Keytek ECA I			
Applicable Standards	CONTROL CENTER		Bays
	E103	ECAT Control Center with VFP, and FiberCon TM Fiber-Optic interface & control; and Windows application software Each control center includes one B-ECAT docking bay. Windows application software requires user-supplied IBM compatible computer, 486 or higher, 8MB RAM, one unused serial port, Windows 3.1 or higher.	n/a
	CONTROL CENTER OPTION		
	E103-S	Oscilloscope trigger for installed surge modules	
	True-EFT [™] SIMULATOR MODULES		
IEC 61000-4-4 Edition 2 to 4.4kV	E411	to 4.4kV (see E455X for compatible coupler/decoupler)	1/2
IEC 61000-4-4 Edition 2 to 4.4kV IEC 61000-4-4 Edition 2 to 8kV	E412 E421	to 4.4kV, built-in single-phase coupler/decoupler, 250V RMS, 16A to 8kV (see E455X for compatible coupler/decoupler)	1/2
IEC 61000-4-4 Edition 2 to 8kV	E422	to 8kV, built-in single phase coupler/decoupler, 250V RMS, 16A	1
	True-EFT OPTIONS		
	E4XX-2MHz	Increases EFT burst frequency to 2MHz at = 3kV,(available for single phase modules only; E411, E412, E421,<br E422)	n/a
	E4XX-CH	Adds Chirp to EFT modules	n/a
IEC 61000-4-4	CCL	Capacitive Coupling Clamp	n/a
	CCLC	Clamp Cover	n/a
	SURGE SIMULATOR MODULES		
IEC 61000-4-5 ANSI/IEEE C62.41 Cat. B and UL 1449(8/98) at 3kA	E501B	1.2/50us, 8/20us Combination Wave to 6kV, 3kA (compatible with CM-I/OCD and CM-TELCD coupler/decouplers)	1/2
IEC 61000-4-5 FCC Part 68 and ITU Rec K.17,K.20, and K.21 (formerly CCITT)	E502B	10/700us and .5/700us Telecom Waves (compatible with CM-TELCD Telecom coupler/decoupler)	1/2
IEC 61000-4-5 FCC CCITT	E502K	Telecom Waves for CCITT Rec K22: 10/700us and 1.2/50us (compatible with CM-TELCD Telecom coupler/decoupler). Note: the 1.2/50us waveform is NOT the same as the combination wave produced by the	1/2
ANSI C62.41 Cat. A and B, and various UL Stds including UL 864		E501B	
UL 1449	E503 E504A	Ring Wave to 6kV: .5us/100kHz at 200A and 500A max UL 1449 Combination Waves to 6kV: 1.2/50us, 8/20us ; selectable short-circuit currents of 125A, 500A or 750A	<u>1/2</u> 1
FCC Part 68	E505A	FCC Part 68 waveforms: <10/ >160us to 1650V, 200A; <10/ >560us to 880V, 100A; <2/ >10us to 2.5kV, 1kA	1
Telcordia GR-1089 CORE	E506-4W	4-wire Bellcore waveforms: <2/ >10us to 800V or 1500V at 100A, 2500V or 5000V at 500A; 2, 3, or 5-terminal (4-wire) telecom port surges	1
Telcordia GR-1089 CORE	E508	Bellcore waveforms: 10/360us to 1kV at 100A; 2 or 3-terminal telecom port surges	1
Telcordia GR-1089 CORE	E508-12P	12-pair 10/360us Bellcore waveforms to 1kV at 25A; for simultaneously testing to 12 pair telecom lines, require an E508	1
ANSI/IEEE C62.41 Cat. B IEC 61000 4-5 to 10kV and 5kV	E510A	10kV Combination Wave: 1.2/50us, 8/20us to 10kV at 5kA (If used with a Coupler/Decoupler, a model E455XkV C/D is required. (If purchased as an upgrade to an existing system, factory calibration is required.)	1
British. Telecom	E511	Modified combination wave: 1.2/50us, 8/20us Combination Wave to 6kV at 5kA	1/2
UL 864	E513	Linear voltage ramps at 100V/us to 2.5kV; 500V/us, 1kV/us, 5kV/us, and 10kV/us to 3kV	1/2
02.004	E514	10/1000us current waveforms at 15A and 100A, 1.5KV/us ramps at 60A and 250A	1
Telcordia GR-1089 CORE	E515	Bellcore: 10/250us 4kV peak open-circuit voltage; 2kA peak short-circuit current (Maximum configuration has three bays and E515 becomes the system base)	n/a
Telcordia GR-1089 CORE - NEW	E518	E518 Telecordia GR-1089-CORE waveforms: 10/1000us 600V, 1kV at 100A/side; 10/1000us 2kV for Protection Coordination Testing.	1
IEC 61000-4-5 ANSI UL	E521	Combination Wave to 20kV, 10kA with built-in 1-phase CDN: 277/480V RMS, 32 A coupler/decoupler (Maximum configuration has three bays and E521 becomes the system base)	n/a
IEC 61000-4-5 ANSI UL	E522	Combination Wave to 20kV, 10kA with built-in 3-phase CDN: 277/480V RMS, 32A coupler/decoupler (Maximum configuration has three bays and E522 becomes the system base)	n/a
	DC OPTION FOR E521 AND E522		
	E521-DC	Allows use of Surge Coupler/Decoupler on DC Powered Mains	n/a
	E522-DC	Allows use of Surge Coupler/Decoupler on DC Powered Mains	n/a

Applicable Standards

Bays

	E501B-VI	Adds Voltage and Current monitoring to the E501B	n/a
	E502B-VI	Adds Voltage and Current monitoring to the E502B	n/a
	E502K-VI	Adds Voltage and Current monitoring to the E502K	n/a
	E503-VI	Adds Voltage and Current monitoring to the E503	n/a
	E504A-VI	Adds Voltage and Current monitoring to the E504A	n/a
	E505A-VI	Adds Voltage and Current monitoring to the E505A	n/a
	E506-VI	Adds Voltage and Current monitoring to the E506	n/a
	E506-4W-VI	Adds Voltage and Current monitoring to the E506	n/a
	E508-VI	Adds Voltage and Current monitoring to the E508	n/a
	E510A-VI	Adds Voltage and Current monitoring to the E510A	n/a
	E511-VI	Adds Voltage and Current monitoring to the E511	n/a
	E513-VI	Adds Voltage and Current monitoring to the E513	n/a
	E514-VI	Adds Voltage and Current monitoring to the E514	n/a
	E515-VI	Adds Voltage and Current monitoring to the E515	n/a
	E518-VI	Adds Voltage and Current monitoring to the E518	n/a
	E521-VI	Adds 3-wire VI monitoring plus automatic software selection to the E521	n/a
	E522-VI	Adds 5-wire VI monitoring plus automatic software selection to the E522	n/a
FCC CCITT	ADDITIONAL SURGE MODULE OP E502B-UPG	TION Upgrade of E502 or E502A to E502B	n/a
5 FCC CCITT			n/a
4-5 FCC CCITT		Upgrade of E502 or E502A to E502B	n/a
	E502B-UPG	Upgrade of E502 or E502A to E502B	n/a
CC CCITT	E502B-UPG	Upgrade of E502 or E502A to E502B FOR DATA LINES	
5	E502B-UPG SURGE COUPLER/DECOUPLERS I CM-I/OCD	Upgrade of E502 or E502A to E502B FOR DATA LINES External 8-line Coupler/Decoupler for I/O Signal lines with Aux clamping protection: requires E501 series module	n/a
-5	E502B-UPG SURGE COUPLER/DECOUPLERS I CM-I/OCD CM-I/OCD-HS	Upgrade of E502 or E502A to E502B FOR DATA LINES External 8-line Coupler/Decoupler for I/O Signal lines with Aux clamping protection: requires E501 series module High Speed option for testing data rates to >100kHz: requires CM-I/OCD External 2 or 4 line Coupler/Decoupler for Telecom lines to > 100kHz; with Aux clamping protection: requires E501 or E502 series module	n/a n/a
-5 FCC CCITT -5 -5 -5	E502B-UPG SURGE COUPLER/DECOUPLERS I CM-I/OCD CM-I/OCD-HS CM-TELCD	Upgrade of E502 or E502A to E502B FOR DATA LINES External 8-line Coupler/Decoupler for I/O Signal lines with Aux clamping protection: requires E501 series module High Speed option for testing data rates to >100kHz: requires CM-I/OCD External 2 or 4 line Coupler/Decoupler for Telecom lines to > 100kHz; with Aux clamping protection: requires E501 or E502 series module	n/a n/a
FCC CCITT	E502B-UPG SURGE COUPLER/DECOUPLERS I CM-I/OCD CM-I/OCD-HS CM-TELCD SURGE COUPLER/DECOUPLER FO	Upgrade of E502 or E502A to E502B FOR DATA LINES External 8-line Coupler/Decoupler for I/O Signal lines with Aux clamping protection: requires E501 series module High Speed option for testing data rates to >100kHz: requires CM-I/OCD External 2 or 4 line Coupler/Decoupler for Telecom lines to > 100kHz; with Aux clamping protection: requires E501 or E502 series module OR AC LINES Single-phase, 250V RMS, 15/16A (normally shipped with 125V NEMA 5015 EUT Mains Connector, unless	n/a n/a n/a
FCC CCITT	E502B-UPG SURGE COUPLER/DECOUPLERS I CM-I/OCD CM-I/OCD-HS CM-TELCD SURGE COUPLER/DECOUPLER FO E551	Upgrade of E502 or E502A to E502B FOR DATA LINES External 8-line Coupler/Decoupler for I/O Signal lines with Aux clamping protection: requires E501 series module High Speed option for testing data rates to >100kHz: requires CM-I/OCD External 2 or 4 line Coupler/Decoupler for Telecom lines to > 100kHz; with Aux clamping protection: requires E501 or E502 series module OR AC LINES Single-phase, 250V RMS, 15/16A (normally shipped with 125V NEMA 5015 EUT Mains Connector, unless	n/a n/a n/a
-5	E502B-UPG SURGE COUPLER/DECOUPLERS I CM-I/OCD CM-I/OCD-HS CM-TELCD SURGE COUPLER/DECOUPLER FO E551 DC OPTION FOR SURGE COUPLER E551-DC	Upgrade of E502 or E502A to E502B FOR DATA LINES External 8-line Coupler/Decoupler for I/O Signal lines with Aux clamping protection: requires E501 series module High Speed option for testing data rates to >100kHz: requires CM-I/OCD External 2 or 4 line Coupler/Decoupler for Telecom lines to > 100kHz; with Aux clamping protection: requires E501 or E502 series module OR AC LINES Single-phase, 250V RMS, 15/16A (normally shipped with 125V NEMA 5015 EUT Mains Connector, unless R/DECOUPLER	n/a n/a n/a

Applicable Standards

SURGE ACCESSORIES

PK1001D	6kV Differential Surge Probe (10ns risetime)	n/a
PK1002D	10kV Differential Surge Probe (15ns risetime)	n/a

COMBINED SURGE/EFT COUPLER/DECOUPLERS

E4551A	Single-phase, 250V RMS, 15/16A for up to 7kV Surge and 8kV EFT wave≰normally shipped with 125V NEMA 5- 15 EUT Mains Connector, unless otherwise specified)	1
E4552A	Single-phase, 277V RMS, 32A for up to 7kV Surge and 8kV EFT waves	1
E4553A	Three-phase, 480V RMS, 16A for up to 7kV Surge and 8kV EFT waves	HB
E4554A	Three-phase, 480V RMS, 32A for up to 7kV Surge and 8kV EFT waves	HB
E4556	Three-phase, 600V RMS, 100A (for surge operation up to 10kV) Includes 5 wire VI monitoring capabilities	n/a
E4356	(Maximum configuration has four bays and E4556 becomes the system base)	

10kV COMBINED SURGE/EFT COUPLER/DECOUPLERS

E4551kV	Single-phase, 250V RMS, 15/16A (for surge operation up to 10kV[<i>inormally shipped with 125V NEMA 5-15 EUT</i> connector, unless otherwise specified)	1
E4552kV	Single-phase, 277V RMS, 32A (for surge operation up to 10kV)	1
E4553kV	Three-phase, 480V RMS, 16A (for surge operation up to 10kV)	HB
E4554kV	Three-phase, 480V RMS, 32A (for surge operation up to 10kV)	HB

INCREASED AC LINE VOLTAGE OPTIONS FOR SURGE COUPLER/DECOUPLERS

E521-HV	Upgrades the E521 to 600V RMS	n/a
E522-HV	Upgrades the E522 to 600V RMS	n/a
E4552-HV	Upgrades the E4552A or the E4552kV to 480V RMS	n/a
E4553-HV	Upgrades the E4553A or the E4553kV to 600V RMS	n/a
E4554-HV	Upgrades the E4554A or the E4554kV to 600V RMS	n/a

Bays

1

1

n/a

VOLTAGE AND CURRENT MONITORING FOR COMBINED SURGE/EFT COUPLER/DECOUPLERS

E4551-VI	Enhanced V & I monitoring: Adds 3 wire automatic mode selection for surge V and I monitoring to E4551A or kV	n/a
E4552-VI	Enhanced V & I monitoring: Adds 3 wire automatic mode selection for surge V and I monitoring to E4552A or kV	n/a
E4553-VI	Enhanced V & I monitoring: Adds 5 wire automatic mode selection for surge V and I monitoring to E4553A or kV	n/a
E4554-VI	Enhanced V & I monitoring: Adds 5 wire automatic mode selection for surge V and I monitoring to E4554A or kV	n/a

DC OPTION FOR COMBINED SURGE/EFT COUPLER/DECOUPLERS

E45XX-DC	Allows the use of combined Surge/EFT Coupler/Decouplers on DC powered mair	n/a

PQF MODULES

IEC 61000-4-11 IEC 61000-4-11 EP61

EP62

E000

ECAT ACCESSORIES		
B-ECAT	Docking bay for additional ECAT Modules (one included with each Control Center, maximum configuration is six	n/a
HB-ECAT	High docking bay required for E4553A, 44554A, E4553kV and E4554kV Coupler/Decouplers only	n/a
S-ECAT	ECAT Floor Stand with casters (required for ECAT Systems with three or more docking bays, HB-ECAT is	n/a

Blank Plug-in Module. Required when only a single 1/2 width module is installed in a docking bay

Swell/Dip/Interrupt Simulator for single-phase AC lines to 240V RMS, 16A

Swell/Dip/Interrupt Simulator for single-phase AC lines to 240V RMS, 32A

Note: S-ECAT not required with E515, E521, E522 or E4556.