



# K Factor = 1.0

CONSTANT INTERRUPTING RATING AT ALL NOMINAL VOLTAGES



## NEW STANDARDS

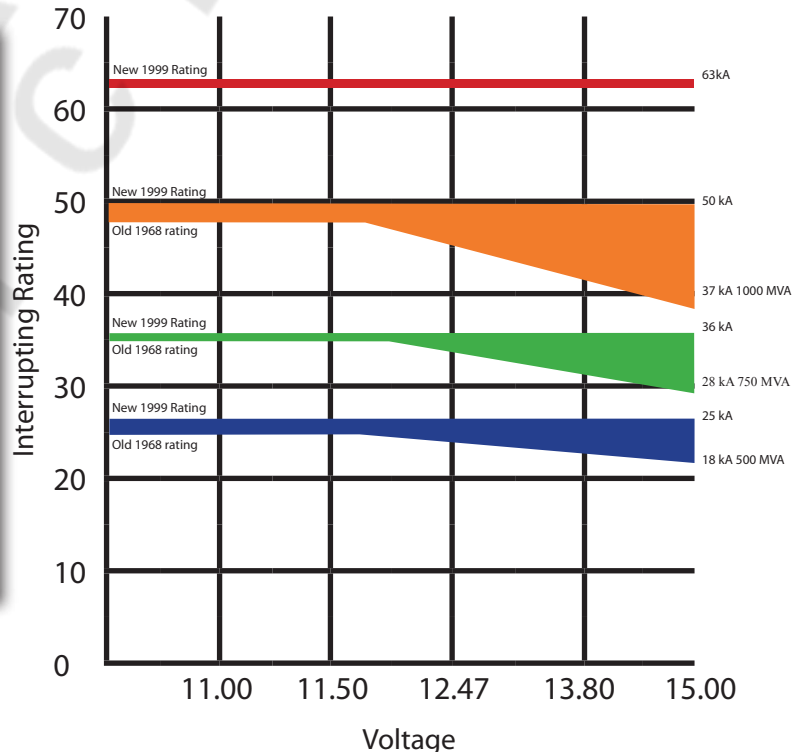
The ANSI standards have evolved from the 1945 revision when breakers were rated based on interrupting MVA. In 1964 the standards established varying K factors to adjust interrupting rating as a function of the voltage. The K factor reflects the performance of the oil and air interrupting technologies available at that time.

## CONSTANT INTERRUPTING RATING

This practice ended with the 1999 change, where circuit breaker K factors were all set at a value of one. The K factor of 1.0 results in all medium voltage breakers, tested to ANSI standard V37.09, having a constant interrupting rating irrespective of nominal system voltage. The changes in interrupting rating at the system voltage can be seen in the table below.

- K Factor = 1.0 for constant interrupting rating**
- Tested for 10,000 operations**
- 36" Wide**
- Low Maintenance Current Transfer**
- Fits Into Existing PowlVac<sup>®</sup> Switchgear**
- 3 Second Short Time**
- UL and C-UL Listed**

Circuit Breaker Comparison at 15kV





### Standard Design PowlVac® and PowlVac-AR® (36" wide)

Breaker Type	Cell Width in/mm	Maximum Voltage	Nominal Voltage	Symmetrical Interrupting Rating (kA rms) (a)	Obsolete MVA Rating	Continuous Current (A rms) (b)	Power Frequency Withstand (kV)	BIL Crest (kV)	Momentary Close & Latch Rating (kA Crest)	% DC interrupting Current (c)	Rated interrupting Time (cycle/msec) (c)	Short Time Current 3 sec (kA)	Back to Back Capacitor Switching (Amps) (d)	
<b>5kV</b>	05PV36STD	36/914	4.76	4.16	36	250	1200, 2000, 3000, 4000	19	60	97	50	3/50	36	-
	05PV50STD	36/914	4.76	4.16	50	350	1200, 2000, 3000, 4000	19	60	135	50	3/50	50	-
	05PV63STD	36/914	4.76	4.16	63	500	1200, 2000, 3000, 4000	19	60	170	50	3/50	63	1640
<b>15kV</b>	15PV25STD	36/914	15.0	13.8	25	500	1200, 2000, 3000, 4000	36	95	67	50	3/50	25	1640
	15PV36STD	36/914	15.0	13.8	36	750	1200, 2000, 3000, 4000	36	95	97	50	3/50	36	1640
	15PV50STD	36/914	15.0	13.8	50	1000	1200, 2000, 3000, 4000	36	95	135	50	3/50	50	1640
	15PV63STD	36/914	15.0	13.8	63	1500	1200, 2000, 3000, 4000	36	95	170	50	3/50	63	1640

### (Narrow Design) PowlVac-ND® and PowlVac ND-AR® (26" wide)

<b>5kV</b>	05PV36SND	26/660	4.76	4.16	36	250	1200, 2000	19	60	97	50	3/50	36	-
	05PV50SND	26/660	4.76	4.16	50	350	1200, 2000	19	60	135	50	3/50	50	-

### PV System 27® and PV System 27 AR® (40" wide)

<b>27kV</b>	27AT25STD	40/1016	27.0	25.0	25	-	1200, 2000	60	125	68	50	3/50	25	250
	27AT40STD	40/1016	27.0	25.0	40	-	1200, 2000	60	125	108	50	3/50	40	250

### PV System 38® and PV System 38 AR® (40" wide)

<b>38kV</b>	38AT40STD	40/1016	338.0	34.5	40	-	1200, 2000	80	150	108	50	3/50	40	250
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