







REF	COMP. drg	 Form No. 2038	उत्पाद मानक परिणामित्र शाप/अभि. निर्देश	PRODUCT STANDARD TRANSFORMER SHOP/ENGG INSTRUCITONS	<b>TR20156I</b>			
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COPYRIGHT AND CONFIDENTIAL The Information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED. It must not be used directly or indirectly in any way detrimental to the interest of the Company.		<b>TITLE: SPECIFICATION OF ELECTRONIC IMPACT RECORDER</b>						
		<b>Application of Electronic Impact Recorder</b>  Computerized reusable system for measuring and registration of accelerations / impact (x-y-z directions), amplitude and duration of shocks experienced by the Transformers /Reactors during transportation and handing.						
<b>TR20156I</b>  PAGE 1 OF 2		<b>Material code: BP9046057178</b>						
		<b>Quantity: As per indent (1 set of software and cables per order)</b>						
		<b>Desired parameters:</b>						
		<ol style="list-style-type: none"> <li>Frequency cut-off : Software Programmable</li> <li>Operating Temperature : -20 to +60 deg C.</li> <li>Acceleration Measuring range and Accuracy: <math>\pm 1</math> to 10 G Factory settable having Accuracy of measurement of <math>\pm 3\%</math>.</li> <li>It Should record minimum 100 events.</li> <li>It should have built-in three axis accelerometer and work on Tri-axial piezoelectric accelerometer technology.</li> <li>Acceleration (x, y, z) events should be stored in the form of signal graphs.</li> <li>Display of events data, graphs and frequencies and their analysis with the help of external software.</li> <li>PC Software should be windows based programmable of alarm levels and frequency for data collection and can be used on computers with Operating System Win 98,2000, NT4, XP</li> <li>It should have provision to configure the device using the software for starting up, data extraction, subsequent analysis and report /charts generation.</li> <li>The communication device for programming and read out data from the registration unit on computer should be of the USB / PORT type.</li> <li>Each and individual event should have separate signal graph.</li> <li>There should be a provision in the Recorder to manually Start/Stop by Button/Key to enable starting of Recorder at our works and Stopping the Recorder at site to avoid recording Unwanted Data.</li> <li>The license for installation of the Software should not be limited to any particular number of Machines. i.e. The software should be installable to desired number of machines with the same license key. This is required to provide software to end customer for analysis at their end to meet contractual requirement.</li> </ol>						
<b>Protection:</b> IP 65 / IP 67 or better rating  <b>Operation:</b> When programmed impact level value exceeded, data storing for analysis should take place.  <b>Operating Time:</b> 6000 Hours Minimum.  <b>Power Supply:</b> Standard Batteries.		1. Clause 3 Modified & Clause 13 added.			वितरण DISTRIBUTION.	सं.	CHECKED & APPROVED	S. G Bokade
		 NKM	 AKD	TRE/TRM/FTM TRX/TTG/ QC-TCB/QA-TCB/ JHANSI	तैयार किया PREPD. Amulya Deota	जारी किया ISSUED टीआरई/मानक TRE/STD.	दिनांक DATE 20.02.10	

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COPYRIGHT AND CONFIDENTIAL The Information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED. It must not be used directly or indirectly in any way detrimental to the interest of the Company.		<p><b>External support:</b> (GPRS, temperature, humidity, pressure, tilt etc.) -- Optional.</p> <p><b>Testing:</b></p> <p>a) Impact Recorder shall be tested for all routine &amp; type tests as per international norms.          b) Impact Recorder shall be calibrated for full &amp; certificates regarding the same shall be furnished with the supply.</p> <p><b>Mandatory Spares:</b></p> <p>a) 1 set of extra Battery with each Impact recorder unit.</p> <p><b>Installation, Analysis &amp; Maintenance:</b></p> <p>a) Supplier to provide necessary training for installation of this impact recorder on transformer &amp; thereafter analysis &amp; interpretation of impact records.          b) Maintenance schedule of the equipment if required.          c) Requirement of spares parts if any to be quoted as optional.</p> <p><b>Documentation and Demo:</b></p> <p>a) Bidder to furnish the complete details of the equipment offered along with leaflet / catalogues.          b) Detail dimensional drawing with mounting arrangement.          c) Reference list of past supplies of equipment particularly of transformer manufacturer.          d) Calibration &amp; Test certificates.          e) Supplier to give Demo if required during Technical evaluation of the offer during Bidding.</p>					
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पुनः Rev. 04 06.08.19	1. Clause 3 Modified & Clause 13 added.  NKM	 AKD	वितरण DISTRIBUTION. TRE/TRM/FTM TRX/TTG/ QC-TCB/QA-TCB/ JHANSI	सं. CHECKED & APPROVED तैयार किया PREPD. Amulya Deota	S. G Bokade जारी किया ISSUED टीआरई/मानक TRE/STD.	दिनांक DATE 20.02.10	