Moisture detectors are used to alarm when damaging moisture breakthrough occurs in gas conditioning systems. These detectors are placed into the gas stream and react to low moisture content and do not require the presence of condensate droplets. After the high moisture is removed, the detectors are dried by the gas stream and are self-resetting and maintenance-free.

The detectors can be used with the AGF-filters or with adapters type G or S.

All models provide automatic broken wire detection.

Moisture Detector Controllers
Model ER-145/A/Ex with intrinsically safe input and long cables. One FF-3-N can be connected. Moisture detection or a broken wire are shown by LED indicators.

Model FF-19 for 19"-support. Same specifications as Model FF-HM below.

Model FF-HM for rail mounting:
- Connection of up to two Model FF-3-N moisture detectors in parallel or one detector Model FF-3-N or FF-40.
- Potential-free outputs for moisture detection and broken wire in fail-safe mode.
- LEDs for power, moisture and broken wire
- Configurable lock mode: detection may be locked or mono-stable. The reset in the locked mode may be done by the switch or external input.

Models FF-x-U for wall mounting:
- These models have mono-stable outputs. Power, moisture detection and broken wire are shown by LEDs.
  - FF-1-U: For connection of one or two FF-1 units. The controller has two summarized outputs.
  - FF-3-U: For connection of one FF-3-N or FF-40. One summarized output for moisture and broken wire, one output for broken wire.
  - FF-3-U-2: For connection of two FF-3-N units in one housing.
**Technical Data**

**Moisture Detector FF-3-N**
- Material: PVDF, 1.4571, Epoxy PE, 1.4571, Epoxy 1.4576, PTFE 1.4576
- Standard cable length: 4 m, 4 x 0.34² 4 m, 2 x 0.25²
- Operating pressure max.: 2 bar 40 bar
- Operating temperature max.: 3 °C to 50 °C 3 °C to 50 °C
- Broken wire detection: yes yes

**Adapters**
- Material Type G: PVDF
- Type S: 1.4571

**Controllers**
- **Model**
  - **FF-HM-230**
    - Power supply: 230 / 115 V AC 50/60 Hz
    - Output max.: 230 V / 2 A 24 V DC/AC 2 A
    - Protection class: IP 40
    - Ex-classification: -
    - Max. cable length: 4 m / 13 ft
    - Dimensions (WxHxD) mm: 70 x 75 x 109
    - Port: Terminals
  - **FF-HM-24**
    - Power supply: 24 V DC ±10%
    - Output max.: 24 V DC/AC 2 A
    - Protection class: IP 40
    - Ex-classification: -
    - Max. cable length: 4 m / 13 ft
    - Dimensions (WxHxD) mm: 70 x 75 x 109
    - Port: Terminals
  - **FF-19**
    - Power supply: 230 / 115 V AC 50/60 Hz
    - Output max.: 24 V DC/AC 2 A
    - Protection class: IP 20
    - Ex-classification: -
    - Max. cable length: 4 m / 13 ft
    - Dimensions (WxHxD) mm: 8D 3H 170
    - Port: Strip DIN 41612
  - **FF-x-U**
    - Power supply: 230 V or 115 V AC 48…62 Hz
    - Output max.: 24 V DC/AC 2 A
    - Protection class: IP 20
    - Ex-classification: -
    - Max. cable length: 4 m / 13 ft
    - Dimensions (WxHxD) mm: 70 x 180 x 81
    - Port: Terminals
  - **ER-145/A/Ex**
    - Power supply: 230 V or 115 V AC
    - Output max.: 24 V DC/AC 2 A
    - Protection class: IP 20
    - Ex-classification: II(1)G [Ex ia Ga] IIC
    - Max. cable length: 70 m / 230 ft
    - Dimensions (WxHxD) mm: 94 x 180 x 81
    - Port: Terminals

**Please indicate with order**

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<th>Description</th>
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<th>Description</th>
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<td>Moisture detector FF-3-N (without cable)</td>
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<td>Controller FF-HM-230</td>
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<td>Moisture detector FF-3-N (with cable)</td>
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<td>Controller FF-HM-24</td>
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<td>Moisture detector FF-40</td>
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<td>Controller FF-1-U</td>
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<td>Controller FF-19</td>
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We reserve the right to amend specification.