Safety Instructions

Converter NRR262 for Oil Leak Detector
TIIS TC18326

Safety instructions for electrical apparatus certified for use in explosion-hazardous areas.
This safety instruction manual describes precautionary items related to the certified instrument. The User should read and understand these safety instructions to ensure safe use.

1. Converter NRR261 is described in the architecture schematic below.

![Architecture Schematic]

- Oil Leak detector (Intrinsically safe)
- Oil Leak detector: NAR300-15
  NAR300-16 (high temp.)
- Approval No.: TC 18324

Li ≤ 3.05mH - Lw AND
Ci ≤ 0.083 μF - Cw
(Refer to 5.3)
2. Ambient temperature for the converter is rated for -20 to +60 °C.

3. Converter NRR262 must be placed in **Non-hazardous area**.

4. Ground terminal of the safety barrier must connect from class A ground terminal (PE) in the converter to class A ground at non-hazardous area.

5. Oil Leak Detector (Intrinsic safety device) which connect to the converter must be satisfied following conditions and TIIS approved.

   5.1 Intrinsic safety ratings
   - Maximum I.S. circuit voltage: \( \geq 28V \)
   - Maximum I.S. circuit current: \( \geq 93mA \)
   - Maximum I.S. circuit energy: \( \geq 0.65W \)

   5.2 Type of protection / Gas group
   - Type of protection: ia
   - Gas Group: II A or II B

   5.3 Relationship between maximum internal Inductance (\( L_i \)) and maximum internal Capacitance (\( C_i \)) and the connected external wiring permissible Inductance (\( L_w \)) and Capacitance (\( C_w \)) are as shown below.
   - \( L_i \leq 3.05 \text{mH} - L_w \)
   - \( C_i \leq 0.083 \text{\( \mu \)F} - C_w \)

   The converters listed in the table below satisfy the conditions of sections 5.1 and 5.2 above.

<table>
<thead>
<tr>
<th>Oil Leak Detector</th>
<th>Approval No.</th>
<th>Safety Instructions</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAR300-15A</td>
<td>TC18326</td>
<td>Ex572-820XJ</td>
<td>Hazardous area setting: Ex ia II B T4</td>
</tr>
</tbody>
</table>

| NAR300-16A (high temp.) | |

Refer to the precautionary items in related device’s Safety Instructions.

6. Use cable for connecting the Oil Leak Detector and converter that is rated at \( \geq 70^\circ \text{C} \).

7. The supplied power and internal voltage of Non-Ex device which connected to the converter must be less than AC250V 50/60Hz or DC250V in normal condition and abnormal condition.

8. Place the Converter (Associated Intrinsic safety device), Oil leak detector (Intrinsically Safe device) and connecting wiring such as to prevent electrical interference from current or voltage induction.

9. Do not modify the internal parts or wiring of the devices.

10. Install in conformance with local laws and regulations.

*This document should be stored together with Installation Instructions BA01027G*
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