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|--|--|--|--|------------------------------|--|
| <b>General Inspection plan</b><br><br>Title<br><b>Control Equipment and Process Instrumentation [Rack and panel mounted equipment]</b> |  |  |  | Document<br>KBE IP – 104:1.1 |  |
|  |  |  |  | Issue<br>4                   |  |
|  |  |  |  | Date<br>2022-11-17           |  |
|  |  |  |  | Supersedes<br>3              |  |

  

|   |  |  |                             |  |                                |
|---|--|--|-----------------------------|--|--------------------------------|
| <b>Inspection according to codes below</b>  |  |  |                             |  |                                |
| <u><b>Inspection Specification</b></u><br>(1st letter)<br>A: Routine 100% Insp.<br>S: Sample Inspection<br>T: Type Inspection |  | <u><b>Inspection performed and documented by</b></u><br>(2nd letter)<br>E: Manufacturer<br>D: Supplier<br>B: Purchaser |                             | <u><b>Inspection supervised by</b></u><br>(3rd letter)<br>B: Purchaser<br>C: Inspector engaged by purchaser<br>D: Supplier |                                |
| <u><b>Documentation</b></u><br>(4th letter)<br>R: Technical Report<br>P: Inspection Record<br>I: Certificate                  |  |  |                             |  |                                |
| <b>Examination Procedures</b>   |  | <b>Codes</b>   | <b>Inspection Procedure</b> | <b>Inspection Record</b>   | <b>Deviation Report/Remark</b> |
| <b>Type Inspection</b>  |  |  |                             |  |                                |
| T1  | Environmental verification for normal operating conditions<br>KBE EP-151       | TE-R   |                             |  |                                |
| T2  | Verification of function and Performance<br>KBE EP-152                         | TE-R   |                             |  |                                |
| T3  | Electromagnetic compatibility Verification<br>KBE EP-153                       | TE-R   |                             |  |                                |
| T4  | Seismic qualification<br>KBE EP-147  | TE-R   |                             |  |                                |
| T5  | Withstand voltage test<br>KBE EP-102   | TE-R   |                             |  |                                |
| T6  | Burn-in test<br>KBE EP-104   | TE-R   |                             |  |                                |
| T7  | Ability to withstand variation in power supply<br>KBE EP-108                   | TE-R   |                             |  |                                |
| T8  | Long-term stability of process instruments and control equipment<br>KBE EP-111 | TE-R   |                             |  |                                |
| T9  | Type inspection certification<br>KBE EP-180                                    | TE-I   |                             |  |                                |
| T10   |  |  |                             |  |                                |
| T11   |  |  |                             |  |                                |
| T12   |  |  |                             |  |                                |
| T13   |  |  |                             |  |                                |
| T14   |  |  |                             |  |                                |
| <b>Notes</b><br><br><br><br><br><br><br><br><br><br>  |  |  |                             |  |                                |

| Examination Procedures   |  | Codes | Inspection Procedure | Inspection Record | Deviation Report/Remark |
|--|--|-------|----------------------|-------------------|-------------------------|
| <b>Routine Inspection</b>  |  |       |                      |                   |                         |
| R1   | Visual inspection<br>KBE EP-101  | AEBI  |                      |                   |                         |
| R2   | Visual inspection of Printed Board Assemblies<br>KBE EP-190                    | AE-P  |                      |                   |                         |
| R3   | Withstand voltage test<br>KBE EP-102   | AE-I  |                      |                   |                         |
| R4   | Ability to withstand variation in power supply<br>KBE EP-108                   | AE-I  |                      |                   |                         |
| R5   | Checking of wiring<br>KBE EP-113   | AE-I  |                      |                   |                         |
| R6   | Insulation resistance measurement<br>KBE EP-114                                | AE-I  |                      |                   |                         |
| R7   | Burn-in test<br>KBE EP-104   | AE-P  |                      |                   |                         |
| R8   | Inspection of corrosion protection<br>KBE EP-148                               | AE-I  |                      |                   |                         |
| R9   | Inspection of protective earth Continuity<br>KBE EP-150                        | AE-I  |                      |                   |                         |
| R10  | Calibration<br>KBE EP-105  | AE-P  |                      |                   |                         |
| R11  | Long-term stability of process instruments and control equipment<br>KBE EP-111 | AE-I  |                      |                   |                         |
| R12  | Functional performance<br>Note 1   | AEBI  |                      |                   |                         |
| R13  | Quality and Identity certification<br>KBE EP-180                               | AE-I  |                      |                   |                         |
| R14  | Delivery Release Inspection<br>Note 2 KBE EP191                                | AEBP  |                      |                   |                         |
| R15  | Factory Acceptance Test (FAT)<br>Note 3,4                                      | AEBR  |                      |                   |                         |
| R16  | Site Acceptance Test (SAT)<br>Note 3,4   | AEBR  |                      |                   |                         |
| R17  | Operating Experience<br>KBE EP-187   | AE-R  |                      |                   |                         |
| <b>Notes</b> <ol style="list-style-type: none"> <li>The test shall be carried out in accordance with the Manufacturers standard procedure, subject to prior review and approval by the Purchaser.</li> <li>Inspection witnessed by Purchaser in accordance with KBE 100.</li> <li>Alternative is according to Manufacturers procedure, reviewed and approved by the Purchaser.</li> <li>For equipment with programmable electronics FAT and SAT are to be performed</li> </ol> |  |       |                      |                   |                         |