26/2022	



/oc*	=	MAX	VOC	AΤ	MIN	TEMP	

AC	(1) AWG #10, THWN-2, Black (1) AWG #10, THWN-2, White (1) AWG #10, THWN-2, Write (1) AWG #10, THWN-2, Green EG (1) Conduit; 3/4" LFMC	$\begin{array}{llllllllllllllllllllllllllllllllllll$	(2)PV Wire, AWG 10 (2)PV Wire, AWG 10 (2)PV Wire, AWG 10 (1)Conduit; 3/4" LFMC	Voc* = 508.79 VDC Isc = 13.6 ADC Vmp = 362.88 VDC Imp= 12.6 ADC Voc* = 508.79 VDC Isc = 13.6 ADC Voc* = 508.79 VDC Isc = 13.6 ADC Vmp = 362.88 VDC Imp= 12.6 ADC
	(1) AWG #10, THWN-2, Black (1) AWG #10, THWN-2, White (1) AWG #10, THWN-2, White (1) AWG #10, THWN-2, Green EG	Voc* = 492.89 VDC Isc = 6.8 ADC Vmp = 351.54 VDC Imp= 6.3 ADC 	(1) AWG #10, THWN-2, Black (1) AWG #10, THWN-2, White (1) AWG #10, THWN-2, Green EGC	Voc* = 508.79 VDC Isc = 13.6 ADC Vmp = 362.88 VDC Imp= 12.6 ADC
$10 = 10^{(1)} \text{AWG } \#8, \text{ THWN-2, Black}$ $10^{(1)} \text{AWG } \#8, \text{ THWN-2, Red}$ $10^{(1)} \text{AWG } \#10, \text{ THWN-2, Green EGC Vmp} = 240 \text{ VAC Imp} = 32 \text{ AAC}$			(2)PV Wire, AWG 10	Voc* = 508.79 VDC Isc = 13.6 ADC Vmp = 362.88 VDC Imp= 12.6 ADC
-(1) Conduit Kit; 3/4" EMT $(1) AWG #10, THWN-2, Black$ $(1) AWG #10, THWN-2, Red$			(2)PV Wire, AWG 10 (1)Conduit; 3/4" LFMC	Voc* = 508.79 VDC Isc = 13.6 ADC Vmp = 362.88 VDC Imp= 12.6 ADC
← (1) AWG #10, THWN-2, Green EGC Vmp = 240 VAC Imp=16 AAC - (1) Conduit Kit; 3/4" EMT			(1) AWG #10, THWN-2, Black (1) AWG #10, THWN-2, White (1) AWG #10, THWN-2, White (1) AWG #10, THWN-2, Green EGC	Voc* = 508.79 VDC Isc = 13.6 ADC Vmp = 362.88 VDC Imp= 12.6 ADC - (1) Conduit Kit: 3/4" EMT
			(2)PV Wire, AWG 10 (1)Conduit; 3/4" LFMC	Voc* = 508.79VDC Isc = 6.8 ADC Vmp = 362.88VDC Imp= 6.3 ADC
JOB NUMBER: JB-8042552	00	ustomer: Kevin Dalv	DESCRIPTION: 13752 KW PV	ARRAY
MOUNTING SYSTEM: TESLA SOLAR ROOF		35040 Country Green Ln		
MODULES: (191) TESLA SR72T2; 72 W, 65.4	O W PTC	Steamboat Springs, CO 804	487	
INVERTER: Multiple Inverters		303-808-5445	THREE LINE DIA	AGRAM

PHOTOVOLTAIC POWER SOURCE	Label Location (C) Per Code: NEC 690.31.E Label Location (DC) (INV) Per Code: NEC 690.14 C	3 3 3 4 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Label Location: (POI) Per Code: NEC 705.12.B.2.3.b
MAXIMUM VOLTAGE MAXIMUM CIRCUIT CURRENT MAX RATED OUTPUT CURRENT OF THE CHARGE CONTROLLER OR DC-TO-DC CONVERTER (IF INSTALLED)	Label Location (DC) (INV) Per Code: NEC 690.53	WARNING THIS EQUIPMENT FED BY MULTIPLE SOURCES. TOTAL RATING OF ALL OVER CURRENT DEVICES, EXCLUDING MAIN SUPPLY OVERCURRENT DEVICE, SHALL NOT EXCEED AMPACITY OF BUSBAR.	Per Code: 705.12.B.2.3.c
AC PHOTOVOLTAIC DISCONNECT	Label Location (AC) (POI) Per Code: NEC 690.14.C	2 2 WARNING ELECTRIC SHOCK HAZARD THE DC CONDUCTORS OF THIS	Label Location: (DC) (INV)
MAXIMUM AC OPERATING CURRENT MAXIMUM AC OPERATING VOLTAGE	Label Location (AC) (POI) Per Code: NEC 690.54	UNGROUNDED AND MAY BE ENERGIZED	
WARNING ELECTRIC SHOCK HAZARD DO NOT TOUCH TERMINALS TERMINALS ON BOTH LINE AND LOAD SIDES MAY BE ENERGIZED IN THE OPEN POSITION	Label Location (AC) (POI) Per Code: CEC 690.13.B		
CAUTION DUAL POWER SOURCE SECOND SOURCE IS PHOTOVOLTAIC SYSTEM	Label Location (POI) Per Code: NEC 705.12.B	3	
		Label Set	



(AC): AC Disconnect
(C): Conduit
(CB): Combiner Box
(D): Distribution Panel
(DC): DC Disconnect
(IC): Interior Run Conduit
(INV): Inverter With Integrated DC Disconnect
(LC): Load Center
(M): Utility Meter
(POI): Point of Interconnection

MCI WIRING DETAIL

<u>GENERAL NOTES</u>

- DRAWING OF STANDARD MCI WIRING DETAIL FOR ANY GIVEN STRING LENGTH
- IF INITIATED, RAPID SHUTDOWN OCCURS WITHIN 30 SECONDS OF ACTIVATION AND LIMITS VOLTAGE ON THE ROOF TO NO GREATER THAN 165V (690.12.B.2.1)
- MID CIRCUIT INTERRUPTER (MCI) IS A UL 1741 PVRSE CERTIFIED RAPID SHUTDOWN DEVICE (RSD)

RETROFIT PV MODULES

- MCIS ARE LOCATED AT ROOF LEVEL, JUST UNDER THE PV MODULES IN ACCORDANCE WITH 690.12 REQUIREMENTS
- THE QUANTITY OF MCIS PER STRING IS DETERMINED BY STRING LENGTH
 - NUMBER OF MODULES BETWEEN MCI UNITS = 0-3
 - MAXIMUM NUMBER OF MODULES PER MCI UNIT = 3
 - MINIMUM NUMBER MCI UNITS = MODULE COUNT/3

 $\begin{array}{c|c} & & & & \\ & & & \\ \hline \end{array} \right)$

*Exception: Tesla (Longi) modules installed in locations where the max Voc for 3 modules at low design temperature exceeds 165V shall be limited to 2 modules between MCIs.

PLEASE REFER TO MCI CUTSHEET AND PVRSA INSERT FOR MORE INFORMATION



MCI WIRING DETAIL

GENERAL NOTES

- DRAWING OF STANDARD MCI WIRING DETAIL FOR ANY GIVEN STRING LENGTH
- IF INITIATED, RAPID SHUTDOWN OCCURS WITHIN 30 SECONDS OF ACTIVATION AND LIMITS VOLTAGE ON THE ROOF TO NO GREATER THAN 165V (690.12.B.2.1)
- MID CIRCUIT INTERRUPTER (MCI) IS A UL 1741 PVRSE CERTIFIED RAPID SHUTDOWN DEVICE (RSD)

SOLAR ROOF TILES

- MCIS ARE LOCATED AT DECK LEVEL, JUST UNDER THE TILES IN ACCORDANCE WITH 690.12 REQUIREMENTS
- THE QUANTITY OF MCIS PER STRING IS DETERMINED BY STRING LENGTH
 - NUMBER OF TILES BETWEEN MCI UNITS = 0-10
 - MAXIMUM NUMBER OF TILES PER MCI UNIT = 10
 - MINIMUM NUMBER MCI UNITS = TILE COUNT/10



PLEASE REFER TO MCI CUTSHEET AND PVRSA INSERT FOR MORE INFORMATION





SOLAR INVERTER

3.8 kW | 7.6 kW

Tesla Solar Inverter completes the Tesla home solar system, converting DC power from solar to AC power for home consumption. Tesla's renowned expertise in power electronics has been combined with robust safety features and a simple installation process to produce an outstanding solar inverter that is compatible with both Solar Roof and traditional solar panels. Once installed, homeowners use the Tesla mobile app to manage their solar system and monitor energy consumption, resulting in a truly unique ecosystem experience.

KEY FEATURES

- Built on Powerwall 2 technology for exceptional efficiency and reliability
- Wi-Fi, Ethernet, and cellular connectivity with easy over-the-air updates
- Designed to integrate with Tesla Powerwall and Tesla App
- 3.8 kW and 7.6 kW models available

SOLAR INVERTER

Tesla Solar Inverter provides DC to AC conversion and integrates with the Tesla ecosystem, including Solar Panels, Solar Roof, Powerwall, and vehicle charging, to provide a seamless sustainable energy experience.

KEY FEATURES

- Integrated rapid shutdown, arc fault, and ground fault protection
- No neutral wire simplifies installation

ELECTRICAL SPECIFICATIONS

MODEL NUMBER	157/000-XX-V	1578000-77-1/	Dimensions	660 mm x 411 mm	x 158 mm (26 in x 16 in x 6 in)
	1554000-XX-y	1556000-XX-y			
OUTPUT (AC)	3.8 kW	7.6 kW	Weight	52 lb4	
Nominal Power	3,800 W	7,600 W	Mounting options	Wall mount (brack	(et)
Maximum Apparent Power	3,328 VA at 208 V 3,840 VA at 240 V	6,656 VA at 208 V 7,680 VA at 240 V	⁴ Door and bracket car	be removed for a moun	ting weight of 37 lb.
Maximum Continuous Current	16 A	32 A	^		
Breaker (Overcurrent Protection)	20 A	40 A			
Nominal Power Factor	1 - 0.9 (leadi	ng / lagging)			
THD (at Nominal Power)	</td <td colspan="2"><5%</td> <td></td> <td></td>	<5%			
INPUT (DC)			660 mm		
МРРТ	2	4			
Input Connectors per MPPT	1-2	1-2-1-2			
Maximum Input Voltage	600	VDC			
DC Input Voltage Range	60 - 55	50 VDC			
DC MPPT Voltage Range	60 - 480 VDC1				
Maximum Current per MPPT (I _{mp})	13 A ²				
Maximum Short Circuit Current per MPPT (I,)	17	17 A ²		411 mm	

PERFORMANCE SPECIFICATIONS

Peak Efficiency	98% at 208 V 98.1% at 240 V	98.4% at 208 V 98.6% at 240 V	
CEC Efficiency	97.5% at 208 V 97.5% at 240 V	97.5% at 208 V 98.0% at 240 V	
Allowable DC/AC Ratio	1.	.7	
Customer Interface	Tesla Mobile App		
Internet Connectivity	Wi-Fi (2.4 GHz, 802.11 b/g/n), Ethernet, Cellular (LTE/4G)³		
AC Remote Metering Support	Wi-Fi (2.4 GHz, 802.11 b/g/n), RS-485		
Protections	Integrated arc fault circuit interrupte (AFCI), Rapid Shutdown		
Supported Grid Types	60 Hz, 240 V Split F 60 Hz, 208 V Wye	Phase	

 1 Maximum current. $^2Where the DC input current exceeds an MPPT rating, jumpers can be used to allow a single MPPT to intake additional DC current up to 26 A <math display="inline">\rm I_{mp}$ / 34 A $\rm I_{sc}$. ³ Cellular connectivity subject to network operator service coverage and signal strength.

05/10/ 22

• 2x the standard number of MPPTs for high production on complex roofs

MECHANICAL SPECIFICATIONS



ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-30°C to 45°C (-22°F to 113°F)⁵
Operating Humidity (RH)	Up to 100%, condensing
Storage Temperature	-30°C to 70°C (-22°F to 158°F)
Maximum Elevation	3000 m (9843 ft)
Environment	Indoor and outdoor rated
Enclosure Rating	Type 3R
Ingress Rating	IP55 (Wiring compartment)
Pollution Rating	PD2 for power electronics and terminal wiring compartment, PD3 for all other components
Operating Noise @ 1 m	< 40 db(A) nominal, < 50 db(A) maximum

 $^5\,{\rm For}$ the 7.6 kW Solar Inverter, performance may be de-rated to 6.2 kW at 240 V or 5.37 kW at 208 V when operating at temperatures greater than 45°C.

COMPLIANCE INFORMATION

Grid Certifications	UL 1741, UL 1741 SA, IEEE 1547, IEEE 1547.1
Safety Certifications	UL 1741 PVRSS, UL 1699B, UL 1998 (US), UL 3741
Emissions	EN 61000-6-3 (Residential), FCC 47CFR15.109 (a)

SOLAR SHUTDOWN DEVICE

The Tesla Solar Shutdown Device is part of the PV system rapid shutdown (RSD) function in accordance with Article 690 of the applicable NEC. When paired with the Tesla Solar Inverter, solar array shutdown is initiated by any loss of AC power.



ELECTRICAL SPECIFICATIONS

RSD MODULE PERFORMANCE

Maximum Number of Devices per String

Maximum Power Consumption

Ambient Temperature

Storage Temperature

Enclosure Rating

Control

Warranty

Passive State

Nominal Input DC Current Rating (I _{MP})	12 A
Maximum Input Short Circuit Current (I _{sc})	15 A
Maximum System Voltage	600 V DC

MECHANICAL SPECIFICATIONS

Electrical Connections	MC4 Connector
Housing	Plastic
Dimensions	125 mm x 150 mm x 22 mm (5 in x 6 in x 1 in)
Weight	350 g (0.77 lb)
Mounting Options	ZEP Home Run Clip M4 Screw (#10) M8 Bolt (5/16″) Nail / Wood screw
650 mm 1 22 mm	50 mm 50 mm 4 Screw M4 Screw M8 Bol Nail / Wood Screv 125 mm

COMPLIANCE INFORMATION

ENVIRONMENTAL SPECIFICATIONS

Certifications	UL 1741 PVRSE, UL 3741, PVRSA (Photovoltaic Rapid Shutdown Array)
RSD Initiation Method	PV System AC Breaker or Switch
Compatible Equipment	See Compatibility Table below

UL 3741 PV HAZARD CONTROL (AND PVRSA) COMPATIBILITY

NEMA 4 / IP65

-40°C to 50°C (-40°F to 122°F)

-30°C to 70°C (-22°F to 158°F)

Power Line Excitation

Normally open

7 W

25 years

Tesla Solar Roof and Tesla/Zep ZS Arrays using the following modules are certified to UL 3741 and UL 1741 PVRSA when installed with the Tesla Solar Inverter and Solar Shutdown Devices. See the Tesla Solar Inverter Installation Manual for detailed instructions and for guidance on installing Tesla Solar Inverter and Solar Shutdown Devices with other modules.

Brand	Model	Required Solar Shutdown Devices
Tesla	Solar Roof V3	1 Solar Shutdown Device per 10 modules
Tesla	Tesla TxxxS (where xxx = 405 to 450 W, increments of 5)	1 Solar Shutdown Device per 3 modules ¹
Tesla	Tesla TxxxH (where xxx = 395 to 415 W, increments of 5)	1 Solar Shutdown Device per 3 modules
Hanwha	Q.PEAK DUO BLK-G5	1 Solar Shutdown Device per 3 modules
Hanwha	Q.PEAK DUO BLK-G6+	1 Solar Shutdown Device per 3 modules

¹Exception: Tesla solar modules installed in locations where the max Voc for three modules at low design temperatures exceeds 165 V shall be limited to two modules between MCIs.



Tesla Photovoltaic Module

_

SR72T2 for full tear-off and overlay installations with SR-SAUL-1

Solar Roof shingle tiles are an aesthetically unparalleled solar energy solution. The combination of energy producing and non-energy tiles allows a Solar Roof to be functionally integrated and customizable to a variety of roof shapes and sizes.



Module Specifications

Electrical Characteristics		System Certifications		
Power Class SR72T2		UL 61730 (UL Listed)		
Test Method	STC	UL 9703 (UL Listed)		
Max Power, P _{MAX} (W)	72	UL 1741 (UL Listed)		
Open Circuit Voltage,	14.20	UL 3741 (UL Listed) Record Set Stamp		
V _{oc} (V) per diode		UL 790 Class A (ETL Listed)		
Short Circuit Current, I_{sc} (A)	6.80	ASTM D3161 Class F (ETL Listed)	05/40/0000	
Max Power Voltage, $V_{_{MP}}(V)$	11.30	TAS100 (ETL Listed)	05/10/2022	
Max Power Current, $I_{_{MP}}(A)$	6.30			
STC	1000 W/m², 25°C, AM 1.5 spectrum			
Mechanical Loading		Temperature Rating (STC)		
Wind Rating	Up to 87 m/s 194 mph	Temperature Coefficient of Isc	0.038%/°C	
Roof Snow Load	Up to 1280 kg/m² 263 lbs/ft² surface-normal Up to 270 kg/m² 55 lbs/ft² shear	Temperature Coefficient of V_{oc} Temperature Coefficient of P_{MAX} (W)	-0.267%/°C -0.372%/°C	
Hailstone Rating	FM 4473 Class 3 (Intertek)			
Mechanical Paramete	rs			
Cells	14		m 44.88 in	
Junction Box	IP68, 1 diodes			
Cable	12 AWG PV Wire, 90 °C wet or dry, Long lead 315 mm 12.40 in. length Short lead 280 mm 11.02 in. length			
Connector	Staubli MC4 type PV-KST4/6II-UR or type PV-KST4-EVO2 (male) and Staubli MC4 type PV-KBT4/6II-UR or type PV- KBT4-EVO2 (female)	430 mm 16		
Principal Materials	Glass, Polymers, Fiberglass and Silicon	\checkmark		
Height From Deck	35.3 mm 1.39 in	315 mm 12.40 in.		
nstalled System Weight	15 kg/m² 3.1 lb/ ft²	280 mm 11.02 in.		
Dimension	430 mm x 1140 mm x 5 mm 16.93 in x 44.88 in x .20 in			
Operation Parameter	s			
Operational Temperature	-40 °C up to 85 °C			
Power Output Tolerance	-0 /+5 %			
Max System Voltage	DC 1000 V (IEC/UL) for installations above 2000m but below 3000m the system voltage is 877 V	00	000 000	
Max Series Fuse Rating	10 A			
Safety Class	Class II			
Fire Rating	UL 61730 Class A			
Limited Warranties		Sheathing Specifications		
Module Warranty	25 years	Solar Doof will be installed over bare solid an	closely fitted cheathing as follows:	
The power output capacity of output power of the Solar Rewill decline by no more than	of your Solar Roof will be at least 95% of maximum rated bof system at 5 years after install. The power output capacity 0.5% per year for the following 20 years. This warranty	DOC PS-1 compliant / exterior grade pl DOC POS-2 OSB sheathing: minimum 7 Closely-fitted sheathing boards: minimum	ywood: minimum 15/32" (11.9 mm) thick /16" thick (11.1 mm) or um of 3/4" (19.1 mm) thick	





Solar Roof can also be installed over compatible existing roofs, as follows:

- Three-tab composition shingle, single layer
- Architectural composition shingle, single layer

Solar Roof will not be installed over raised presidential-style composition shingle, roofs with more than one layer of composition shingle, or existing non-composition shingle roof types like tiled roofs.





PV HAZARD CONTROL SYSTEM | ZS PVHCS

UL 3741 REPORT DATE 10-20-21 (APPLICABLE TO ZS COMP. ZS SPAN, ZS RAMP, AND ZS SEAM) PV RAPID SHUTDOWN ARRAY. UL 1741 CATEGORY QIJR

WARNING: To reduce the risk of injury, read all instructions.

PV HAZARD CONTROL EQUIPMENT AND COMPONENTS

Function	Manufacturer	Model No.	Firmware Versions and Checksums	Certification Standard
PVRSE Mid Circuit Interrupter (MCI)	Tesla	MCI-1	N/A	UL 1741 PVRSE
Inverter or Powerwall+	Tesla	7.6 kW: 1538000 ¹ 3.8 kW: 1534000 ¹ 7.6 kW: 1850000 ¹	V4, CEA4F802 V4, FF7BE4E1 V4, CEA4F802	UL 1741, 1998 PVRSS/PVRSE
PV Module	Hanwha/ Q-CELLS Tesla	Q.PEAK DUO BLK-G5/SC310-320 Q.PEAK DUO BLK G6+/SC330-345 Tesla TxxxS (xxx = 405 to 450) Tesla TxxxH (xxx = 395 to 415)	N/A	UL 1703 UL 61730
PVHCS Initiator (PV Inverter)	Dedicated PV system AC circuit breaker or AC disconnect switch, labeled per NEC 690.12 requirements.		N/A	
PVHCS Initiator (Powerwall+)	Emergency stop device (NISD)- Listed "Emergency Stop Button" or "Emergency Stop Device" or "Emergency Stop Unit".		UL 508 or UL 60947 Parts 1, 5-1 and 5-5	

¹ Applies to variations of this part number with suffix of two numbers and one letter.

Note: PVHCS installation requirements may reduce the effective equipment and component ratings below the individual equipment and component PVRSE ratings in order to achieve PVHCS shock hazard reduction requirements.

PVHCS INSTALLATION REQUIREMENTS

Max System Voltage	600 VDC
PVHCS Maximum Circuit Voltage (Array Internal Voltage After Actuation)	165 VDC (cold weather open circuit)
Max Series-Connected Modules Between MCIs: *Exception: Tesla S-Series (TxxxS) modules installed in locations where the max VOC for 3 modules at low design temperature exceeds 165V shall be limited to 2 modules between MCIs.	3*

OTHER INSTALLATION INSTRUCTIONS

1. An MCI must be connected to one end of each series string or mounting plane sub-array string.

2. Verification that MCIs are installed with 3 or fewer modules between MCIs shall be documented for inspection, by voltage measurement logs and/or as-built string layout diagrams.

3. For PV Inverter: The PVHCS initiator (AC breaker or switch) shall be sized and installed in accordance with NEC requirements. The specific part shall be identified on the as-built system drawings.

4. For Powerwall+: The PVHCS emergency stop initiator shall have the following minimum ratings: Outdoor (Type 3R or higher), 12V, 1A, and shall be installed in accordance with NEC requirements. The specific part shall be identified on the as-built system drawings. Refer to the Powerwall+ installation manual for further details.



Certification Mark of UL on the installation instructions is the only method provided by UL to identify products manufactured under its Certification and Follow-Up Service. The Certification Mark for these products includes the UL symbol, the words "CERTIFIED" and "SAFETY," the geographic identifier(s), and a file number.

TESLE

PV HAZARD CONTROL SYSTEM PVHCS | CERTIFICATION

UL 3741 REPORT DATE 8-12-21 PV RAPID SHUTDOWN ARRAY, UL 1741 CATEGORY QIJR, REPORT DATE: 2021-06-11 (REV 8-10-21)

WARNING: To reduce the	risk of injury, read all instruc	tions.		
PV HAZARD CONTROL EQUIPMENT AND COMPONENTS				Record Set Stamp
Function	Manufacturer	Model No.	Firmware Versions and Checksums	Certincation Standard
PVRSE Mid Circuit Interrupter (MCI)	Tesla	MCI-1 15503791	N/A	UL 1741 PVRSE
Inverter or Powerwall+	Tesla	7.6 kW: 1538000 ¹ 3.8 kW: 1534000 ¹ 7.6 kW: 1850000 ¹	V4, CEA4F802 V4, FF7BE4E1 V4, CEA4F802	UL 1741, 1998 PVRSS/PVRSE
PV Module	Tesla	SR60T1, SR72T1 SR72T2	N/A	UL 61730
Diode Harness (Not applicable to SR72T2)	Tesla	SRDTH	N/A	UL 9703
PV Wire Jumper(s)	Tesla	SR-BJ2X, SR-BJ3X, SR-BJ4X, SR-BJMini	N/A	UL 9703
Pass-Through Box	Tesla	SRPTB-4	N/A	UL 1741
PVHCS Initiator : (PV Inverter)	Dedicated PV system AC circuit breaker or AC disconnect switch, labeled per NEC 690.12 requirements.		N/A	
PVHCS Initiator (Powerwall+)	Emergency stop device (NISD)- Listed "Emergency Stop Button" or "Emergency Stop Device" or "Emergency Stop Unit"			UL 508 or UL 60947 Parts 1, 5-1 and 5-5

¹ Applies to variations of this part number with suffix of two numbers and one letter.

Note: PVHCS installation requirements may reduce the effective equipment and component ratings below the individual equipment and component PVRSE ratings in order to achieve PVHCS shock hazard reduction requirements.

PVHCS INSTALLATION REQUIREMENTS

Max System Voltage

PVHCS Maximum Circuit Voltage (Array Internal Voltage After Ac

Max Series-Connected Panels between MCIs

OTHER INSTALLATION INSTRUCTIONS

1. An MCI must be connected to one end of each series string or mounting plane sub-array string.

2. Verification that MCIs are installed with 10 or fewer modules between MCIs shall be documented for inspection, by voltage measurement logs and/or as-built string layout diagrams.

3. For PV Inverter: The PVHCS initiator (AC breaker or switch) shall be sized and installed in accordance with NEC requirements. The specific part shall be identified on the as-built system drawings.

4. For Powerwall+: The PVHCS emergency stop initiator shall have the following minimum ratings: Outdoor (Type 3R or higher), 12V, 1A, and shall be installed in accordance with NEC requirements. The specific part shall be identified on the as-built system drawings. Refer to the Powerwall+ installation manual for further details.



Certification Mark of UL on the installation instructions is the only method provided by UL to identify products manufactured under its Certification and Follow-Up Service. The Certification Mark for these products includes the UL symbol, the words "CERTIFIED" and "SAFETY," the geographic identifier(s), and a file number.

	600 VDC
ctuation)	165 VDC (cold weather open circuit)
	10