



TwinSource

DCC - III RMSTS, 3Ph, 4 Pole, 208/120V, 18KW Rack Mount Static Transfer Switch

Introducing the TwinSource Dual Cord Converter DCC-III-RMSTS static transfer switches for **high power, 3 phase** critical IT applications. This plug-in rack-mount IT static transfer switch (RMSTS) utilizes the latest state-of-the-art, fault tolerant, logic topology which provides higher redundancy of critical components than other STS designs, with a first time ever predicted MTBF of over 60 million hours. This super high reliability and internal redundancy makes the DCC-III the number one choice to meet the ultra-high availability requirements of mission critical IT operations at critical data centers, air traffic control sites, and telecommunications centers demanding 7x24 availability. They are ideal to convert single corded IT loads to dual corded configuration so as to achieve the same availability as the dual corded loads.



The DCC-III RMSTS uses a Power Quality Seeking sense circuit that enables the critical load to always be on the better of the two sources. The system does this through the use of a unique triple band power quality discriminator circuit that categorizes the voltage at each source into: Good Quality, Marginal Quality, and Unacceptable Quality voltage bands. The system always seeks the Good Power Quality band and the bands are user settable. This unique and advanced failure avoidance feature enables the RMSTS to keep the load in a safe zone of power quality unlike switching devices that stay on the edge of power failure before initiating a transfer at high risk. The built-in bypassing and isolation outer module, combined with the inner plug-in electronics module, give the TwinSource DCC-III RMSTS the lowest MTTR (Mean Time To Repair) in the industry of less than 2 minutes. The RMSTS also comes with an optional RS-485 Modbus user interface that can be connected to a BMS system for monitoring of status and alarms or at a much lower cost, to a TwinSource provided ETU (Ethernet Translator Unit) that would enable conversion of the very same data to LAN/Web readable color-graphic displays with time stamped event archiving capabilities that can be downloaded when desired. As many as 16 ETUs can be monitored from the same PC and each ETU can monitor up to 16 x RMSTSs. Alarm Acknowledge and Preferred Source Selection commands can be performed by the user from the monitoring PC.

This product is certified to UL1008 and Canadian CSA Standards.

Standard Features

- Four Pole Device (avoids ground circulating currents)
- Calculated MTBF > 1 million hours
- Predicted MTBF > 60 million hours
- Lowest MTTR < 2 minutes
- Plug-in "hot swappable" electronic module
- TUV Certified to meet UL-1008, & CSA Standards
- Self Diagnostic Scanning - identifies causes of alarms immediately - eliminates troubleshooting by a technician
- Redundant logic power supplies
- Redundant fans
- User selectable settings
- "Auto-retransfer Off" protection
- Anti-cross connection logic
- Power Quality Seeking System
- Shorted/Open SCR protection
- Short Circuit: 22KA
- Internal Maintenance Bypass
- Operator "Do Not Bypass" alarm to help operator
- 2 Remote Contacts

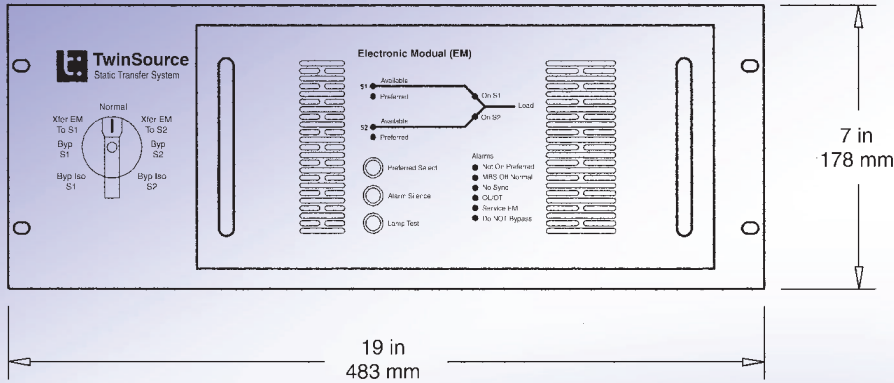
Applications

Critical Data Centers
Telecommunications Sites
Air Traffic Control Sites
Petrochemical Plants
Semiconductor Fab Plants Controls
Critical Industrial Controls

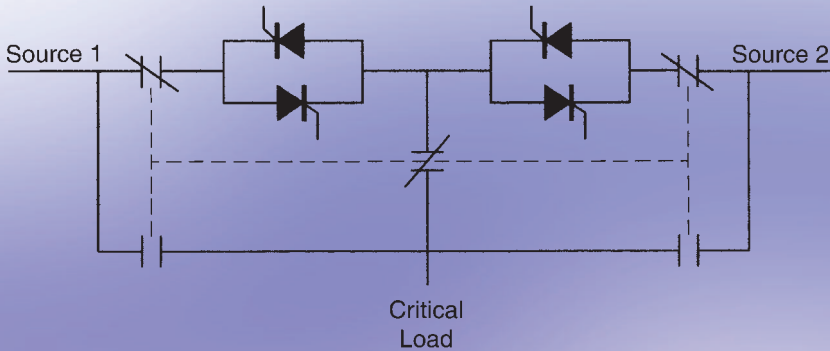
Options

- RS-485 (Modbus RTU)
- Ethernet LAN Interface

Front View



RMSTS Schematic



Basic Specifications

Electrical Characteristics

Current Rating 50 A
 Voltage, Power 208/120V, 18KW
 3-ph, 4 wire
 Poles 4

Operational Characteristics

Sense and transfer time
 1/4 cycle

User Adjustable Settings

Over and Under Voltage
 Phase Angle for Manual Transfer
 Default Preferred
 Unit Address for ETU
 Auto-retransfer On/Off

Panel Controls

Preferred Select
 Alarm Silence
 Lamp Test
 Bypass Isolation Selector Switch
 Diagnostics (selftest)

Remote Contacts

Service EM
 Summary Alarm

Panel Indicators

Source 1 Available
 Source 2 Available
 Source 1 Preferred
 Source 2 Preferred
 On Source 1
 On Source 2

Alarms

Not On Preferred
 MBS Off Normal
 No Sync
 OL/OT
 Service EM
 Do Not Bypass

Environmental Specifications

Operating Temperature
 Range 0°C to 40°C
 Relative Humidity 0% to 95% noncondensing

Physical Specifications

Weight 65 lbs/30 kg (requires rack shelf to support weight)
 Dimensions H - 7 in
 W - 19 in
 D - 33 in

TwinSource LLC with corporate offices in the US and UK is a worldwide leading supplier of rack mount RMSTS transfer switches for a variety of applications. Our Dual Cord Converter solid state 1/4 cycle RMSTS products are ideal for protecting super-critical IT operations or transactions, where speed of transfer and ultra fault-tolerant reliability are pre-requisite requirements of transaction missions that can cost millions if disrupted.

TwinSource also supplies an electromechanical product; our MagLatch RMATS, in 24A rating and for all voltages and frequencies worldwide. This product uses the same reliable and fast acting TwinSource sense and control logic that control the main dual coil magnetically latched transfer relays for superior performance.

TwinSource has high level expertise in electrical and electronics engineering onboard for developing its state of the art fault tolerant transfer mechanisms utilizing patented technology owned by the company. TwinSource product lines are well known for their high reliability, excellent workmanship, ease of use, lowest MTTR, and have set a new standard for rack-mount transfer switches in the industry.

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