

LAMP VOLTAGE RE-RATING

Incandescent lamps may be rerated to suit individual design goals. This chart provides the correlation between Voltage, Amperage, MSCP and Life Ratings, and may be used as a guide in the application of incandescent lamps. For lamps energized in excess of ±10% of rated voltage, values in actual application may vary widely depending on conditions. It is not recommended to operate lamps above 20% of rated voltage levels.

RERATING FORMULAS FOR LAMPS		
<p>RERATING MSCP =</p> $\left(\frac{V2}{V1}\right)^{3.5} \times \text{DESIGN MSCP AT RATED VOLTAGES}$	<p>RERATING AMPS =</p> $\left(\frac{V2}{V1}\right)^{.55} \times \text{DESIGN AMPS AT RATED VOLTAGES}$	<p>RERATING LIFE =</p> $\left(\frac{V2}{V1}\right)^{12} \times \text{DESIGN LIFE AT RATED VOLTAGES}$
<p>V1 = RATED VOLTAGE OF LAMPS V2 = LAMP APPLICATION VOLTS</p>		

UNDER-RATED LAMP VOLTAGES			
VOLTS Percent	AMPS Percent	MSCP Percent	LIFE Percent
99	99.4	96.5	112.8
98	98.9	93.2	127.4
97	98.3	89.9	144.1
96	97.8	86.7	163.2
95	97.2	83.6	185.1
90	94.4	69.2	354.1
85	91.4	56.6	703.0
80	88.5	45.8	1455.2
75	85.4	36.5	3156.9
70	82.2	28.7	7224.8

OVER-RATED LAMP VOLTAGES			
VOLTS Percent	AMPS Percent	MSCP Percent	LIFE Percent
101	100.5	103.5	88.7
102	101.1	107.2	78.8
103	101.6	110.9	70.1
104	102.2	114.7	62.5
105	102.7	118.6	55.7
110	105.4	139.6	31.9
115	108.0	163.1	18.7
120	110.5	189.3	11.2
125	113.1	218.4	6.9
130	115.5	250.5	4.3

PLEASE CONTACT JKL ENGINEERING AT ENGINEERING@JKLLAMPS.COM FOR QUESTIONS ABOUT LAMP RERATINGS OR OTHER RATING VALUES.



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