

# IS THE ACS800-01\_U1 DRIVE NEMA 12 OR IP55 CATEGORY 1 OR CATEGORY 2?

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## **Description:**

The ACS800-01/U1 Drive has a Nema 12 or IP55 enclosure available, which will have protection against dust ingress and water jets spraying against the enclosure. Recently, I have been reading the IEC60529, which the IP codes are based on, and I found one interesting point. Within the IP55 rating, there are 2 categories. The definitions are below:

IP55 category 1: during normal operation, the air pressure inside the enclosure can become less than that outside the enclosure.

IP55 category 2: There is never any difference between the air pressure outside the enclosure and inside the enclosure.

I would like to know whether the ABB ACS800-01/U1 drive enclosures are certified as IP55 category 1 or category 2. I was not able to find this in either the catalogues or manuals.

## **Answer:**

In category 1 the test is required to use typically 20mbar under pressure during the testing (2 hours).

In Category 2 has no pressure required, but the tests takes place 8 hours. According to my information UL do not have categories. However we have used Atomized water method in UL instead of Dust and hose down tests.

Based on ABB testing we determined the ACS800-01/U1 equipment meets the category 2.

## **Documents or other reference material:**

None

## **Corrective Actions:**

None

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