

FREE-STANDING STATIC TRANSFER SWITCH

DCC-4-S

Free-standing static transfer switch for distribution-level loads, 100 to 600 A single or three phase, with maintenance bypass.

CURRENT RATING

100–600 A

three phase; 100–600 A single phase

VOLTAGE

100–480 V

three or single phase, 50 or 60 Hz

TRANSFER TIME

¼ cycle

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

SWITCHED POLES

2, 3 or 4

4-pole transfers the neutral



KEY FEATURES

- As fast as ¼ cycle per phase, break-before-make, with an automatic Vt-proportional delay out of phase
- Maintenance bypass with 5 or 6 mechanically interlocked molded-case switches; input and output isolation
- 22 kA short-circuit rating with upstream Class J fuses
- Free-standing NEMA 1 cabinet with redundant fans
- Three phase 3-pole or 4-pole, or single phase 2-pole, at all standard voltages, 50 Hz or 60 Hz
- Bi-color LED mimic or color touchscreen
- Ethernet with HTTP, SNMP and Modbus TCP/IP; 5 dry status contacts and 2 transfer control inputs
- 100% continuous duty at 104 °F (40 °C)
- ETL listed to UL 1008S

RATINGS

	THREE PHASE	SINGLE PHASE
Current ratings	100, 150, 200, 250, 300, 400, 500, 600 A	100, 150, 200, 250, 300, 400, 500, 600 A
Voltages	3-pole: 480, 415, 400, 240, 220, 208, 200 V 4-pole: 480/277, 415/240, 400/230, 208/120, 200/115 V	2-pole: 240, 230, 220, 208, 200, 120, 100 V
Switched poles	3 or 4-pole	2-pole
Frequency	50 Hz or 60 Hz	50 Hz or 60 Hz
Transfer	As fast as ¼ cycle	As fast as ¼ cycle

TRANSFER

Transfer type	Break-before-make, zero-current transfer by thyristors (SCRs)
In-phase transfer time	As fast as ¼ cycle per phase (4.2 ms @ 60 Hz, 5 ms @ 50 Hz)
Out-of-phase transfer	Automatic Vt proportional delay, up to 12 ms, 0° to 180°
Detection	Digital, < 1 ms
MTBF	> 800,000 hours

BYPASS AND ISOLATION

Maintenance bypass	Bypass with 5 or 6 mechanically interlocked molded-case switches
Isolation	Input isolation switches on each source, plus output isolation switch

CONTROLS AND MONITORING

Display	Bi-color LED mimic or color touchscreen
Front-panel controls	Preferred supply selection, source transfer selection and alarm cancel buttons
Control inputs	2 wet transfer control inputs
Status contacts	5 dry change-over status contacts, Form C
Communications	Ethernet: HTTP, SNMP, Modbus TCP/IP

CONNECTIONS

Input termination	Bolt terminals for lugs
Output termination	Bolt terminals for lugs

MECHANICAL

Dimensions H × W × D	74.8 × 31.5 × 15.7 in (1900 × 800 × 400 mm)
Weight	Up to 650 lb (295 kg), depending on rating
Enclosure	NEMA 1
Cooling	Redundant fans

ENVIRONMENT

Operating temperature	32–104 °F (0–40 °C)
Humidity	5–95% non-condensing at 104 °F (40 °C)

PERFORMANCE

Loading	0–100% continuous at 104 °F (40 °C) ambient
Overload at 104 °F (40 °C)	100–250 A: 125% 10 min; 150% 30 s; 1 kA 1 s; 20 kA 1 cycle 300–600 A: 125% 10 min; 150% 30 s; 4 kA 1 s; 8 kA 0.1 s; 28 kA 1 cycle
Fault current setting	350% peak, with load-fault transfer inhibit

PROTECTION

Short-circuit rating (bracing)	22 kA with upstream Class J fuses
Internal protection	Circuit breakers; semiconductor fuses optional

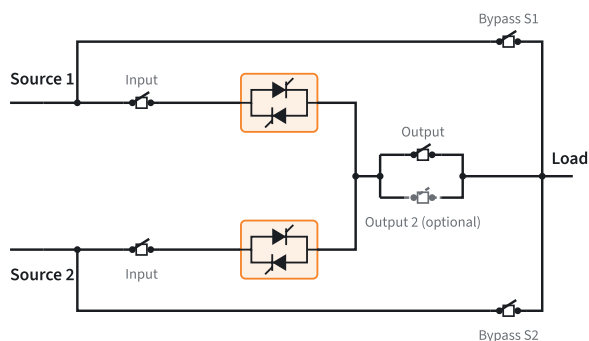
POWER QUALITY

Power factor	No practical limit
Maximum THDv	10% maximum source voltage distortion
Crest factor	3.5 : 1

COMPLIANCE

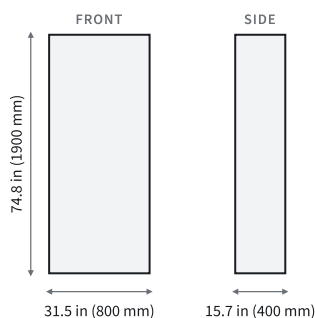
Regulatory approvals	ETL listed to UL 1008S
Standard warranty	12 months from start-up or 18 months from shipment, whichever is sooner

ONE-LINE DIAGRAM



Input, output and bypass molded-case switches, mechanically interlocked; a second output switch in parallel is optional (5 or 6 switches). Shown as a one-line; 2, 3, 4-pole builds switch every pole shown.

DIMENSIONS



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

MODEL NUMBER **D4-ES-PPP-FVVVAAA-I** e.g. D4-SK-3P4-6480600-M

D4	DCC-4 base model
PPP	Phase and poles: 1P2 single phase 2-pole, 1P3 split phase (on request), 3P3 three phase 3-pole, 3P4 three phase 4-pole
VVV	Voltage, e.g. 480
I	Interface: M bi-color LED mimic, T color touchscreen

ES	Enclosure and sub-model: R2 rack, R4 rack (higher current), W2 wall, W4 wall (higher current), SK free standing
F	Frequency: 6 = 60 Hz, 5 = 50 Hz
AAA	Current, e.g. 060 = 60 A