

**Specification Submittal Form – Capacitor Protection Reactors**  
 acc. UL/CSA file no. 173113

<input type="checkbox"/> <b>Use Standard Mangoldt Specification</b>		<b>LOW VOLTAGE SPEC</b>
Phases <input type="checkbox"/> 3~ <input type="checkbox"/> 1~	System Frequency <input type="checkbox"/> 60 hz <input type="checkbox"/> 50 hz	System Voltage (VN) <input type="checkbox"/> 600V <input type="checkbox"/> 480V <input type="checkbox"/> 415V <input type="checkbox"/> 240V <input type="checkbox"/> 208V
Tuning frequency 4.08 x fundamental frequency (hz)	Inductance / tolerance _____ mH ± 3 % of L <sub>Nom</sub>	Fundamental current 1.10 x I <sub>N</sub> (where I <sub>N</sub> = nominal current based on KVAR and nominal voltage)
Harmonic voltage distortion V <sub>H3</sub> = 0.5%, V <sub>H5</sub> = 6%, V <sub>H7</sub> = 5%, V <sub>H11</sub> = 3.5%, V <sub>H13</sub> = 3% (9.08% THVD)	Harmonic current capability I <sub>3</sub> = 3%, I <sub>5</sub> = 56%, I <sub>7</sub> = 17%, I <sub>11</sub> = 5.8%, I <sub>13</sub> = 4% (relative to I <sub>N</sub> )	Capacitor terminal voltage 1.064 x V <sub>L-L</sub>
Thermal current (I <sub>RMS</sub> ) 1.25 x I <sub>N</sub>	Core linearity (I <sub>LIN</sub> ): 2.36 x I <sub>N</sub> (with 0.95 x L <sub>Nom</sub> )	Max. ambient temperature 50° Celcius
Over-temperature switch 1 in center coil <input type="checkbox"/> N.C. <input type="checkbox"/> N.O		

<input type="checkbox"/> <b>Use Customer Specification</b>		<b>MEDIUM &amp; LOW VOLTAGE SPEC</b>
Phases <input type="checkbox"/> 3~ <input type="checkbox"/> 1~	System Frequency <input type="checkbox"/> 60 hz <input type="checkbox"/> 50 hz	System Voltage (VN) _____ Volts, specify <input type="checkbox"/> L-L or <input type="checkbox"/> L-N
Tuning frequency _____ hertz	Inductance _____ mH	Tolerance + _____ % / - _____ % of L <sub>Nom</sub>
Harmonic voltage distortion		
V <sub>H3</sub> = _____ %	V <sub>H5</sub> = _____ %	V <sub>H7</sub> = _____ %
V <sub>H11</sub> = _____ %	V <sub>H13</sub> = _____ %	V <sub>H__</sub> = _____ %
Fundamental current _____ x I <sub>N</sub> (where I <sub>N</sub> = nominal current based on KVAR and nominal voltage)		
Harmonic current capability(relative to I <sub>N</sub> )		
I <sub>3</sub> = _____ %	I <sub>5</sub> = _____ %	I <sub>7</sub> = _____ %
I <sub>11</sub> = _____ %	I <sub>13</sub> = _____ %	I <sub>__</sub> = _____ %
Core linearity (I <sub>LIN</sub> ): _____ x I <sub>N</sub> (with 0.95 x L <sub>Nom</sub> )	Max. ambient temperature _____° Celcius	Over-temperature switch(es) <input type="checkbox"/> one <input type="checkbox"/> three <input type="checkbox"/> N.C. <input type="checkbox"/> N.O.

**CAPACITOR DATA – Please provide this ratings information about your capacitors**

Configuration : specify  Delta or  Wye connection

Output _____ kVAr	Voltage rating _____ Volts (L-L)	Micro-Farads _____ uF (per phase)
Company:	Name:	
City:	St/Prov:	PC/ Zip:
Tel:	Fax:	
Email:		

# Specification Submittal Form – Harmonic Filter

acc. UL/CSA file no. 173113

<input type="checkbox"/> Use Standard Mangoldt Specification		<b>LOW VOLTAGE SPEC</b>
Phases <input type="checkbox"/> 3~ <input type="checkbox"/> 1~	System Frequency <input type="checkbox"/> 60 hz <input type="checkbox"/> 50 hz	System Voltage (VN) <input type="checkbox"/> 600V <input type="checkbox"/> 480V <input type="checkbox"/> 415V <input type="checkbox"/> 240V <input type="checkbox"/> 208V
Tuning frequency 4.7 x fundamental frequency (hz)	Inductance / tolerance _____ mH ± 3 % of L <sub>Nom</sub>	Fundamental current 1.10 x I <sub>N</sub> (where I <sub>N</sub> = nominal current based on KVAR and nominal voltage)
Harmonic current capability I <sub>5</sub> = 70%, I <sub>7</sub> = 56% (relative to I <sub>N</sub> )	Thermal current (I <sub>RMS</sub> ) 1.35 x I <sub>N</sub>	Core linearity (I <sub>LIN</sub> ): 2.65 x I <sub>N</sub> (with 0.95 x L <sub>Nom</sub> )
Capacitor terminal voltage 1.045 x V <sub>L-L</sub>	Max. ambient temperature 50° Celcius	Over-temperature switch 1 in center coil <input type="checkbox"/> N.C. <input type="checkbox"/> N.O

<input type="checkbox"/> Use Customer Specification		<b>MEDIUM &amp; LOW VOLTAGE SPEC</b>
Phases <input type="checkbox"/> 3~ <input type="checkbox"/> 1~	System Frequency <input type="checkbox"/> 60 hz <input type="checkbox"/> 50 hz	System Voltage (VN) _____ Volts, specify <input type="checkbox"/> L-L or <input type="checkbox"/> L-N
Tuning frequency _____ hertz or <input type="checkbox"/> _____ x fundamental freq. (hz)	Inductance _____ mH	Tolerance + _____ % / - _____ % of L <sub>Nom</sub>
Harmonic voltage distortion		
V <sub>H3</sub> = _____ %	V <sub>H5</sub> = _____ %	V <sub>H7</sub> = _____ %
V <sub>H11</sub> = _____ %	V <sub>H13</sub> = _____ %	V <sub>H15</sub> = _____ %
V <sub>H17</sub> = _____ %	V <sub>H19</sub> = _____ %	V <sub>H21</sub> = _____ %
Fundamental current _____ x I <sub>N</sub> (where I <sub>N</sub> = nominal current based on KVAR and nominal voltage)		
Harmonic current capability(relative to I <sub>N</sub> )		
I <sub>3</sub> = _____ %	I <sub>5</sub> = _____ %	I <sub>7</sub> = _____ %
I <sub>11</sub> = _____ %	I <sub>13</sub> = _____ %	I <sub>15</sub> = _____ %
I <sub>17</sub> = _____ %	I <sub>19</sub> = _____ %	I <sub>21</sub> = _____ %
Core linearity (I <sub>LIN</sub> ): _____ x I <sub>N</sub> (with 0.95 x L <sub>Nom</sub> )	Max. ambient temperature _____ ° Celcius	Over-temperature switch(es) <input type="checkbox"/> one <input type="checkbox"/> three <input type="checkbox"/> N.C. <input type="checkbox"/> N.O.

**CAPACITOR DATA – Please provide this ratings information about your capacitors**

Configuration : specify  Delta or  Wye connection

Output _____ kVAr	Voltage rating _____ Volts (L-L)	Micro-Farads _____ uF (per phase)
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Company: \_\_\_\_\_ Name: \_\_\_\_\_

City: \_\_\_\_\_ St/Prov: \_\_\_\_\_ PC/ Zip: \_\_\_\_\_

Tel: \_\_\_\_\_ Fax: \_\_\_\_\_

Email: \_\_\_\_\_