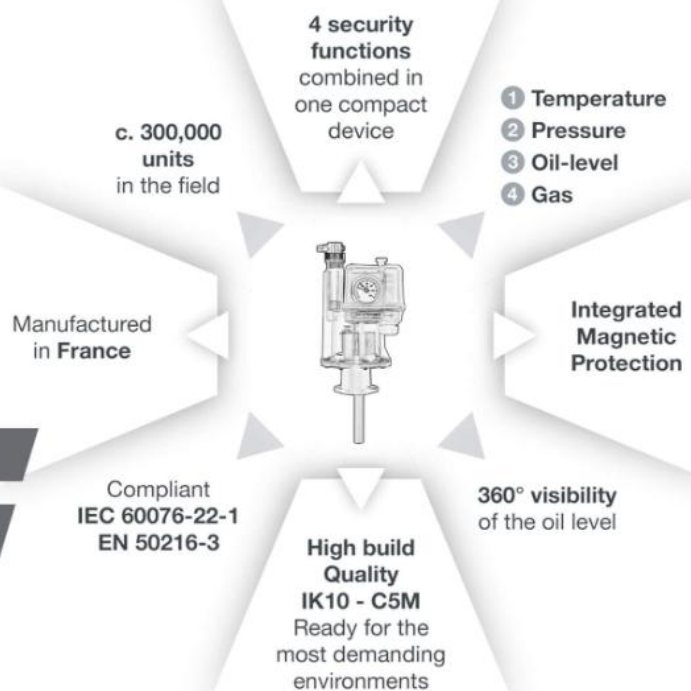




D Detection
M Measurement
C Control
R Relay



The DMCR – Detection, Measurement and Control Relay – is a superior safety solution for hermetically-sealed oil-filled distribution transformers which combines four different safety functions into a single, compact and solid device. The DMCR continuously monitors the following oil parameters inside the transformer tank : pressure, temperature levels as well as gassing or dielectric level decrease.

The first version of the DMCR brought significant technical innovations compared to alternative security solutions available on the market. IDEF SYSTEMES regularly improves the DMCR design based on user feedback.

The DMCR relay has two design features which are unique to our product:

- **360° Dielectric Level Visibility:** the DMCR casing is a transparent reservoir which enables visibility of the dielectric level from all directions
- **Integrated Magnetic Protection:** the magnet which triggers the dielectric level contact is ring-shaped and shields the reed switch from the influence of any external magnetic field up to 25mT.

The DMCR is designed and manufactured by IDEF SYSTEMES in France in accordance with the Standard IEC 60076-22-1 / EN 50216-3. The DMCR is rated IK 10 and IP 56. The DMCR is equipped with a oil sampling system located on the top of the relay which enables gas and dielectric sampling and filling. The relay is supplied with a complete fixing kit. Depending on customer requirements, IDEF SYSTEMES can offer a number of different options to the DMCR relay. Please do not hesitate to contact us with any specific enquiry.

TEMPERATURE

- **Two Adjustable Thermostat Switches** with changeover contact for over temperature detection. Both the primary and secondary temperature thresholds are factory set at customer requirements within a 30°C to 120°C range.
- **One Thermometer** with maximum temperature indicator provides visual temperature information.

DIELECTRIC LEVEL

- **A Reed Magnetic Switch** with changeover contact is triggered when a dielectric-level decrease of over 170cm³ is achieved.
- **An integrated magnetic protection** shields the Reed Switch from any external magnetic field interference.

PRESSURE

- **One Adjustable Pressure Switch** with changeover contact. The tripping overpressure threshold of the pressure switch is factory set at customer requirement within a 100 mbar to 500 mbar.

PRESENCE OF GAS

- Gassing or dielectric-level decrease is initially visible through the **lowering of a small float**.
- This is followed by the **lowering of the main float, visible all-round at 360°**, which triggers the Reed Switch.