Mobrey™ VLS

ATEX Safety Instructions for Vibrating Rod Level Switches

Models covered:
VLS***35A/****
Instructions specific to hazardous area installations

Model numbers covered: VLS***35A/***** (*** indicates options in construction, function and materials.)

The following instructions apply to equipment covered by certificate number BKI 12ATEX0001:

1. The Mobrey VLS may be used in a hazardous area with flammable dusts. See Table 1 for maximum surface temperature.

2. Installation of the Mobrey VLS shall be carried out by suitably trained personnel, in accordance with the applicable code of practice.

3. The Mobrey VLS is suitable for installation across the boundary between an area that specifically requires Equipment Protection Level Da (Zone 20) and an area that specifically requires Equipment Protection Level Db (Zone 21). The probe (and extension) is only to be installed in Zone 20 (EPL Da).

4. Inspection and maintenance of this equipment shall be carried out by suitably trained personnel, in accordance with the applicable code of practice. Only approved spares supplied by the manufacturer or approved agent can be used.

5. If the Mobrey VLS is likely to come into contact with aggressive substances, it is the responsibility of the user to take suitable precautions that prevent it from being adversely affected, thus ensuring that the type of protection is not compromised. Aggressive substances: e.g. acidic liquids or gases that may attack metals or solvents that may affect polymeric materials. Suitable precautions: e.g. regular checks as part of routine inspections or establishing from the material’s data sheet that it is resistant to specific chemicals.

6. It is the responsibility of the user to ensure:
   a. That any unused cable entries are sealed with suitably certified stopping plugs (Ex tb IIIC IP67, size M20x1.5).
   b. That only suitably certified cable entry devices are used when connecting the Mobrey VLS (Ex tb IIIC IP67, size M20x1.5).
   c. That a suitable temperature-rated cable is used. The cable entry temperature may exceed 70 °C.
   d. That the joint requirements between the Mobrey VLS and the vessel/tank are compatible with the process media.
   e. That the joint tightness is correct for the joint material used.
   f. The seal between housing and cover is in good condition and correctly fitted.
   g. The voltage and current limits for the Mobrey VLS are not exceeded.
   h. The protective earth terminal is connected to an external protective earthing system.

7. Technical data
   a. Materials of construction:
      Probe: stainless steel 316 (1.4571) type
      Housing and cover: aluminum alloy
      Note: The metallic alloy used for the enclosure material may be at the accessible surface of the Mobrey VLS; in the event of rare accidents, ignition sources due to impact and friction sparks could occur.
   b. Coding: II 1/2 D, Ex ta/tb IIIC T90°C...T170°C Da/Db
   c. Temperature

<table>
<thead>
<tr>
<th>Table 1: Thermal Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process temperature (Tp) (EPL Da – category 1D)</td>
</tr>
<tr>
<td>Ambient air temperature (Ta) (EPL Db – category 2D)</td>
</tr>
<tr>
<td>Maximum surface temperature (process connection)</td>
</tr>
<tr>
<td>Maximum surface temperature (T)</td>
</tr>
<tr>
<td>T Class</td>
</tr>
</tbody>
</table>

1. The process temperature can reach +95 °C for a maximum period of one hour.
Minimum ambient air temperature (Ta) = –30 °C
Minimum process temperature (Tp) = –30 °C
d. Pressure: must not exceed the rating of the coupling/flange fitted.
e. Ingress Protection: IP67

8. Special conditions of use
   a. The enclosure must not be opened when the equipment is electrically energized.
   b. The Mobrey VLS can only be used in a dust/air mixture with a minimum ignition temperature at least 1.5 times higher than the temperature class (T Class) for the specific model and operating conditions shown in Table 1.
   c. In hazardous atmospheres the unit can only be energized after fitting the housing cover and tightening down the cover securing clamp.
EU Declaration of Conformity
No: DML 146 Rev. C

Delta Mobrey Ltd
Riverside Business Park, Dogflud Way, Farnham, Surrey, GU9 7SS, United Kingdom
(Tel: +44(0)1252 729140, Fax: +44(0)1252 729168)

Declares under our sole responsibility that the product(s):
Equipment: Mobrey™ VLS, Dry Products Vibrating Rod Level Switch
Type Numbers: VLS***35A/*
(Minor variations in design to suit the application and/or mounting requirements are identified by alpha/numeric characters where indicated * above)

Conform to the relevant provisions of the European Directives:

| 2014/34/EU | ATEX | 2014/30/EU | EMC |
| 2011/65/EU | RoHS |          |     |

Inspection carried out by:
For 2014/34/EU:
ExVÁ Robbanásbiztos Berendezések Vizsgáló Alloomása Kft. [1418]
Mikoviny S. u. 2-4
1037 Budapest, HU

EU Type/Design Examination Certificate to 2014/34/EU
BKI 19ATEX0011
Category II 1/2 D Ex ta/tb IIIC T90°C…T170°C Da/Db

The following Harmonised Standards have been applied:
EN 60079-0:2012 + A11 :2013
EN 60079-31:2014
EN 61326-1:2013

The following Technical Standards and Specifications have been applied:
EN 61010-1:2010

Authorised Signatory for the manufacturer within the European Union:

Signed: Date of issue: 2-Sept-19
Place: Slough, UK

David J. Ross-Hamilton, Global Approvals Manager