

VENTILATION

Required Ventilation Q according to IEC 62485-2, Section 7.2 at charging with IU- or U-characteristics, valid up to max. 40°C.

The purpose of ventilating a battery location or enclosure is to maintain the hydrogen concentration below the 4%vol hydrogen Lower Explosion Limit (LEL) threshold. Battery locations and enclosures are to be considered as safe from explosions, when by natural or forced (artificial) ventilation the concentration of hydrogen is kept below this safe limit.

Battery Type: VRLA - AGM
Battery System: 2 x 32 - HRL1234W

1. Floating Charge

1.1 Ventilation air flow rate:

0.17 [Q = m³/h]

1.2 Free area of opening in air inlet and outlet for natural ventilation:

4.75 [A = cm²]

1.3 Required safety distance from source of gas release:

57.7 [mm]

2. Boost Charge

2.1 Ventilation air flow rate:

1.36 [Q = m³/h]

2.2 Free area of opening in air inlet and outlet for natural ventilation:

38.04 [A = cm²]

2.3 Required safety distance from source of gas release:

115.39 [mm]

