YASKAWA SOLECTRIA SOLAR

Commercial Rapid Shutdown Combiner

RSDCOM

Installation and Operation Guide

RSDCOM M-PC-1Z-4F
RSDCOM M-PC-1Z-5F

RSDCOM M-FG-2Z-4F
RSDCOM M-FG-2Z-5F

RSDCOM M-PS-3Z-4F
RSDCOM M-PS-3Z-5F

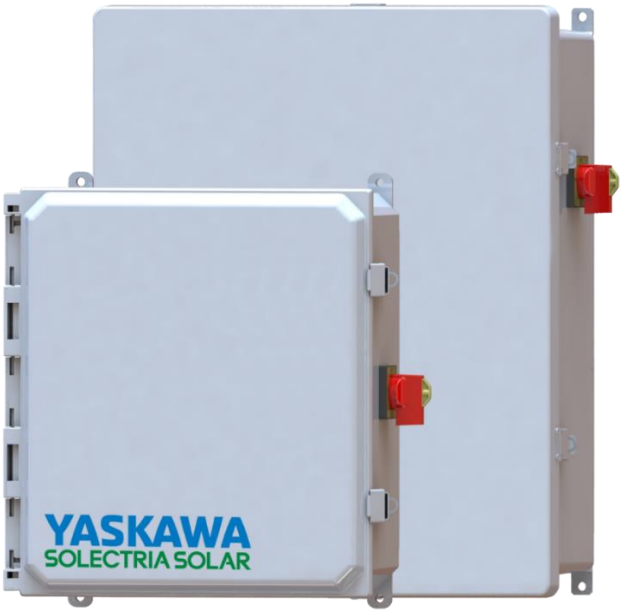
RSDCOM M-FG-3Z-4F
RSDCOM M-FG-3Z-5F

RSDCOM M-PC-1Z-4F-24V
RSDCOM M-PC-1Z-5F-24V

RSDCOM M-FG-2Z-4F-24V
RSDCOM M-FG-2Z-5F-24V

RSDCOM M-PS-3Z-4F-24V
RSDCOM M-PS-3Z-5F-24V

RSDCOM M-FG-3Z-4F-24V
RSDCOM M-FG-3Z-5F-24V



DOCR-070841 | Published August 2018 | Revision E | English

RSDCOM Installation and Operation Guide

IMPORTANT SAFETY INSTRUCTIONS
SAVE THESE INSTRUCTIONS

INSTRUCTIONS IMPORTANTES CONCERNANT LA SÉCURITÉ

Before installing or using the Commercial Rapid Shutdown Combiner (RSDCOM), please read all instructions and caution markings in this manual and on the combiner, as well as on the PV modules, PV inverter, and Charge Controller.

This manual contains important instructions that shall be followed during installation and operation of RSDCOM. To reduce the risk of electrical shock, and to ensure the safe installation and operation of the combiner, the following safety symbols are used to indicate dangerous conditions and important safety instructions.

CONSERVER CES INSTRUCTIONS. CETTE NOTICE CONTIENT DES INSTRUCTIONS IMPORTANTES CONCERNANT LA SÉCURITÉ.

WARNING
Could Injure Personnel or Damage Equipment

Instructions for Qualified Personnel Only

Positive Connection Point Symbol

Negative Connection Point Symbol

Ground Connection Point Symbol

DC Electrical Connection Point Symbol

WARNING: The RSDCOM contains no user serviceable parts. For maintenance, please contact Yaskawa Solectria Solar or an authorized installer by visiting http://www.solectria.com or by calling +1-978-683-9700.

WARNING: Disconnect all PV modules or completely cover the surface of all PV arrays with opaque (dark) material before wiring. PV arrays produce electrical voltage when exposed to light and could create a hazardous condition.

AVERTISSEMENT: *Couper Toutes Les Sources d'alimentation Avant Le Dépannage.*

WARNING: Connection of the RSDCOM with PV modules, and a PV inverter to the electric utility grid, must be done after receiving prior approval from the utility company and performed only by qualified personnel.

WARNING: The RSDCOM is designed to be used with a transformerless PV string inverter or other ungrounded inverter or system. This guide assumes a floating, ungrounded PV system. Both positive and negative polarities are fused and switched in the RSDCOM.

1.0 Introduction

1.1 Product Overview

The commercial Rapid Shutdown Combiner (RSDCOM) is a fused string combiner that helps users meet the array-level rapid shutdown requirements of NEC 2014 and NEC 2017 Article 690.12. The unit integrates with Yaskawa Solectria Solar XGI 1000 and PVI 14/20/23/28/36/50/60TL three-phase transformerless string inverters. The RSDCOM may be used with other string inverters with an MPPT zone input capacitance of 65 µF or less. The RSDCOM allows for operation of 1, 2 or 3 Maximum Power Point Tracking (MPPT) zone configurations with up to 5 strings per MPPT zone, depending on the model.

Array disconnect is automatic upon loss of AC power at the site, per NEC 690.12. The unit uses a 208 (L-L), 240 (L-L) or 480 (L-L) VAC input, or a 24VDC input for control power. A disconnect can also be located remotely from the combiner as an additional shutdown method. A local lockable disconnect is provided on the unit.

1.2 In order to comply to NEC array-level shutdown requirements with the RSDCOM, all PV circuits connected to the inverter must be protected by an RSDCOM. Part Number Matrix

Part number example

RSDCOM-M-PC-1Z-5F-24V

Rapid shutdown combiner, 1000 VDC, polycarbonate enclosure,1 MPPT zone, 5 fuse positions, customer-supplied external 24VDC supply to be wired into the unit.

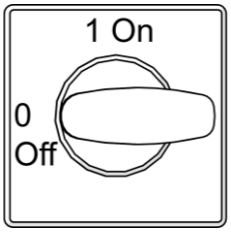
Table 1-1 – RSDCOM Part Number Matrix

Part No. Example: RSDCOM – M – PC - 1Z - 5F - 24V	
Model Name	RSDCOM = Rapid Shutdown Combiner
Voltage	M = 1000 VDC
Enclosure	PC = Polycarbonate PS = Powder-coated Steel FG = Fiberglass
MPPT Zones	1Z = 1 MPPT Zone 2Z = 2 MPPT Zones 3Z = 3 MPPT Zones
Fused Inputs	4F = 4 Fused Positions 5F = 5 Fused Positions
Control Power	NULL = 208, 240 or 480 (L-L) VAC 24V = 24 VDC Supply

1.3 Disconnect Switch Operation

OFF

No output power



ON

Output power if control power present

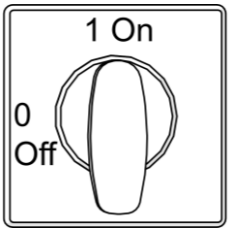


Figure 1-1 – Disconnect Switch (lockable)

The disconnect switch can be locked when in the OFF position.

1.4 Single Line Diagram

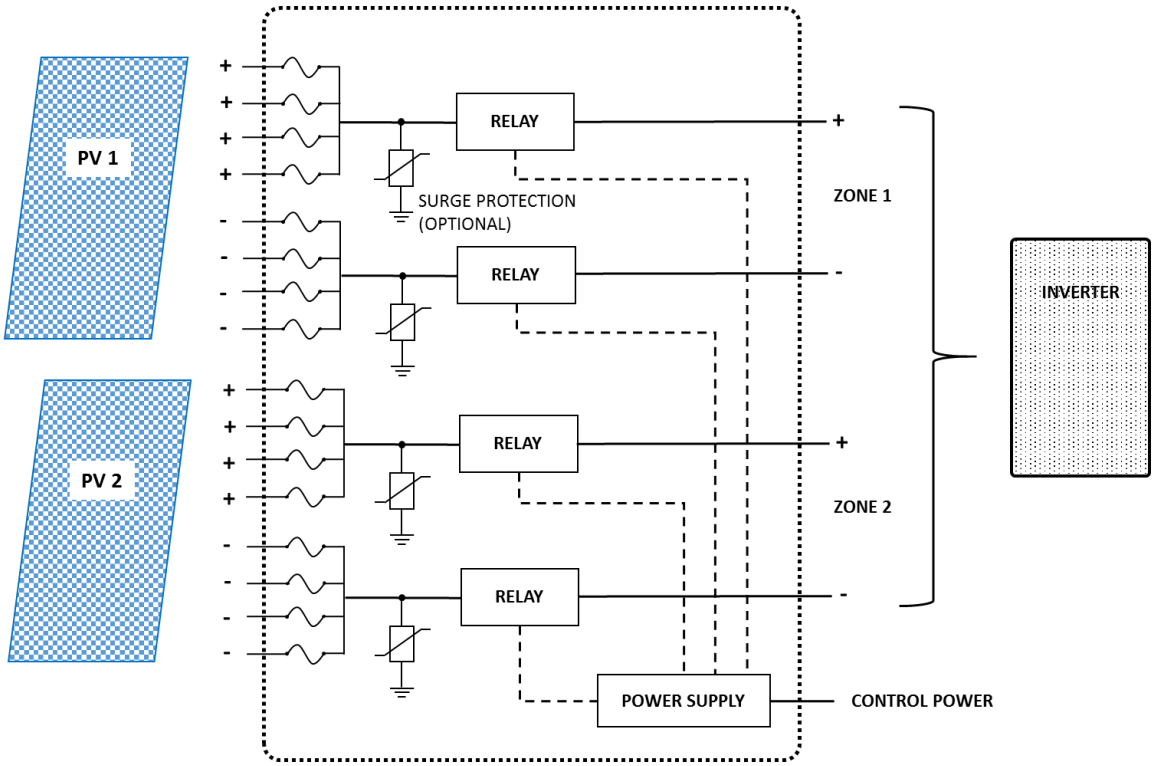


Figure 1-2 – 2-Zone RSDCOM Diagram

2.0 Ratings Table

	Commercial Rapid Shutdown Combiner for PVI 14-60TL and XGI 1000 Inverters		
	1 MPPT Zone	**2 MPPT Zones**	**3 MPPT Zones**
Absolute Maximum Input Voltage	1000 VDC	1000 VDC	1000 VDC
Number of MPPT Zones	1 MPPT Zone	2 MPPT Zones	3 MPPT Zones
Number of DC Inputs, Options	4 or 5 per Zone	4 or 5 per Zone	4 or 5 per Zone
Fuse Size Compatibility*	15A, 20A, 30A	15A, 20A, 30A	15A, 20A, 30A
Max Current Input (Isc x 1.25)	60A per Zone	60A per Zone	60A per Zone
Dimensions (H x W x D)	14 in. x 12 in. x 6 in. (356 mm x 309 mm x 152 mm)	20 in. x 16 in. x 8 in. (508 mm x 406 mm x 203 mm)	26 in. x 20 in. x 8 in. (660 mm x 508 mm x 203 mm)
Weight	18 lbs (8.2 kg)	29 lbs (13.2 kg)	40 lbs (18.1 kg)
Enclosure Material & Rating	Polycarbonate (Type 4X)	Fiberglass (Type 4X)	Powder-Coated Steel (Type 4) or Fiberglass (Type 4X)
Control Power Options	208 VAC (L-L), 240 VAC (L-L), 480 VAC (L-L) VAC (0.6A max) or 24 VDC		
Ambient Temperature Rating	-40°F to 122°F (-40°C to 50°C)		
Mounting Locations	Outdoor, Wall, Array, Rooftop - Vertical or Horizontal		
Inverter Compatibility**	PVI 14/20/23/28/36/50/60TL and XGI 1000 all models		
For Compliance With	2014 and 2017 NEC, Article 690.12		
Safety Certification	UL 1741		
Warranty	5 years		
* PV fuses not included with combiner. Re-use fuses provided with the inverter. Fuses also sold separately.			
** Compatible with other 3-phase transformerless inverters with MPPT zone input capacitance ≤ 65 µf			

Table 2-1 – RSDCOM Ratings

3.0 Installation

WARNING: These installation instructions are for use by qualified personnel only. To reduce the risk of electric shock, do not perform any installation unless qualified to do so.

WARNING: This manual contains important instructions for all RSDCOM models that shall be followed during installation of the Combiner.

The necessary steps to install the RSDCOM are: unpacking, inspecting, mounting, conduit installation, wiring, testing, and commissioning.

3.1 Unpacking and Inspection

The RSDCOM are thoroughly inspected and rigorously tested before they are shipped. Even though units are delivered in rugged packaging when shipped individually or on a pallet, it is possible the units may become damaged during shipping. Upon reception, inspect the combiner thoroughly after it is unpackaged. If any damage is noticed, document the damage with digital photos and immediately report the damage to the shipping company. If there is any question about potential shipping damage, contact Yaskawa Solectria Solar (see section 7.2 for contact information). If it is determined that the unit must be returned, an RMA number must be obtained from Yaskawa Solectria Solar prior to returning the unit.

When unpacking, remove any cardboard shipping aids and the tape inside the enclosure. The mounting tabs and associated hardware may be inside the unit.

3.2 Mounting

The RSDCOM may be mounted vertically with input conductors exiting the bottom-left side of the unit. It may also be mounted flat on the enclosure back such that the back of the unit is parallel to the mounting surface and the door opens upward. The combiner may also be mounted at any angle between vertical and flat, as shown in Figure 3-1 at 90°, 45°, and 0°.

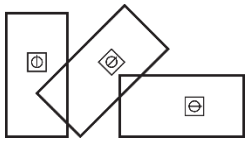


Figure 3-1 Mounting Angle

The string combiner box weight is 18-40 lbs, depending on the model number. Be sure to verify the load capacity of a wall mounting area.

Mounting tabs are located at the corners of the unit, and allow for simple mounting to a wall, array racking, or posts. Install the combiner in an accessible location following NEC requirements for enclosure door and disconnect switch clearances and proximity to other equipment. Although not required, installation at waist or chest height allows for easiest access and keeps the unit above potential snow line or drifts. Installers sometimes prefer lower installation heights for aesthetics or wind-loading reasons. Although not required, the RSDCOM will achieve a maximum lifetime if located in full or partial shade.

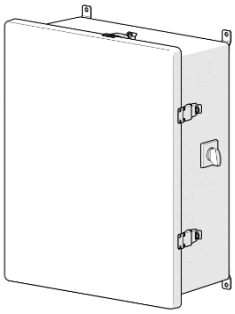


Figure 3-2 Mounting Tabs

Ensure the disconnect switch is set to OFF, as shown below.

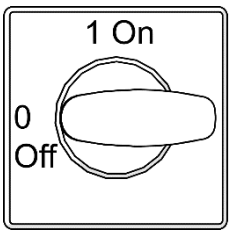


Figure 3-3 Disconnect Switch

3.3 Install Conduits

WARNING: Do not create conduit entrances and exits in a location on the enclosure that interferes with the internal components.

The use of UL514B or equivalent conduit fittings and UL50 installation methods are required to maintain the Type 4 or 4X rating of the enclosure. Failure to follow these standards may result in water intrusion into the unit through conduit connections and will void the warranty. Consult Figure 3-4 for conduit entries. Installing conduit entries in other places may interfere with internal components. Output conductor conduits must be installed on the bottom. Source circuit conduits may be installed in any of the shaded regions. Do not use the top wall for conduit entry.

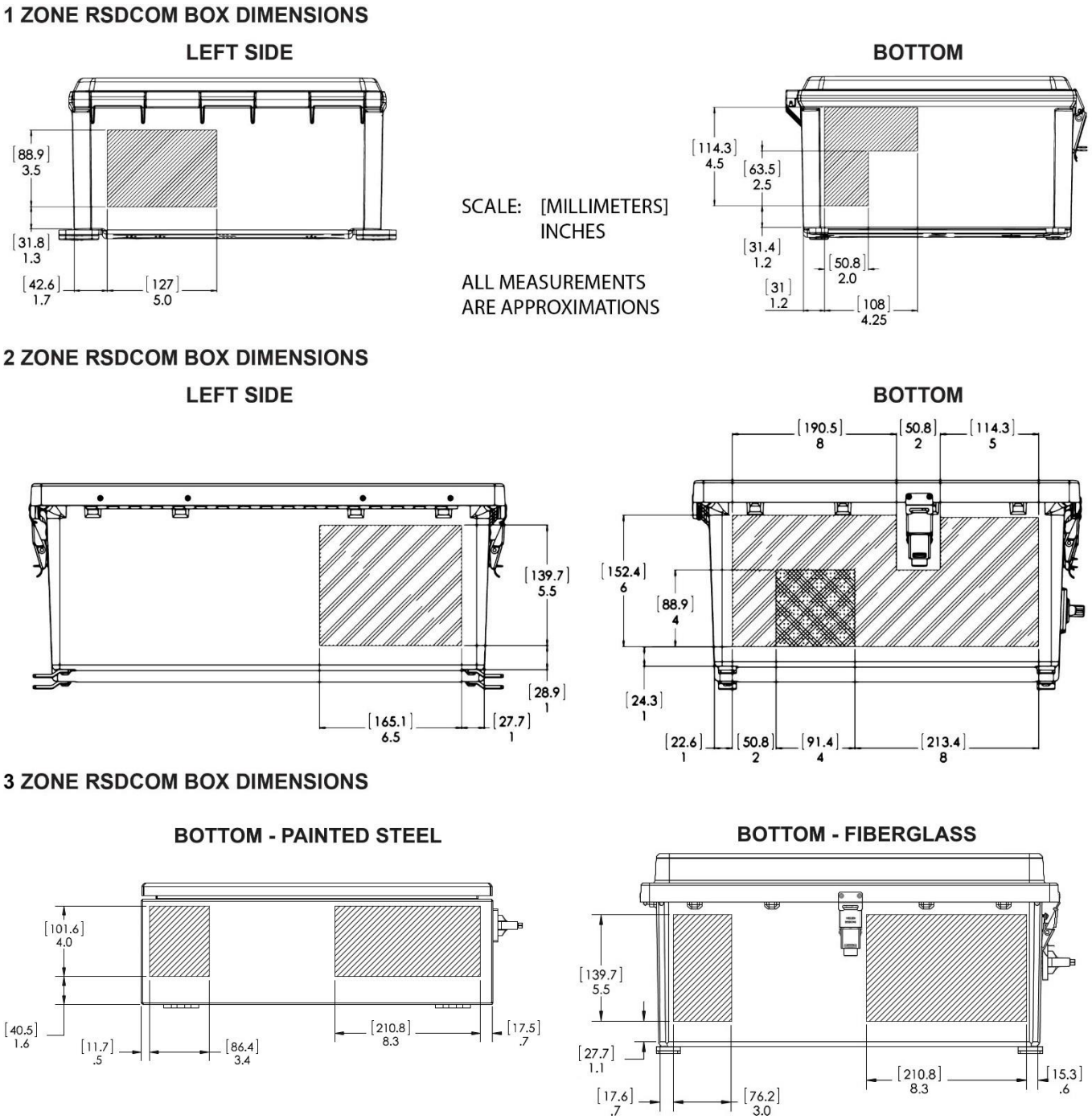


Figure 3-4 Suitable Conduit Entry Locations

3.4 Wiring

The RSDCOM requires copper conductors for input PV source circuits. For the PV output circuit conductors, either copper or aluminum may be used. Due to terminal size restrictions, aluminum wiring may not be an option in all cases. As with any aluminum wiring, follow industry best practices to ensure a reliable connection by thoroughly cleaning the conductor just prior to making the electrical connection and using an oxide inhibitor to prevent the formation of aluminum oxide. Both input and output terminations for all models are rated for 90°C. All wiring must be in accordance with local and national electrical codes.

3.4.1 Remove Fuses

WARNING: Removing fuses from a live circuit may create dangerous arc-flash and shock hazards.

Note: The unit is not shipped with fuses unless the fuses option is ordered. Refer to section **5.1 – Fuses**. Remove all fuses as shown in Figure 3-5.

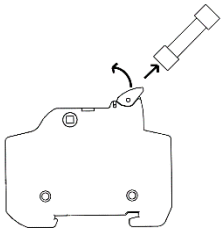


Figure 3-5 Fuse Removal

3.4.2 Grounding

Connect both input and output equipment DC ground wires to the ground terminal on the left, hinge side of the box.

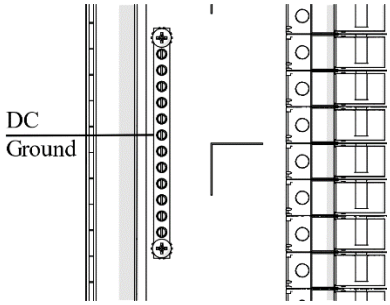


Figure 3-6 DC Ground

Use 14AWG – 4AWG copper wire. Attach only 1 wire per terminal. Tighten with a slotted screwdriver to 20 in-lbs. Use of oxide inhibitor paste is recommended.

3.4.3 PV Source Conductors

Connect PV source circuit conductors to fuse holders. Shown in Figure 3-7 are connections for 2 MPPT zones with 4 strings per zone. The zones are separated, with positive (+) on top and negative (-) below. Ensure that the polarity matches.

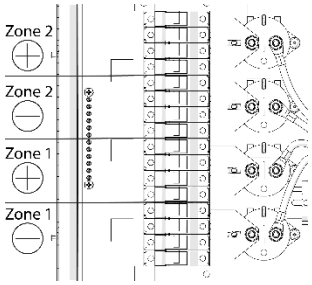


Figure 3-7 Fuse Holder Connections – 2MPPT Zones with 4 Inputs per Zone

Keep all strings within the MPPT zone desired. Be sure to never connect the positive (+) of a string in one zone and the negative (-) of that same string to a different zone. 1 or 2 wires may be attached at each fuse holder. For 1 wire, use 12AWG – 6AWG wire. For 2 wires, use 12 AWG – 10 AWG wire. Use a Phillips #2, 6mm diameter shank screwdriver and tighten to 30 in-lbs.

Note: Use the 2 wires per terminal only when connecting 2 strings and 30A fuses are in use.

Note: Do not exceed the input current rating for any zone.

For 15A use all fuse holders.

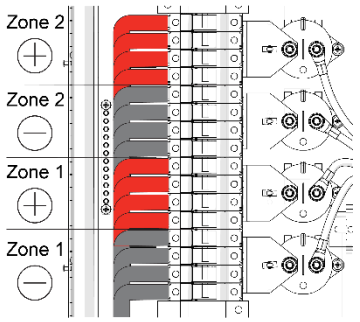


Figure 3-8 Fuse Holder Connections – 2MPPT Zones with 4 Inputs per Zone and 15A fuses

For 20A fuses, use 3 of the fuse holders per polarity per zone. Space out the wires as much as possible.

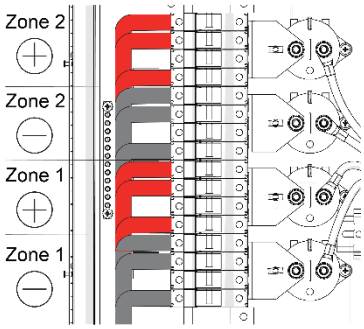


Figure 3-9 Fuse Holder Connections – 2MPPT Zones with 4 Inputs per Zone and 20A fuses

For 30A fuses, use every other fuse holder. Do not use 5 inputs per zone with 30A fuses.

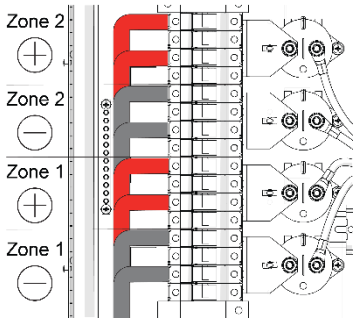


Figure 3-10 Fuse Holder Connections – 2MPPT Zones with 4 Inputs per Zone and 30A fuses

3.4.4 PV Output Circuit Conductors

Connect the output circuit conductors to the output terminal blocks. Shown in Figure 3-11 are the connections for a 2 MPPT zone unit with the AC power supply. With the 1 MPPT zone unit, there will be only one pair of positive and negative terminals. For the 3 MPPT zone unit, there will be three pair of positive and negative terminals. Ensure that the polarity matches.

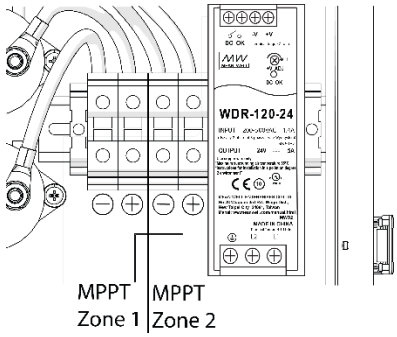


Figure 3-11 Fuse Holder Connections – 2MPPT Zones with Power Supply

Use 6AWG – 2AWG copper or aluminum wire. Attach only 1 wire per terminal. Tighten with a slotted screwdriver to 28 in-lbs.

3.4.5 Control Power

The RSDCOM offers two control power options which are identified in the model number. RSDCOM models ending with "-24V", refer to 24 VDC control power, supplied by the customer. This is explained in section **3.4.5.b – Customer-Provided 24VDC Input**. For all other models refer to section **3.4.5.a – AC Power Supply**.

3.4.5.a AC Power Supply

Connect AC control power circuit conductors to the power supply at terminals marked L1, L2, and ground. Only a line-to-line (L-L) connection can be used. Land one phase on the L1, the other on L2, and ground on ground. Shown in Figure 3-12 is the 2 MPPT zone unit with the AC power supply terminals. The power supply terminals are in a different location in the 1 MPPT zone unit. The power supply accepts 208, 240, and 480 VAC.

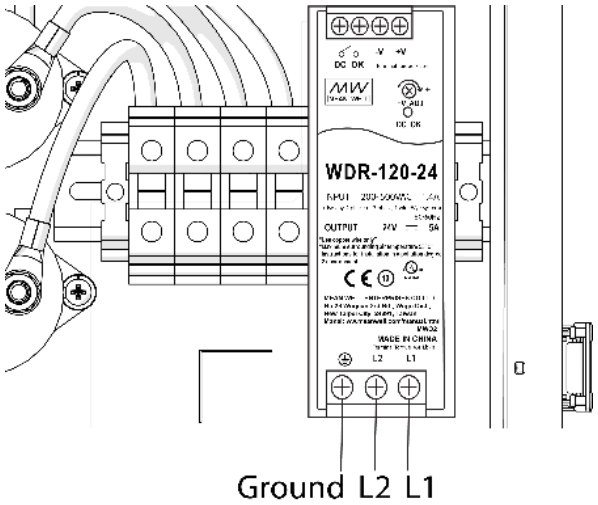


Figure 3-12 – 2 MPPT Zone Unit with the AC Power Supply

Use a 14AWG – 10AWG wire with matching #6 stud fork terminals. Tighten with a Phillips screwdriver to 5 in-lbs.

Note: Having multiple units using the same input control wires or running the wires long distances may affect the minimum wire size. Make sure that the AC voltage in all units is at least 208VAC.

3.4.5.b Customer Provided 24VDC Input

Connect the 24VDC control power circuit conductors to the push-in terminal.

Use 16AWG-12AWG wire. Push a slotted instrument screwdriver in the square hole and then insert the wire into the round hole. Tug the wire to ensure it is connected.

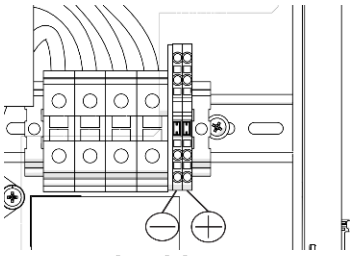


Figure 3-13 – 2 MPPT Zone Unit with Customer Provided 24VDC Input

Note: Having multiple units using the same input control wires or running the wires long distances may affect the minimum wire size. Make sure that the DC voltage in all units is at least 21±0.1VDC and account for 3.9A (0.08s) surge (turn-on) current.

3.4.6 Connecting to PVI 14-60TL

WARNING: Wiring to or removing fuses from a live circuit may create dangerous arc-flash and shock hazards.

De-energize the string inverter before installing RSDCOM inputs.

3.4.6.a Connecting to PVI 14-20TL

Fuse bypass kits are not supported for these models. Connect directly to the terminals above fuses.

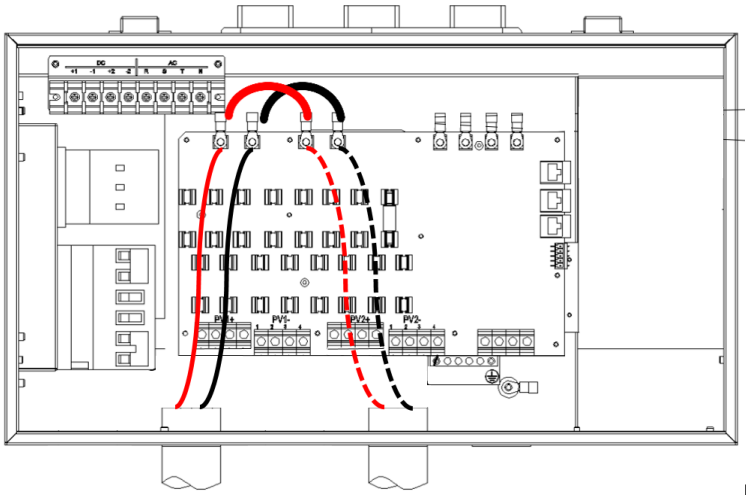


Figure 3-14 – PVI 14-20TL Connections for 1 and 2 Zone RSDCOM Input

The PVI 14-20TL comes with the two zones bussed together. Note that the jumpers may be removed and the inverter operated with two independent zones. Refer to DC Connections from the PV Array in the PVI 14/20TL Installation and Operation Manual. Connect the output from a one zone or a two zone RSDCOM as in Fig. 3-14.

WARNING: Ensure that the polarity matches before powering on inverter. Polarity mismatch will create an arc-flash hazard once power is applied.

3.4.6.b Connecting RSDCOM Output to PVI 23TL, PVI 28TL, PVI 36TL, PVI 50TL & PVI 60TL

Connecting the RSDCOM output to the PVI 23-36TL or PVI 50-60TL requires the addition of a fuse bypass kit or two. Remove the fuses in the inverter wiring box before installing the fuse bypass kit(s). Install the bypass kit(s) that corresponds to the string inverter, as shown in the Inverter Fuse Bypass Kits table (Table 3-1).

Table 3-1 – Inverter Fuse Bypass Kits

Inverter Model	Bypass Kit Part Number	Fuse Bypass Kits Required
PVI 23TL, PVI 28TL, PVI 36TL	OPT-FUSEBYPASS-PVI-23-36TL	• If the inverter is in its factory default condition with the zones connected in parallel, one fuse bypass kit is required • If the inverter is configured with two independent zones*, two fuse bypass kits are required
PVI 50TL, PVI 60TL	OPT-FUSEBYPASS-PVI-50-60TL	• These inverters are configured with 3 independent MPPT zones. A single fuse bypass kit for the PVI 50-60TL contains a set of 6 pieces for one inverter.

*Refer to the inverter's Installation and Operation Manual to configure the inverter with two independent zones.

Attach the output from the RSDCOM to the screw of the bypass kit. Use a ring terminal with an inner diameter appropriate for a 6 mm or ¼ inch fastener and for the conductor. Use conductors that lie in the range identified in the RSDCOM Installation Summary Table (Table 3-2).

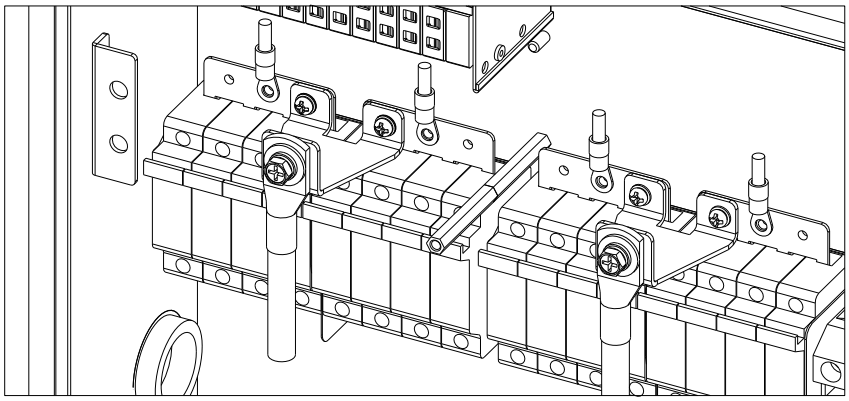


Figure 3-15A – FUSEBYPASS-PVI-23-36TL 1 MPPT

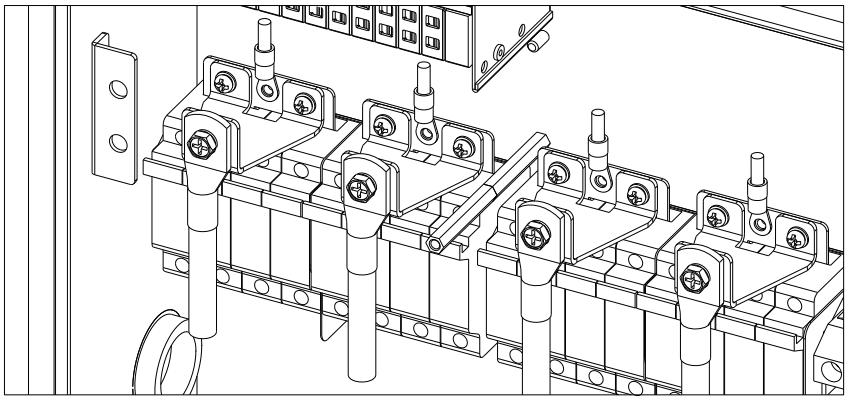


Figure 3-15B – FUSEBYPASS-PVI-23-36TL 2 MPPTs

Figure 3-16 Fuse Bypass Kit Installed in the PVI-50-60TL (3 MPPTS)

WARNING: Ensure that the polarity matches before powering on inverter. Polarity mismatch will create an arc-flash hazard once power is applied.

3.4.7 Connecting to XGI 1000

WARNING: Wiring to or removing fuses from a live circuit may create dangerous arc-flash and shock hazards.

De-energize the string inverter before installing RSDCOM inputs.
The XGI 1000 comes from the factory with all input zones bussed. In other words, the inverter dc input is configured as a single zone with 16 fused positions. In this case, connect the output of the RSDCOM(s) to the lugs shown in Figure 3-17 below. Note that the maximum current rating of the XGI 1000 input when in the single-zone configuration is 180A (the sum of the rated short-circuit current, Isc, multiplied by 1.25).

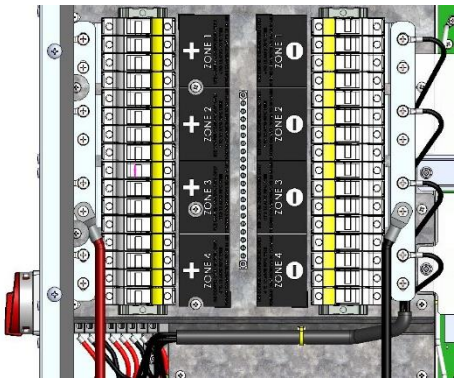


Figure 3-17 Connections to XGI 1000 with all Zones Bussed

If the XGI has been re-configured to operate with 4 zones, each with 4 fused positions, connect the output of the RSDCOM(s) as shown in Figure 3-15 below. Note that the maximum current rating of each zone of the XGI 1000 is 50A (the sum of the rated short-circuit current, Isc, multiplied by 1.25).

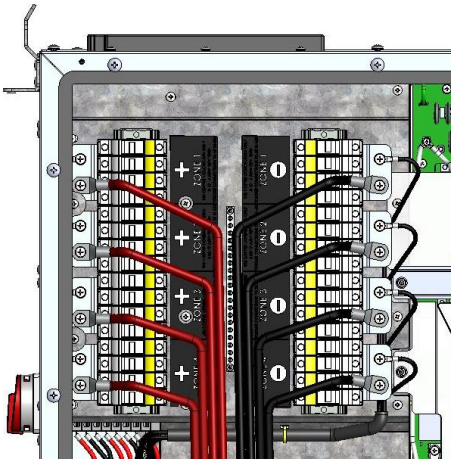


Figure 3-18 Connections to XGI 1000 with Zones Enabled

3.4.8 Wiring Summary Tables

Table 3-2 – RSDCOM Installation Summary Table

Connection	Wire Size	Torque	Screwdriver	Notes
Ground	14AWG - 4AWG	20 in-lbs	Slotted	Copper only
PV Source Conductors	(1) x 12AWG - 6AWG (2) x 12AWG - 10AWG	20 in-lbs	Phillips	1 or 2 wires per terminal, Copper only
PV Output Circuit Conductors	6AWG - 2AWG	28 in-lbs	Slotted	Copper or aluminum
Control Power – AC Power Supply	14AWG - 10AWG	5 in-lbs	Phillips	208-480 VAC, use matching #6 stud fork terminals
Control Power – Customer Provided 24 VDC Input	16AWG - 12AWG	N/A	Instrument slotted	Round hole: wire Square hole: screwdriver

Table 3-3 – RSDCOM Control Inputs 1 MPPT Zone

	AC Power Supply	24VDC
Voltage Range	208, 240 or 480 VAC (L-L)	21 ± 0.1 – 26 V
Surge Current	N/A	2.8A (0.04s)
Continuous Current	0.087A (rms)	0.6A

Table 3-4 – RSDCOM Control Inputs 2 MPPT Zones

	AC Power Supply	24VDC
Voltage Range	208, 240 or 480 VAC (L-L)	21 ± 0.1 – 26 V
Surge Current	N/A	3.9A (0.08s)
Continuous Current	0.17A (rms)	1.2A

Table 3-5 – RSDCOM Control Inputs 3 MPPT Zones

	AC Power Supply	24VDC
Voltage Range	208, 240 or 480 VAC (L-L)	21 ± 0.1 – 26 V
Surge Current	N/A	3.9A (0.08s)
Continuous Current	0.34A (rms)	1.8A

3.4.9 Final Steps

WARNING: Verify the proper polarity of each source conductor and correct matching MPPT zone. Polarity reversal can lead to dangerous arc-flash conditions capable of harming personnel and equipment.

WARNING: Check the string combiner box for tools and ensure the unit is clean and orderly.

WARNING: Installing fuses in a live circuit may create dangerous arc-flash and shock hazards.

1. Verify all connections meet the requirements of this Installation and Operations Guide.
2. Check all source circuit voltages and polarities.
3. Ensure the disconnect switch is set to OFF.
4. Install all fuses as shown in Figure 3-19.

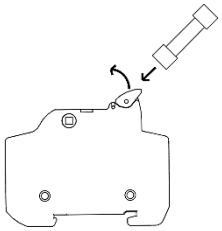


Figure 3-19 Installation of Fuses

5. Close RSDCOM door, ensuring door is securely closed using enclosure latches.
6. Apply both nylon 7-inch cable ties to the rings of 2 door latches to lock enclosure.

4.0 Operating Instructions

The combiner box is controlled by the disconnect switch and either the AC power supply or a 24VDC control power input.

The disconnect switch is user operable. When both the control power is present and the disconnect switch is on, a red LED on the circuit board will illuminate. This indicates the RSDCOM enables the flow of power from the input to output conductors.

If either the control power is absent or the disconnect switch is set to off, the RSDCOM prevents the flow of current from the input to the output conductors.

The disconnect switch is fully load-break rated and can be safely operated under normal operating conditions when installation is per this manual and all warnings and ratings are observed. See Disconnect Switch Operation for positioning the switch.

5.0 Options

Additional options are available for order with the RSDCOM. These must be included in an order as they are factory installed options.

5.1 Fuses

The RSDCOM is optionally equipped with factory-installed 15A fuses. Fuses are typically moved from the inverter wiring box to the RSDCOM and are therefore not included with the RSDCOM. RSDCOM can accommodate 15A, 20A and 30A fuses.

5.2 Surge Arrestor

The RSDCOM is optionally equipped with surge protection for each zone (1 installed in 1 zone combiner, 2 installed in 2 zone combiner, and 3 installed 3 zone combiner) to protect against voltage surges.

6.0 Warranty and RMA Instructions

For all warranty information, please visit:

http://solectria.com/support/documentation/warranty-information/grid-tied-inverter-warranty-letter/

7.0 Appendices

7.1 Appendix A: Datasheet

https://solectria.com/support/documentation/inverter-datasheets/commercial-rapid-shutdown-combiner/

7.2 Appendix B: Contact Information

Yaskawa Solectria Solar
360 Merrimack Street
Building 9, 2nd Floor
Lawrence, Massachusetts 01843
USA

Tel: 978.683.9700
Fax: 978.683.9702

Sales/General Info:	inverters@solectria.com
Technical Support and Service:	978.683.9700 ext. 2
Website:	www.solectria.com

7.3 Appendix C: Authorized Distributors

https://solectria.com/pv-inverters/how-to-buy/

8.0 Certifications

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AUTHORIZATION TO MARK

This authorizes the application of the Certification Mark(s) shown below to the models described in the Product(s) Covered section when made in accordance with the conditions set forth in the Certification Agreement and Listing Report. This authorization also applies to multiple listee model(s) identified on the correlation page of the Listing Report.

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Applicant:	Solectria Renewables, LLC	**Manufacturer:**	Solectria Renewables, LLC
Address:	360 Merrimack Street Bldg 9, Floor 2 LAWRENCE, MA 01843	**Address:**	360 Merrimack Street Bldg 9, Floor 2 LAWRENCE, MA 01843
Country:	USA	**Country:**	USA
Contact:	Jihua Ma (primary) Anthony Marinella (alternate)	**Contact:**	Michael Dinneen (primary) Frank Wright (alternate)
Phone:	(978) 683-9700	**Phone:**	(978) 683-9700
FAX:	(978) 683-9702	**FAX:**	(978) 683-9702
Email:	jihua.ma@solectria.com anthony.marinella@solectria.com	**Email:**	michael.dinneen@solectria.com frank.wright@solectrica.com

Party Authorized To Apply Mark: Same as Manufacturer
Report Issuing Office: Cortland, NY

Control Number: *3058249* **Authorized by:** Edward Kelley Jr

for Dean Davidson, Certification Manager

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Standard(s):	Inverters, Converters, Controllers And Interconnection System Equipment For Use With Distributed Energy Resources [UL 1741:2010 Ed.2+R:07Sep2016]
Product:	Rapid Shutdown Combiner Box

ATM for Report 103346418CRT-001a Page 1 of 4 ATM Issued: 30-Jan-2018
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AUTHORIZATION TO MARK

Models:	RSDCOM-M-PC-1Z-4F, RSDCOM-M-PC-1Z-5F, RSDCOM-M-PC-1Z-4F-24V, RSDCOM-M-PC-1Z-5F-24V, RSDCOM-M-FG-2Z-4F, RSDCOM-M-FG-2Z-5F, RSDCOM-M-FG-2Z-4F-24V, RSDCOM-M-FG-2Z-5F-24V RSDCOM-M-PC-1Z-2F, RSDCOM-M-PC-1Z-3F, RSDCOM-M-PC-1Z-2F-24V, RSDCOM-M-PC-1Z-3F-24V, RSDCOM-M-FG-2Z-2F, RSDCOM-M-FG-2Z-3F, RSDCOM-M-FG-2Z-2F-24V, RSDCOM-M-FG-2Z-3F-24V RSDCOM-M-PS-3Z-4F, RSDCOM-M-PS-3Z-5F, RSDCOM-M-PS-3Z-4F-24V, RSDCOM-M-PS-3Z-5F-24V RSDCOM-M-FG-3Z-4F, RSDCOM-M-FG-3Z-5F, RSDCOM-M-FG-3Z-4F-24V, RSDCOM-M-FG-3Z-5F-24V

ATM for Report 103346418CRT-001a Page 2 of 4 ATM Issued: 30-Jan-2018
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