

# Comparison in case of Dust



## ATEX

**AT**mosphere **EX**plosive  
 Manufacture need to follow Directive [2014/34/UE](#)  
 Normative [IEC/EN 60079-0\\_2017](#)



## ACD

**A**pliance for **C**ombustible **D**ust  
 Manufacture need to follow Directive [2006/42/CE](#)  
 Design and certification follows the [IEC \(EN\) 60335-2-69\\_2021](#)

User environment

**Dirty/dusty environment with risk of dust cloud**  
 Risk analyses from customer mandatory EN 99/92



**Clean environment without dust cloud.**  
 No Risk analyses from customer required.



Material to vacuum

Combustible dust (IFA-list)  
**Conductive dust if machine IP6x protected**

Combustible dust (IFA-list)

Considerations

Need to **exclude any introduction of risk to the environment** and avoid ignition source.

Need to be grounded and bounded to avoid sparks by electrostatic energy **inside the container and the accessories.**

Product design

Filter tested and **antistatic**, use of spark reducing material on impact, material **construction parts grounded**. Antistatic wheels, **electric components IP and ATEX certified**. Machine is completely certified only when marked "tb/tc" including enclosure of electrical protection concept.

Filter always **M-class category** and **antistatic**, use of spark reducing material on impact, material construction parts grounded, electric **components industrial standard**.

### VHS010 – 011 LC Z22 EXA

**Filtered** motor head with **brushless motor**

Filter chamber electrically **grounded and bounded**

Stainless Steel construction for impact reduction

Certification and **risk assessment from Accessories to Plug**. Unique Nilfisk EXA certification for Accessories available.



### VHS010 – 011 LC ACD

**Industrial Standard** motor head

Filter chamber electrically **grounded and bounded**

Stainless Steel construction for impact reduction

Mandatory **accessories in antistatic/ conductive**



Main applications

Risk qualified, protected working environment where introduction of machine may increase the risk. Possible presence of combustible dust cloud in the atmosphere of environment.

Any non-qualified and clean environment. I.e. Food, Pharma, Manufacturing. Accumulation of limited combustible dust settled on surfaces.