

Optimum moisture protection in every application.

The new environmental classes at ebm-papst.

ebmpapst

The engineer's choice



Greater protection from moisture.

Comparing degrees of protection of electrotechnical devices **usually involves referring to established IP Codes**. The problem is that this international code does not distinguish between different sector requirements or even between specific applications. Therefore, it is often not meaningful to real-world applications.

We bring the specifics.

We have solved this issue by developing a moisture-protection concept that does not just consider the product itself, but also the specific application. Our 'environmental classes' **H0 to H2 now immediately indicate which product is suited to which branch and which conditions.**

How do we do it? By subjecting every fan and every motor to comprehensive testing at our in-house laboratories. These tests are sometimes much more demanding than those called for by the IP Codes and are as close to reality as possible. We guarantee the highest quality, reliability and durability, made by ebm-papst, for your specific application.

Incidentally, the new classification applies to all ebm-papst products, regardless of category or sector.

The environmental class is marked with an additional “+” in applications that employ aggressive agents such as salt fog, chemical substances or high levels of ammonia.

H0 (dry)

No water action, no condensation

Max. relative humidity (%): ≤ 95
Corrosion requirements: no
Example application: Condensing technology



H1 (moist)

Water action from condensation

Max. relative humidity (%): 100
Corrosion requirements: yes
Example application: refrigerated display case at a supermarket



H2 (wet)

Direct water exposure such as rain, snow and ice

Max. relative humidity (%): 100
Corrosion requirements: yes
Example application: Outdoor condenser without rain protection



Simple and practical: our new environmental classes.

H0 – dry environment *such as modern heating and gas-blowing technology*

Products are exposed to low levels of moisture. During operation there are only moderate temperature changes **which do not lead to condensation.**



H1 – moist environment *such as a refrigerated display case at a supermarket*

The temperature can quickly change during operation. Condensation can at least **sometimes form.** It is assumed that no drop of water can directly reach the motor, electronics or other live parts of the product.



H2 – wet environment *such as open-air condensers*

Direct water exposure such as rain, snow and ice. The temperature changes very quickly during operation, and there is almost **constant condensation.** The acceptable relative humidity is 100 %. Water can lead to corrosion.



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