RST Series 60/100/200 Amp
Automatic Transfer Panels
Residential & Light Commercial Standby

Order Model	Rating	Voltage
RST 60/178	60 Amp	120/240V, 1 phase
RST 100/177	100 Amp	120/240V, 1 phase
RST 200/176	200 Amp	120/240V, 1 phase

Features

- **UL 1008 Listed/CSA-approved**
- **Mechanically Interlocked Contactor**
- **Fully Automatic Control**
- **Automatic 2-Amp Regulated Battery Charger**
- **UL Type 1 Enclosure**

Application Flexibility

The RST Automatic Transfer Panel combines reliability and flexibility in a small, economical package for transferring loads between the utility and generator set.

The RST Transfer Panels work together with the Cummins Onan RS series generators. The control monitors utility and emergency standby generator set power. When utility power fails or is unsatisfactory, the control starts the generator set and transfers the load to the generator set. The transfer panel immediately senses when utility power is restored. It automatically transfers back to utility power, shutting down the generator and instantly resetting itself for the next power interruption. No action is required by the homeowner.

Electronic Control

Reliable, digital electronic control system with system surge voltage isolation, undervoltage monitoring on each power source, four standard time delays.

Enclosures

The transfer panel and control are mounted in a single door enclosure.

- UL Type 1 cabinet.
- Wire bend space complies with 1999 NEC Table 373-6b
- Special Hex Key (8mm) Quarter Turn latches to provide limited access internally

Positive Interlocking

Mechanical and electrical contactor interlocking prevents source-to-source connection through the power or control

Agency Approvals

- Listed to UL 1008 for use in optional standby systems
- Complies with NEMA ICS 10
- Conforms to applicable requirements for NFPA 70, 99, and 110
- CSA-approved up to 600 VAC

Transfer Panel Mechanism

Transfer Action

Independent break-before-make action positively prevents dangerous source-to-source connections.

Mechanical Interlock

Prevents simultaneous closing of normal and emergency contacts.

Surge Withstand Ratings

Guidelines for Location. Surge test waveforms for location Category B3, per IEEE C62.41. Testing per guidelines in IEEE C62.45.

Electrical Interlocks

Prevent simultaneous closing signals to normal and emergency contacts and interconnection of normal and emergency sources through the control wiring.

Environmental

- Operating temperatures: -40°F (-40°C) to 122°F (50 C)
- Storage temperature: -40°F (-40°C) to 140°F (60°C)
- Humidity: 95% relative humidity, non-condensing
- Altitude: Up to 10,000 ft (3000 m) without derating

Control Features

Function	Benefit
Start Time Delay: 3 sec	Prevents nuisance generator set starts during momentary utility power variations.
Transfer Time Delay: 3 sec	Allows generator set to stabilize before load is applied.
Retransfer Time Delay: 5 min	Prevents needless power interruption if return of utility power is momentary
Stop Time Delay: 5 min	Allows gradual generator set cool down.
Undervoltage Sensing: Normal and Emergency - Pickup: 85% of nominal - Dropout: 75% of pickup	Provides reliable sensing of utility power to start the generator set in brownout conditions. Reliably maintains connection through motor starting voltage dips.

UL Withstand and Closing Ratings

The RST transfer panel must be protected by an overcurrent device of the type and size specified which will protect the switch when used on a circuit capable of delivering not more than the symmetrical RMS amperes listed in the table.

WCR Ratings using Current Limiting Fuses

Switch Amp Rating	WCR @ max voltage with Current Limiting Fuse	Max Fuse Size and Type
60 A	100,000 A (600 VAC)	100 A, Class J or T
100 A	100,000 A (600 VAC)	225 A, Class J or T
200 A	100,000 A (600 VAC)	400 A, Class J or T

Transfer Panel Lug Capacities

Switch Amp Rating	Size
60	2 to 10 AWG CU
100	2/0 to 14 AWG CU/AL
200	300 MCM to 6 AWG CU/AL

WCR Ratings using Specific Circuit Breakers

WCR Ratings using specific manufacturer's circuit breakers are detailed in Onan Publication R-1095.

Transfer Panel in UL Type 1 Enclosure

Do not use for construction purposes. Refer to outline drawing for all construction details.

Switch Amp Rating	Height (H) in (mm)	Width (W) in (mm)	Depth in (mm)	Weight lb. (kg)	Outline Drawing No.
60	29.00 (735)	18.00 (455)	11.31 (285)	120 (55)	310-0924 (120-600 VAC)
100	29.00 (735)	18.00 (455)	11.31 (285)	120 (55)	310-0924 (120-600 VAC)
200	34.00 (865)	21.50 (545)	11.31 (285)	155 (70)	310-0925 (120-600 VAC)

Accessories

- Exerciser Clock Kit, 7-day, electronic design, field installed. Part No. 300-5308.

See your distributor for more information

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Important: Backfeed to a utility system can cause electrocution and/or property damage. Do no connect to any building's electrical system except through an approved device or after building main switch is open. Standby Rating based on: Applicable for supplying emergency power for the duration of normal power interruption. No sustained overload capability is available for this rating. (Equivalent to Fuel Stop Power in accordance with ISO3046, AS2789, DIN6271, and BS5514.) Nominally rated. (See T-030 document for more information.)

 Specifications subject to change without notice