

# eFUSE

## The remote controllable switchgear



### Key functionalities

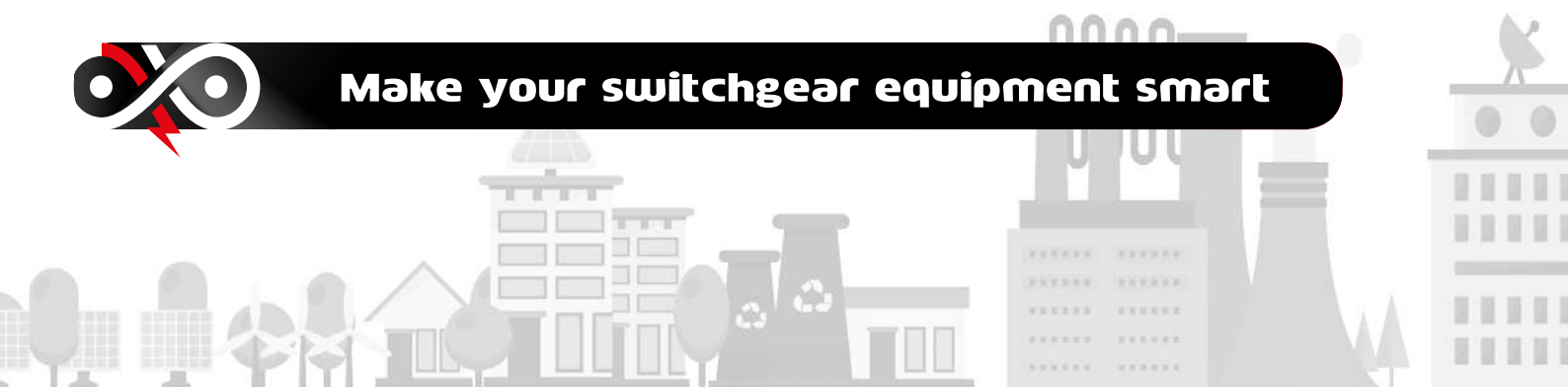
- **A remote communication smart switch** in 2 separate DIN mount modules
- **3 switching module functional options** available - **Circuit Breaker, Mains Switch, Residual Current Circuit Breaker**
- **Multiple** standardized **communication options** available - **WiFi, GPRS, Z-Wave, Ethernet**
- **Remote or local switch control** and **monitoring the device ON/OFF status** with many special features like **history log**, periodic **self-check mechanism**, **auto-reclosure**, ...
- **Support for a wide variety of switchgear equipment providers** on the market
- **Enabled through the IoT web based eFUSE-VIZOR server platform** with multiple supervision and control functions
- Accessible through **standardized web MQTT services (eFUSE-VISION)** to perform supervision and control function from **3rd party applications**
- Smart mobile application available for configuration, supervision and control – via the **eFUSE-MOBILE free app portfolio for Android/iOS/Windows Phone**

## Key functionalities

- **A remote communication smart switch** in 2 separate DIN mount modules (communication module and switching module electrically separated)
- **3 switching module functional options** available - **Circuit Breaker, Mains Switch, Residual Current Circuit Breaker**
- **Multiple** standardized **communication options** available - **WiFi, GSM/GPRS, Z-Wave, ethernet** providing fast and secure access to the eFUSE device
- **Remote or local switch control** and **monitoring the device ON/OFF status**
- **Support for a wide variety of switchgear equipment providers** on the market - control of the switching module is done through a mechanical lever - universal handle matchable with different producers available as option
- **Status alarm signal broadcasted** during every switchover event
- **Many intelligent functions** available such as real-time alarms, history log, remote control, local control, single, repeated, delayed self recovery (self reclosing) actions, remote or local firmware upgrade function and many more ...
- **Different control modes** available (manual no-control over communication, automatic-full control over communication, standalone-predefined mode, configuration mode)
- **Enabled through the IoT web based eFUSE-VIZOR server** platform enabling status supervision, direct control, energy management, load control, security supervision and much more ...
- Accessible through **standardized web MQTT services (eFUSE-VISION)** to perform supervision and control function from 3rd party applications
- **Easy integration of the device into the IoT systems.** Many different predeveloped solutions available for the customer, different PLC project solutions, simple SCADA examples, ...
- Smart mobile application available for configuration, supervision and control – **via the eFUSE-MOBILE free app portfolio for Android/iOS/Windows Phone**
- **Scalable design** allowing for currents from 32A to 63A
- **LCD display** on the communication unit providing crucial information
- Used in **many different environments** such as telecommunication systems, traffic systems, medical systems, buildings, smart-grids, ...
- A **certified product for EU and other markets** (KEMA, TUV, CE, SEMKO)



**Make your switchgear equipment smart**



# System building blocks

## Communication module (EHUB) which includes:

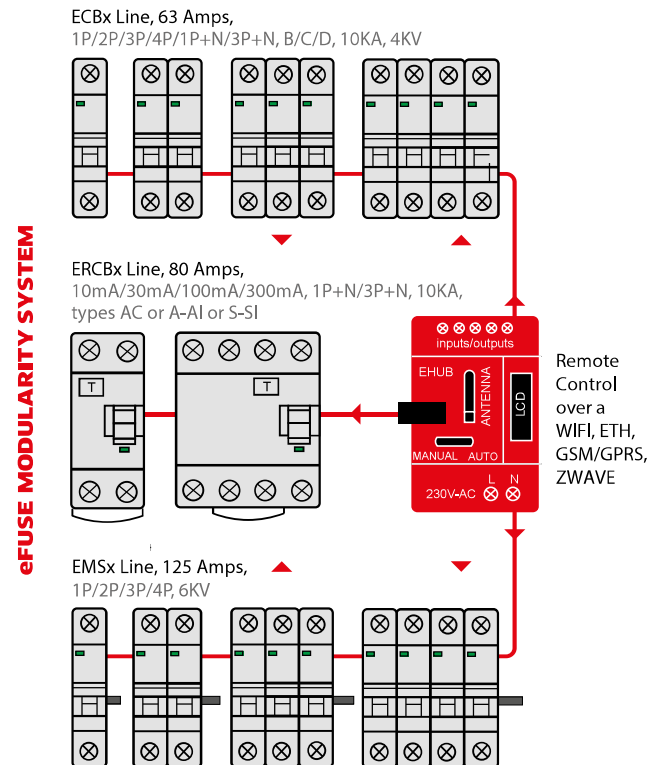
- Motor drive unit
- Communication board (WiFi, GPRS, ZWAVE, ethernet)
- DC motor
- LCD status screen

## Switchgear element(s)

- Miniature Circuit Breaker-MCB (ECBxLine)
- Residual Current Circuit Breaker-RCCB (ERCbXLine)
- Mains Switch-MCCB (EMSxLine)

## Remote control

- Smart phone eFUSE-Mobile app
- eFUSE-VIZOR IoT server platform
- MQTT web services from 3rd party systems



# Technical Data

Model/Type	ERCb Line	EMS Line	ECB Line
Standards	IEC/EN61008	IEC/EN60947-3	IEC/EN60898-1 IEC/EN60947-2
Number of Poles	1P+N/3P+N	1P/2P/3P/4P/1P+N/3P+N	
Rated Current		25A, 40A, 63A, 80A	
Sensitivity	30mA, 100mA, 300mA	-	-
Surge Circuit Current Withstand Capacity	3kA	-	3kA
Short Circuit Current Withstand Capacity	6kA/10kA	-	6kA/10kA
Rated impulse withstand voltage	-	-	4kV/6kVDC
Rated Voltage		230/240VAC	
Frequency		50/60Hz	
Insulation Voltage		2500V/min	
Tripping time	1sec	-	1sec
Operation status indication	Green=Off (safe-no voltage), Red=On(danger-voltage on)		
Operating temperature		-25 ÷ 40°C	
Storage temperature		-40 ÷ 70°C	
Protection degree		Terminal IP 20, Housing IP 40	
Tropicalisation relative humidity		95% at 55°C	
Mounting type (EN60715)		DIN rail 35mm	
Terminal connection		25mm <sup>2</sup>	

# Typical usage

## Area of usage:

Telecommunication systems, Traffic systems, Medical systems, Smart buildings/ households, Low voltage transformer stations, Smart-grid applications etc.

