POWERCOMMAND[®] TRANSFER SWITCHES

SEAMLESSLY, RELIABLY AND SAFELY MEET YOUR CRITICAL POWER NEEDS







THE TRANSFER OF POWER IS ALWAYS CRITICAL IN ANY APPLICATION

Introducing the new breed of smarter, tougher and faster transfer switches to meet the need for flawless power transfer for mission-critical applications as well as commercial, light commercial and light industrial users in addition to small businesses and residential users.

From dense urban areas to remote locations, and from home and small businesses to industrial solutions, we're engineering the next generation of reliable power. PowerCommand[®] transfer switches are your direct connection to reliability, connectivity and real-time data about power system performance. Advanced microprocessor control technology ensures easy yet reliable operation. And a robust, high contact-force mechanism withstands thousands of cycles in utilityto-generator, utility-to-utility or generator-to-generator installations.



Transfer switches are listed to UL 1008: Standard for Safety – Transfer Switch Equipment. UL 1008 testing requires enduring high overload and fault currents for up to thousands of switching cycles and tens of thousands of short circuits to ensure the highest levels of safety, reliability and longevity.

WE'VE GOT YOU COVERED: ADAPTABILITY, CONNECTIVITY AND INTELLIGENCE



POWERCOMMAND[®] TRANSFER SWITCHES: SAFE, DEPENDABLE POWER TRANSFER BETWEEN SOURCES

Your application	 Mission-critical, Industrial and Enhanced Commercial Data centers Electric power grid systems First responder communications systems Health care institutions Public infrastructure Railway/aircraft operating and control systems Telecom systems Water/wastewater treatment facilities 	 Light Commercial and Light Industrial Fabrication plants Office buildings Small factories Warehouses 	 Home and Small Business Residential Bars Restaurants Retail stores
Consider these PowerCommand [®] transfer switch models from Cummins	X-Series (see page 4) BTPC (see page 5)	OTEC (see page 6) GTEC (see page 7)	RA (see page 8) RSS (see page 9)

MISSION-CRITICAL, INDUSTRIAL AND ENHANCED COMMERCIAL APPLICATIONS

POWERCOMMAND® X-SERIES

X-Series transfer switches are designed specifically for mission-critical, industrial and enhanced commercial applications in which reliable power is paramount to the safety and vitality of our communities.

X-Series transfer switches are available as automatic (open/closed transition) and non-automatic, with service or non-service entrance.

The blow-on technology utilized by the high-endurance mechanism (HEM) uses that same electromagnetic energy to hold the contacts closed during a fault, practically eliminating arcing, contact damage and performance degradation. The HEM is designed to enable the X-Series to carry up to 100% of its rated load.



Amps

40 to 3,000

High Withstand and Closing Ratings (WCR)

- The highest UL1008 0.05s (three-cycle) time duration and 0.5s (30-cycle) short-time ratings in the industry
- Freedom to use any upstream overcurrent protective device to protect the transfer switch

PowerCommand® 80 Microprocessor Control

- Fully integrated single control without requiring addon modules
- Highly advanced control designed for a wide variety of applications
- Intuitive, easy-to-navigate human-machine interface (HMI) with color display
- Integrated advanced, high-accuracy metering with harmonic analysis capability
- Automatic load management capability provides easy setup of downstream load management schemes without additional hardware
- Modbus Ethernet TCP/IP and Modbus RTU RS485 communication protocols

Transition Types

- Open delayed transition
- Open fast transition sync
- Open fast transition no sync
- Hard-closed transition
- Non-automatic transition

Rigorously Tested for Any Environment

- UL1008 listed
- Repeated thermal cycling from -40 to 122 °F (-40 to 50 °C) with varying levels of humidity
- UV-protected, external-facing components fully validated using Xenon arc test chamber
- Designed and shaker-table tested to ensure the transfer switch survives extreme seismic events

External Service Port

Ensures easy and safe access to control

BEST-IN-CLASS REMOTE ANNUNCIATOR

The PowerCommand[®] Transfer Switch Remote Annunciator allows you to remotely monitor up to eight X-Series transfer switches on one easy-to-read color LCD screen. At a glance, you will know the transfer switch position, source availability, and whether there are active events or alerts. An intuitive user interface provides you access to additional information for each transfer switch, including source voltage, frequency, and alert logs and command functions to initiate tests, override transfer timers, and load shed remotely.

- Market-leading intuitive design
- Color-coded symbols and icons
- Tactile feedback buttons
- Remote monitoring
- Detailed information and history
- Remote test, override and shed control
- Fault and event notification
- Voltage and frequency metering
- Hardwire support for one non-X-Series control

BTPC BYPASS ISOLATION TRANSFER SWITCH



Amps

150A to 4,000A

Bypass Isolation

- Combines a draw-out automatic transfer switch with isolation mechanism and a manual bypass switch
- Provides redundant power transfer and re-transfer capability for critical need applications requiring a reliable power supply to the load

Bypass

- Bypass switch and transfer switch have identical electrical ratings
- Bypass contacts carry current only during bypass operation

Mechanical Flags and Transfer Switch

 Indicate bypass and transfer switch position

Easy Operation

 Bypass and isolation functions are simple, requiring only two operating handles

Draw-out positions

 Connected, tested and isolated with door closed for safety

Heavy-duty, Three-point Latches

 Ensures door will stay closed without the need for screw-in fasteners

Positive Interlocking

 Mechanical and electrical interlocking prevent source-tosource connection through the power or control wiring

BTPC bypass isolation transfer switches combine a draw-out ATS with an isolation mechanism and a manual bypass switch to provide redundant power transfer and re-transfer capabilities for mission-critical applications.

BTPC switches are available with closed transition for transferring loads without interruption. Like conventional transfer switches, BTPC transfer switches are designed for operation and switching of electrical loads between primary power and standby generators.

The switch monitors both power sources, signals generator startup, automatically transfers power, and returns the load to the primary power source when the utility returns and stabilizes.



LIGHT COMMERCIAL AND LIGHT INDUSTRIAL APPLICATIONS

OTEC

The OTEC series provides the basic features needed for primary source and generator monitoring, generator starting and load transfer functions for emergency standby power applications for commercial, institutional and industrial users.

Amps

- 40A 1,200A Non-service Entrance
- 40A 1,000A Service Entrance

PowerCommand® 40-01 Microprocessor Control

- LCD four-line text display shows system status, contextual icons and warnings
- Event logging with enhanced fault codes, alert lists, power event history and diagnostic capability
- Three-phase sensing on Source 1 and Source 2
- Optional Modbus RTU RS485 connection

Easy Service Access

- Single-plug harness connection and compatible terminal markings simplify servicing
- Access space is ample
- Door-mounted controls are field-programmable; no special tools required

Advanced Transfer Switch Mechanism

 Bi-direction linear motor actuator provides virtually friction-free, constant-force, straight-line transfer switch action with no complex gears or linkages

Break-before-make Action

 Independent break-before-make action is used for both three-pole and four-pole neutral switches

Main Contacts

- Heavy-duty silver alloy contacts used with multi-leaf arc chutes are rated for motor loads or total system load transfer
- No routine contact maintenance required

Simultaneously Switched Neutral

- The neutral poles of the transfer switch have the same ratings as the phase poles and are operated by a common crossbar mechanism
- True four-pole switching allows for proper ground fault sensing

Positive Interlocking

 Mechanical and electrical interlocking prevent source-tosource connection through the power or control wiring

Transition Types

- Open delayed transition
- Open in-phase translation

Service Entrance Option

- Meets UL 1008 standards for service entrance applications
- UL-listed overcurrent disconnect device on the main incoming utility source





GTEC

The GTEC combines reliability and flexibility in a small, economical package, ideal for emergency, standby and optional standby applications. It is designed for the IEC market.

Amps

• 40 to 2,000

PowerCommand® 40-02 Microprocessor Control

- LCD four-line text display shows system status, contextual icons and warnings
- Event logging with enhanced fault codes, alert lists, power event history and diagnostic capability
- Three-phase sensing on Source 1 and Source 2
- Modbus RTU RS485 connection

Operating Modes

- Open transition with programmed transition delay
- Open in-phase transition with sync-check monitor and programmed transition backup
- Exercise and test modes

Multi-voltage Rating

The GTEC can be applied to voltages from 110 to 480 V

Listing

- Third-party certified to IEC 60947-6-1 AC31A
- All switches bear the CE mark

Easy Service and Access

- Door-mounted controls
- Ample access space and compatible terminal markings

Positive Interlocking

 Mechanical and electrical interlocking prevent source-tosource connection through the power or control wiring

Advanced Transfer Switch Mechanism

 True transfer switch mechanism with break-beforemake action

Continuously Rated

• Can be used in applications up to their nameplate rating

Main Contacts

 Long-life, high-pressure silver enables contacts to withstand thousands of switching cycles and provides 100% continuous current ratings

HOME APPLICATIONS

RA

The RA is integrated with the Cummins RS series generator and a wide range of Cummins Quiet Connect RS standby generators. A single controller for the generator ensures an easier and more dependable installation.

Amps

• 100 to 400

Reliable

- A powerful solenoid powers RA transfer switches, i.e., you can count on the switch to handle numerous load transfers between the utility power and the backup generator over its lifetime
- Long-life, high-pressure, silver alloy contacts resist burning and pitting, prevent premature contact failures, and ensure long life
- Electrical contacts are mechanically held in both normal and emergency positions for reliable, quiet operation

Safe

- Electrical and mechanical interlocks prevent simultaneous closing signals to normal and emergency contacts and interconnection of normal and emergency sources through the control wiring
- UL1008 and CSA listed and complies with NFPA70 requirements

100A, 24 Circuits

- Large enough for the full output of a 24 kW generator
- Capable of handling all circuits in many homes
- Eliminates need for load shedding, since connected loads can be matched to generator capacity

Integrated ATS and Load Center

- Reduces wiring and installation time
- No need to contact utility company to remove meter
- Requires less wall space

Service Entrance Options

Options for UL1008 and CSA 22.2



SMALL BUSINESS APPLICATIONS

RSS

The RSS combines dependability and flexibility in a small, economical package suitable for standby power in commercial and light industrial plus home and small business applications.

Amps

100A and 200A

PowerCommand® 20 Control

 A versatile, feature-rich, microprocessor-based control with LCD digital display and tactile-feel softswitches for easy operation and screen navigation

Mechanically Interlocked Contactor

- A powerful and economical solenoid drives the mechanism
- Long-life, high-pressure, silver alloy contact resists burning and pitting

Advanced Transfer Switch Mechanism

 True transfer switch mechanism with break before-make action

Main Contacts

- Silver alloy contacts with multi-leaf arc chutes are rated for 100% load interruption
- They require no routine contact maintenance and provide 100% continuous current ratings

Neutral and Ground Bar

- Fully rated
- Silver-plated copper ground and neutral bus

Ease of Service and Access

- Single-plug harness connection and compatible terminal markings simplify servicing
- Access space is ample and door-mounted controls are field-programmable; no special tools are required



POWERCOMMAND CLOUD[™]

BALANCE COMPLEX POWER WITH SEAMLESS CONTROL

In today's always-on world, Cummins PowerCommand Cloud[™] keeps you in touch with real-time information about your power systems — wherever you are, whenever you need it.

Accessed via your computer, tablet or smartphone, PowerCommand Cloud[™] enables you to check system status, identify faults, and access critical notifications, reducing your operational and maintenance costs.



Manage Power Remotely

Our robust cloud-based solution and user-friendly mobile and web apps provide remote access to manage multiple sites and systems through a single interface. You're empowered to make decisions and act on them quickly to improve responses and reduce unplanned downtime. In addition, your local Cummins distributor can handle routine issues remotely and mitigate potentially serious situations by scheduling proactive service calls based on the data they see.

Emphasis on Data Security

Be assured that your data is secured when in-transit and in storage: Cummins adheres to security best practices and regularly monitors and updates PowerCommand Cloud[™].



PowerCommand Cloud[™] is a fully integrated, cloud-based system that brings together:

- 24/7 monitoring
- Multi-location management
- On-the-go access and visibility
- Real-time notifications
- Remote service and calibration
- Remote asset control

POWERCOMMAND® TRANSFER SWITCH PRODUCT PORTFOLIO

Main Feature	X-Series	BTPC	OTEC	GTEC	RA/RSS
Specifications					
Application	Utility-to-Genset Utility-to-Utility Genset-to-Genset	Utility-to-Genset Utility-to-Utility Genset-to-Genset	Utility-to-Genset	Utility-to-Genset	Utility-to-Genset
Amp Range	40 to 3,000	150 to 4,000	40 to 1,200	40 to 2,000	100 to 400
	(Select the ATS to	o suit the largest-sized supply	(amps) that will be applied to t	he ATS.)	
Voltage Rating	up to 600VAC	up to 600VAC	up to 600VAC	up to 480VAC	240V
Phases	1 or 3	1 or 3	1 or 3	1 or 3	1
Frequency	50 or 60Hz	50 or 60Hz	50 or 60Hz	50 or 60Hz	60Hz
Poles	3.4	3.4	3.4	3.4	2
Warranty	up to 10 years	up to 10 years	up to 10 years	1 vear	2 vears
Wantanty		Switch Mech	anism	1 your	2 youro
0 T 1		Switch Mech	amom		
Open Iransition	•	•	•	•	•
Closed Iransition	•	•	-	—	_
Programmed Transition	•	•	•	•	-
Non-Automatic Operation	•	-	-	_	-
Bypass Isolation — Open Transition	-	•	-	-	-
Bypass Isolation - Closed Transition	-	•	_	_	-
Bypass Isolation — Programmed Transition	_	•	-	_	_
Service Entrance Available	•	-	• (≤1,000A)	_	•
Mechanical Interlock	•	•	•	•	•
WCR With Specified Circuit Breakers	65kA B-Frame	25 to 100kA	14 to 85kA	25 to 65kA	10 to 35kA
WCR With Current Limiting Fuses	200kA	200kA	200kA	26 to 120kA	-
Three-cycle Rating	30 to 150kA	25 to 100kA	25 to 42kA	_	_
Short-time Ratings	35 to 125kA	_	_	_	_
30-cycle Rating (UL Listed)					
		Contro			
Type of Control	PC80	PCC L2	PC40-01	PC40-02	"RA- No Control RSS - PC20"
Operator Panel					
Load Connected to Normal LED	•	•	•	•	•
Normal Source Available LED	•	•	•	•	•
Load Connected to Emergency LED	•	•	•	•	•
Emergency Source Available LED	•	•	•	•	•
Load AC Metering Bar Graph	_	•	_	_	_
Control Functions					
Three-phase Voltage Sensing-Utility	•	•	•	•	_
Three-phase Voltage Sensing-	•	•	•	•	_
	•	•	•	•	•
	•	_	•	•	•
O/U Frequency Sensing Utility	•	•	•	•	•
O/U Frequency Sensing Generator	•	•	•	•	•
Voltage Imbalance	•	L2 Control	-	_	-
Phase Rotation	•	L2 Control	•	•	-
Loss of Phase	•	•	•	_	-
High Neutral Current Sensing	•	_	_	_	_
Transfer Normal to Emergency	•	•	•	•	•
Re-transfer Emergency to Normal	•	•	•	•	•

Control Functions					
Engine Start Delay (Adjustable)	•	•	•	•	•
Time Delay to Engine Stop	•	•	•	•	•
Programmed Transition	•	•	•	•	-
Elevator Time Delay	•	-	•	•	•
Fail to Disconnect Timer (Closed Transition)	•	•	-	-	-
Time and Date-Stamped Event Log	•	•	•	•	-
Historical Data Display	•	•	•	•	-
Remote Monitoring/Communication	•	•	•	•	—
System Data Display	•	•	•	•	•
Load Monitoring	•	L2 Control	_	_	-
Automatic Load Management	•	-	_	_	-
Integrated Power Quality Metering	•	-	_	-	-
Alphanumeric Display	•	•	•	•	•
Panel Security Lock	•	•	-	_	-
Exercise Clock	•	•	•	•	-
Real-Time Clock	•	•	•	•	Yes
ATS Certification/Compliance	UL1008 CSA	UL1008 CSA	UL1008 and CSA on non-SE switches	IEC 60947-6-1 CE Marked	UL1008 CSA (RA only)

Amp Rating	X-Series	BTPC	OTEC	GTEC	RA/RSS
40	CXSB, CXSBSE	-	OTECA, OTECASE	GTECA	-
63	_	_	_	GTECA	_
70	CXSB, CXSBSE	-	OTECA, OTECASE	-	-
100	-	_	_	GTECB	RA112N3, RA112S3/ RSS100
125	CXSB, CXSBSE	-	OTECA, OTECASE	GTECB	_
150	CXSB, CXSBSE, CXTC, CXTCSE	BTPCB	OTECB, OTECBSE	-	RA1512S3
160	_	-	-	GTECC	_
200	_	_	_	GTECC	RA212N3, RA212S3/ RSS200
225	CXSB, CXSBSE, CXTC, CXTCSE	BTPCB	OTECB, OTECBSE	GTECC	-
250	-	-	OTECBSE	GTECC	_
260	CXSB, CXSBSE, CXTC, CXTCSE	BTPCB	OTECB	-	-
300	CXSB, CXSBSE, CXTC, CXTCSE	BTPCC	OTECC, OTECCSE	-	RA312S3
350	-	-	-	GTECD	-
400	CXSB, CXSBSE, CXTC, CXTCSE	BTPCC	OTECC, OTECCSE	GTECD	RA412N3, RA412S3
500	-	_	-	GTECD	-
600	CXTC, CXTCSE, CXTD, CXTDSE	BTPCC	OTECC, OTECCSE	-	-
630	-	-	-	GTECE	-
800	CXTD, CXTDSE	BTPCD	OTECD, OTECDSE	GTECE	-
1,000	CXRE, CXRESE	BTPCD, BTPCE	OTECD, OTECDSE	GTECF	_
1,200	CXRE, CXRESE, CXRF, CXRFSE	BTPCE	OTECE	_	-
1,250	_	—	-	GTECF	-
1,600	CXRF, CXRFSE, CXRG, CXRGSE	BTPCF	_	GTECG	-
2,000	CXRG, CXRGSE	BTPCG	_	GTECG	-
2,600	CXRH, SE ETO only	_	_	_	_
3,000	CXRH, SE ETO only	BTPCH	_	_	_
4,000	-	BTPCJ	-	-	-
ATS Certification / Compliance	UL1008 CSA (For use in USA and Canada only)	UL1008 CSA	UL1008	EC 60947-6-1	UL1008
	-	-	CSA (RA only)	CE Marked	CSA (RA only)

MORE THAN JUST A TRANSFER SWITCH

Cummins backs you up with world-class experience, service and support.

- More than a century of expertise in power generation innovation
- Dedicated factory representative provides your single point of contact
- Convenient single-source supplier: design, testing and servicing, all by Cummins
- Global support network
- Sophisticated integrated power system solutions for the next generation of power





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