

<p>Project title:</p> <p>Advice on electrical safety parameters of one no. partially Purged Control Panel Ex 'p' Z-Type in size of 1000mm(L) x 800(W) x 2100(H) & 600mm(L) x 600mm(W) x 2100mm(H) as per IS/IEC 60079:2-2007 and NFPA-496-2008 suitable for use in hazardous area</p> <p>Project No.:</p> <p>CNP/4878/2019-20</p>	<p>Executive Summary:</p> <ol style="list-style-type: none"> 1. On the basis of Examination, investigation and advice on Purged Control Panel Ex 'p_z' in size of 600mm(L) x 600mm(W) x 2100(H) under reference confirms to the applicable requirements of type of protection Ex 'p' as per NFPA 496:2017 & IS/IEC 60079-2:2007 (Reaffirmed 2014) for use in Zone 2 and Gas Group IIB+H₂ hazardous area as defined in IS 5572. 2. The minimum time required for pre start purging of the Ex 'p' Panel and associated tubes and ducts at flow rate of 15 cubic feet/minute is calculated as per <i>Equation -1</i> as 8.5 minute as per IS/IEC 60079-2:2007 and 7 minute as per NFPA 496:2017(<i>Equation-2</i>). 3. The pressurized local control panel and associated ducts were purged with five times volume of the free air volume of the Ex 'p' unit with associated ducts and tubes as required in NFPA 496:2017 & IS/IEC 60079-2:2007 (Reaffirmed 2014). 4. Automatic Audible and visual alarms are initiated at falling pressure of 10mm WC inside purged section and power supply is not cut off automatically but manual at falling pressure of 10mm WC inside purged section. 5. Based on the above conclusions, the Purged Control Panel Ex 'p_z' in size of 600mm(L) x 600mm(W) x 2100(H) as per IS/IEC 60079:2-2007 (Reaffirmed 2014) and NFPA-496-2017 is suitable for use in Gas Group IIB+H₂ hazardous area as defined in IS 5572.
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