

Fused Disconnect Recombiner System for North America

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Fused Disconnect Recombiner System (FDRS) is designed for installation next to the inverter. The FDRS integrates multiple non-load break disconnects and fuses into one easy-to-install, safe and compact enclosure.

- Input configurations available from 12 to 40 circuits
- Provides disconnecting means & overcurrent protection for incoming PV array circuits
- Input configurations coupled with unlimited fuse rating & installed quantity selection ensure maximum system design flexibility

Standard Features

- ◆ 1000 VDC and 1500VDC for compatibility with standard system designs.
- ◆ Fused inputs with standard photovoltaic fuses
- ◆ Mechanical blown fuse indication.
- ◆ Optional non-load break disconnects for incoming PV array circuits.
- ◆ Custom engineered single-circuit bus bar output kit enables close coupling to inverter DC input bus.
- ◆ Lock Out/Tag Out (LOTO) functionality on switch disconnect handles.
- ◆ Zone Current Monitoring with Modbus TCP/IP communication via Ethernet.
- ◆ Integrated Monitoring & Control PLC manages current monitoring, ventilation fans & electronic safety interlock system.
- ◆ Durable, NEMA 3R powder-coated steel enclosure.
- ◆ Exterior door supports padlock.
- ◆ Powder coated steel dead front for arc-flash protection.
- ◆ Temperature sensor controlled ventilation fans.

Specifications

Max. # Input Circuits	Max Voltage (VDC)	Max. Fuse Rating / Input (Amps)	Disconnect Switch Rating (Amps)	Max. Input Conductor Sizes	Input Conductor Termination Type	Enclosure Inches (mm)
12, 16, 20, 24	1000	400	400	1x1000 kcmil or 2 x 500 kcmil	NEMA 2-hole pattern for 90°C compression lugs	79x64x32 (2007x1626x813)
16, 20, 24, 28, 32, 36, 40	1500	355	350/400	1x1000 kcmil or 2 x 500 kcmil	NEMA 2-hole pattern for 90°C compression lugs	110 x 64 x 32 (2794 x 1626 x 813)



- ◆ Standard NEMA 2-hole bolt pattern for compression lug terminations.
- ◆ 90°C cable terminals.
- ◆ Fastener hardware for Pos., Neg. & EGC compression lug terminations provided.
- ◆ Oversized enclosure for optimum cable management.
- ◆ Electronic interlock safety system prevents operation of inverter with FDRS enclosure doors open. Complete with "SAFE OPERATION" LED annunciation.

Optional Features

- ◆ 1-hole compression lug terminals with UL1741 anti-turn prevention.
- ◆ Project specific labels applied at factory: Inverter Station ID#, Recombiner ID # and/or NEC 690.53 ratings.
- ◆ Custom enclosure colors.
- ◆ Low-power LED lighting kit for enclosure interior.

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