

Low-Voltage, Metal-Enclosed

K-LINE Plus™

K-LINE Plus switchgear is a rugged, reliable product for demanding industrial and utility secondary distribution and protection applications. Based on the original K-LINE design used for decades in nuclear power plants, K-LINE Plus adds enhanced ratings, optional safety shutters and the advanced protection and monitoring capabilities of MPSC-2000™ trip units. K-LINE Plus uses modular construction with a Galvalume™ steel frame and interior, flexible system arrangements and automated order engineering to result in fast delivery of quality custom switchgear.

UL Listing Available

ISO 9001 Certified



FEATURES

Standard

- ▶ Electrically or manually operated circuit breakers
- ▶ Dense loading for flexible and compact arrangements—up to four feeder circuit breakers per frame in any combination of ratings through 2000 A
- ▶ Closed-door racking for improved operator safety
- ▶ Self-aligning, fully automatic primary and secondary contacts
- ▶ On-board auxiliary contacts rather than MOCs and related mechanical linkages
- ▶ Internal ventilation chimneys improve operator safety by eliminating the need for door louvers
- ▶ Simplified, symmetric, solid copper main bus with 100% plated surface
- ▶ Primary bus system passes all dielectric ratings without requiring bus insulation
- ▶ Riser bus-sized for full rating of breaker compartment
- ▶ One-piece cradles enable easy field upgrade of circuit breaker compartments
- ▶ Spring-loaded front panels on circuit breakers seal against compartment doors to prevent dust entry and restrict access to live parts
- ▶ Safety interlocks prevent racking a closed breaker, closing a breaker in an intermediate position or insertion of an improperly rated breaker
- ▶ Up to three, front-accessible, stab-mounted CTs per phase

Special

MPSC-2000 circuit breaker trip units feature programmable, full-function current protection and metering. Voltage protection and metering is optional. All MPSC-2000 protection settings, trip data and metering information are accessible through a convenient LCD display and keypad, or from a remote power control system. Other important features include:

- ▶ rms sensing
- ▶ Four-digit (4) password protection
- ▶ Metering accuracy: 1% current and voltage, 2% power
- ▶ Historical information access from a remote location
- ▶ Individually addressable and communications-ready
- ▶ Integral self-monitoring light for trip system condition
- ▶ Trip target, with cause of trip on LCD display



OPTIONS AND ACCESSORIES

- ▶ Choice of indoor, outdoor or drip-proof construction
- ▶ Floor-rolling lift truck or overhead lift truck mounted on switchgear
- ▶ Main bus barriers to segregate the main bus from the cable compartment
- ▶ Main bus insulation (not required to meet ANSI dielectric ratings)
- ▶ Automatic shutters to cover primary contacts when circuit breaker is withdrawn
- ▶ Seismic certification through UBC Zone 4
- ▶ Silver- or tin-plating of main bus system
- ▶ Key interlock system for safety interlocking
- ▶ Space heaters to reduce condensation (standard on outdoor equipment)
- ▶ Unfused (KP) or fused (KDP) circuit breakers

The optional ABB Arc Guard® system further improves safety by detecting an arc fault in any primary compartment. If an arc is detected, a tripping signal is sent within 2 ms to trip the appropriate upstream breaker, thereby minimizing arc duration and the potential for injury to nearby personnel.

The Power Rich System enables industrial and utility substation automation through remote switchgear monitoring, communications and control. The system is Windows® compatible, and provides real-time graphs, report generation, security and alarm features and communications compatibility with most industrial and utility control systems and protocols.

SPECIFICATIONS

Ratings

Breaker	Frame (A)	Rating	Interruption @ 60 Hz (Sym. Amps)					
			Instantaneous Trip			Short Time or Delayed Trip		
			600 V	480 V	240 V	600 V	480 V	240 V
KP-8	800	ANSI	22,000	30,000	42,000	22,000	22,000	22,000
KPE-8	800	Extended	30,000	42,000	42,000	30,000	30,000	30,000
KP-16	1600	ANSI	42,000	50,000	65,000	42,000	42,000	42,000
KPE-16	1600	Extended	50,000	65,000	65,000	50,000	65,000	65,000
KP-20	2000	ANSI	42,000	50,000	65,000	42,000	50,000	50,000
KPE-20	2000	Extended	50,000	65,000	65,000	50,000	65,000	65,000
KP-32	3200	ANSI	65,000	65,000	85,000	65,000	65,000	65,000
KPE-32	3200	Extended	85,000	85,000	130,000	85,000	85,000	85,000
KP-40	4000	ANSI	85,000	85,000	130,000	85,000	85,000	85,000
KPE-40	4000	Extended	85,000	100,000	130,000	85,000	85,000	85,000

See literature or contact your ABB Sales Representative for other ratings or information.

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Manufactured at

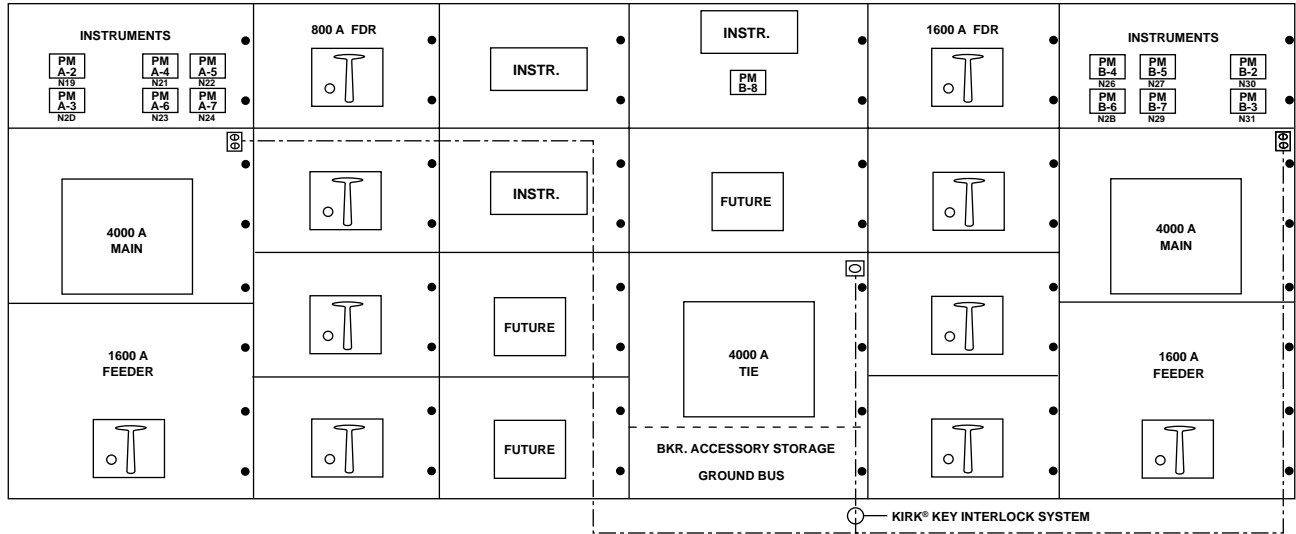
ABB Inc.
Lake Mary, FL
407-732-2000

K-LINE Plus™

SPECIFICATIONS

Typical Arrangements

Indoor Front Elevations

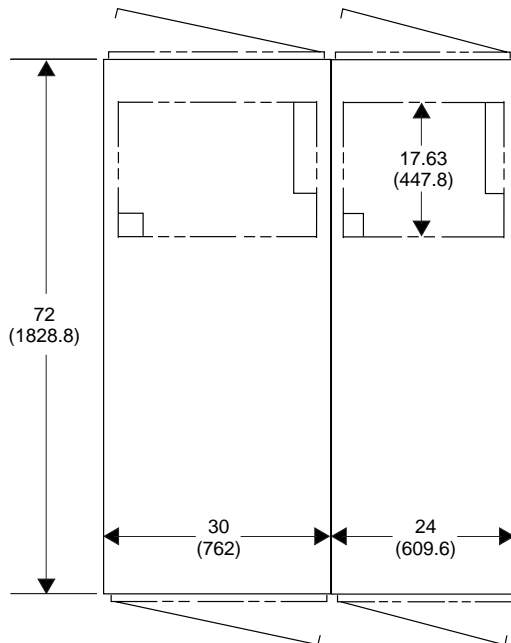


Standard Design Dimensions

Floor Plans (Indoor)

Section View (Outdoor)

Dimensions are specified in inches (mm) and are approximate.



Shaded area represents indoor switchgear section view.