



To: Mark Sta. Maria  
Tripletech International Corporation  
Tripletech Corporate Building  
466 Scholastica Street, San Antonio Valley 1  
Brgy. San Antonio, Paranaque City  
Philippines 1715

**Ken Kuhn**  
Manager, Field Service  
Firetrol Fire Pump Controllers

**Emerson Network Power**  
111 Corning Road  
Suite 120  
Cary, NC 27518

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RE: Voltage Limitations of Electric Control Equipment

Dear Mark,

March 12, 2013

As defined by the International Electrotechnical Commission (IEC), Underwriters Laboratories (UL) and the Institute of Electrical and Electronics Engineers (IEEE), an over voltage condition exists when the voltage applied to an electrical apparatus exceeds by 10% the rated nominal voltage of the apparatus. An under voltage condition exists when the voltage applies is 15% or more below the rated nominal voltage

Electrical equipment for the control of motors must operate reliably and without damage when operating between these limits. Refer to IEC Standard 60439, UL Standard 508 and IEEE P1683. Operating the equipment for a sustained period of time in an over voltage condition will cause excessive heating and shorten the life of the equipment. If the voltage is too low, the equipment may not operate as expected, this is especially true of the electro-magnetic devices.

These voltage limitations apply to most pieces of electrical equipment.

Regards,

A handwritten signature in black ink that reads "Ken Kuhn".

Ken Kuhn  
Manager, Field Service

**Firetrol**