

# ROLEC Gehäuse-Systeme GmbH

## Information concerning system of protection IP69K

### Testing criteria for system of protection IP69K according to DIN 40050-9:1993

#### Test conditions for 1<sup>st</sup> Characteristic number (6)

Vacuum test with dust/air mixture

- Vacuum  $\leq 2\text{kPa}$  (20mbar)
- Testing time 8 h
- Testing dust 50% lime powder and 50% flue dust
- Grain size distribution 33 weight percentage  $\leq 32\mu\text{m}$   
67 weight percentage  $> 32\mu\text{m}$ , but  $\leq 250\mu\text{m}$

#### Test conditions for 2<sup>nd</sup> Characteristic number (9K)

System of protection test against penetration of water

- Testing device high pressure water jet / fan nozzle
- Spraying angle  $0^\circ\text{-}30^\circ\text{-}60^\circ\text{-}90^\circ$
- Distance 100 – 150mm – on turntable – rpm  $(5 \pm 1)$  1/min
- Water flow 14 – 16l/min  $\pm 5\%$
- Water pressure 8000 – 10000 kPa (80 – 100bar)
- Water temperature  $80^\circ \pm 5^\circ\text{C}$
- Testing time 30 sec. for every position

#### Definition of the first characteristic number (6)

Characteristic number	Short description	Definition
6	Dust tight	No dust penetration

#### Definition of the second characteristic number (9K)

Characteristic number	Short description	Definition
9K	Protected against water penetration during cleansing with high pressure jet / steam jet	A water jet being squirted from any direction under very high pressure against the enclosure may cause no damage.

