

RACK-MOUNT STATIC TRANSFER SWITCH

DCC-II

The flagship 2-pole rack-mount static transfer switch: SCR-based, with a plug-in electronic module and built-in bypass isolation.

CURRENT RATING

30–50 A

3 standard ratings

VOLTAGE

100–240 V

single phase, 50 or 60 Hz

TRANSFER TIME

¼ cycle

as fast as, per phase: 4.2 ms at 60 Hz

SWITCHED POLES

2

both conductors switched

KEY FEATURES

- SCR-based static transfer as fast as ¼ cycle per phase
- Hot-swappable electronic module in a 4U chassis: MTTR under 2 minutes
- Built-in maintenance bypass isolation switch with a 7-position selector; mechanical interlocks optional
- Built-in voltage suppression and transient protection
- Two remote alarm contacts, plus Modbus RTU via RS-485
- 100% continuous-duty rated
- Power Quality Seeking: moves to the better source before the preferred one fails, not at the edge
- Redundant logic supplies and fans, self-diagnostics, and a 22 kA short-circuit rating
- TÜV certified to UL 1008 and CSA; CE marked



RATINGS

SINGLE PHASE

Current ratings	30, 40, 50 A
Voltages	2-pole: 240, 230, 220, 208, 200, 120, 100 V
Switched poles	2-pole
Frequency	50 Hz or 60 Hz
Transfer	As fast as ¼ cycle

TRANSFER

Sense and transfer time	As fast as ¼ cycle per phase (4.2 ms @ 60 Hz, 5 ms @ 50 Hz)
Reliability	MTBF > 70 million hours; MTTR < 2 minutes

BYPASS

Maintenance bypass	Internal maintenance bypass isolation switch, 7-position selector; hot-swappable electronic module; mechanical interlocks optional (Interlock I and II)
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CONTROLS AND MONITORING

Panel indicators	Source available, preferred, on-source; alarms: not on preferred, MBS off normal, no sync, OL/OT, service EM, do not bypass
Panel controls	Preferred select, alarm silence, lamp test, bypass isolation selector, diagnostics (self test)
Remote contacts	2: summary alarm, service EM
Communications	Modbus RTU via RS-485 (standard)
User settings	Over/under voltage, phase angle for manual transfer, default preferred, do not bypass, unit address, auto-retransfer on/off
Protection logic	Anti-cross-connection logic; Power Quality Seeking; shorted/open SCR protection; self-diagnostic scanning; redundant logic supplies; redundant fans; built-in voltage suppression and transient (surge) protection

CONNECTIONS

Input and output	Terminal blocks
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PROTECTION

Short-circuit rating	22 kA
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MECHANICAL

Dimensions H × W × D	7 × 19 × 21 in (178 × 483 × 533 mm)
Weight	49 lb (22.2 kg)
Cooling	Redundant fans

ENVIRONMENT

Operating temperature	32–104 °F (0–40 °C)
Humidity	0–95% non-condensing

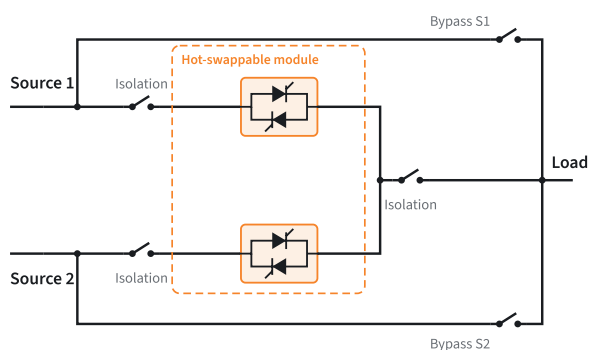
COMPLIANCE

Certifications	TÜV certified to UL 1008 and CSA; CE marked
Standard warranty	12 months from start-up or 18 months from shipment, whichever is sooner

INSTALLATION

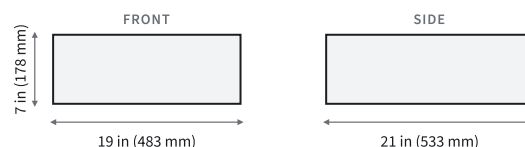
Rack mounting	Use a rack shelf and cable strain relief where the unit weight exceeds the two-post mounting capacity of the rack.
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ONE-LINE DIAGRAM



Bypass module with a 7-position selector: isolation and bypass contacts. Only the SCRs are in the hot-swappable electronic module, which is isolated and removed with the load on bypass. Shown as a one-line; 2-pole builds switch every pole shown.

DIMENSIONS



Outline for planning only. Request the dimensioned drawing for mounting and clearances.

MODEL NUMBER **D2-FVVVAA-C-I** e.g. D2-624050-RC-TBD

D2	Base model
VVV	Voltage, e.g. 208
C	Comms: RC remote contacts and Modbus RTU via RS-485

F	Frequency: 6 = 60 Hz, 5 = 50 Hz
AA	Current, e.g. 50 = 50 A
I	I/O: TB terminal blocks, TBD dual-output terminal blocks

Specifications are subject to change without notice. For wire sizes, drawings and installation details, contact TwinSource engineering. DS-DCCII Rev A, October 2026.