

# The Next Step in Earth Fault Monitoring

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Robbie Mewton

Technical Sales Manager - Marine

15

International  
Bender Group  
Members

70

International  
reps

> 1000

Employees on  
four continents

170

Million Euro  
turnover (2020)



Bender UK is a Bender Group Company  
established since 1946

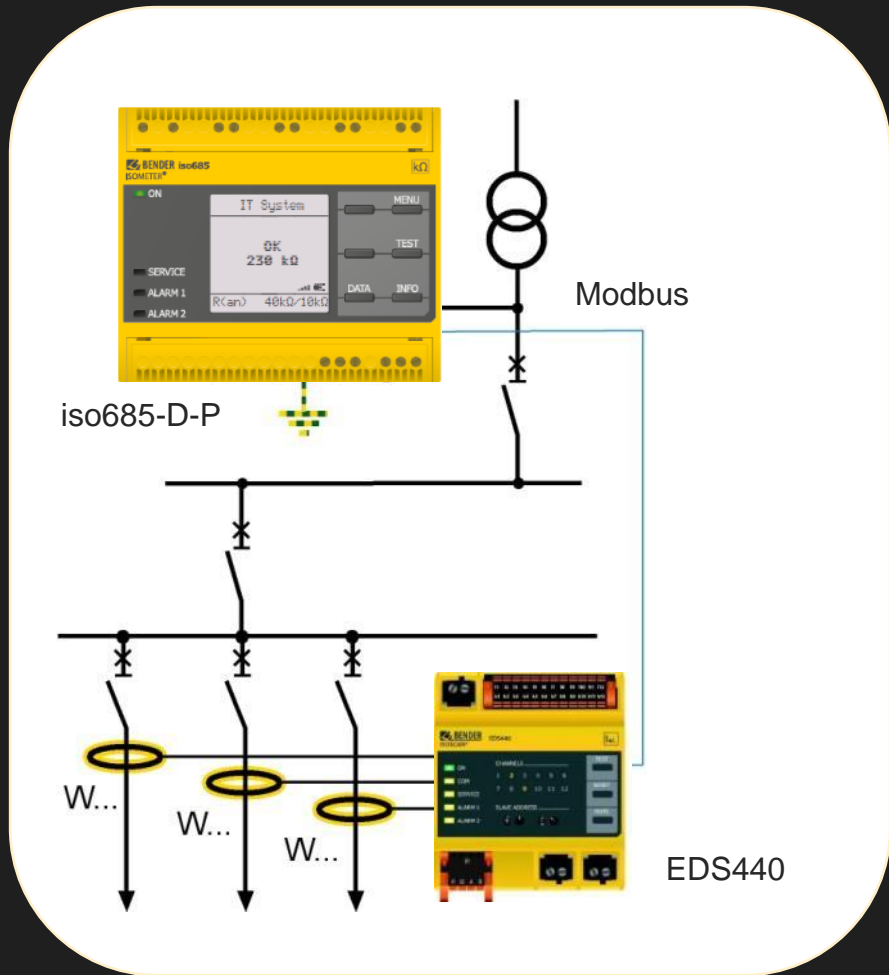
- **Experts** in electrical safety
- Design, consultation, supply, manufacture, installation, commission, tech. support & service
- Remote monitoring & reporting capability
- **85+ employees** - office & remote
  - Sales & marketing, engineering, project management, service, and administration
- 2021 turnover - **>£25mill**
- UK & Ireland **field-based** engineering team
- **24/7, 365** technical support, call-out, service & repair
- **2022** – Bender UK 25<sup>th</sup> Anniversary

# The existing limitation

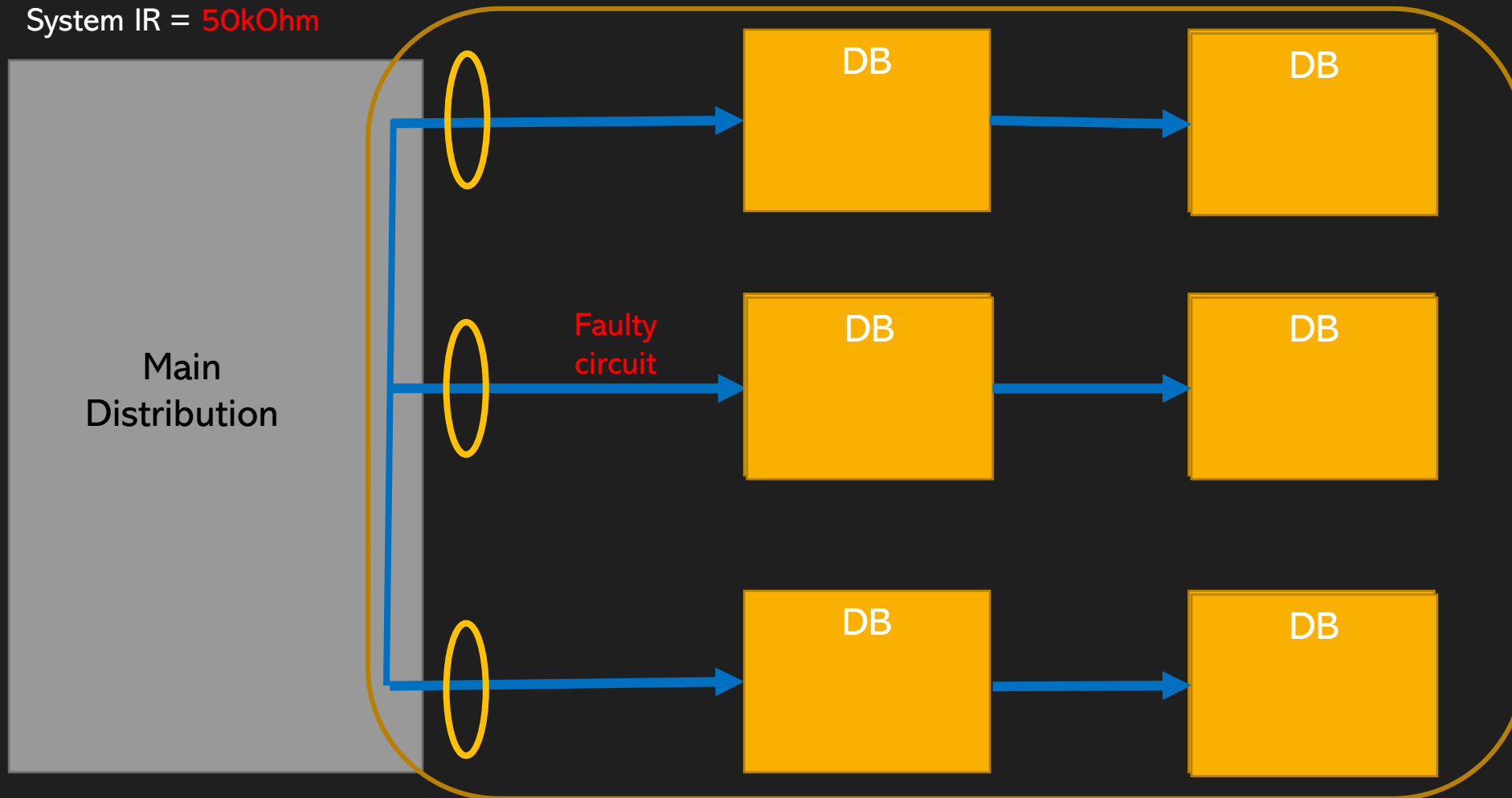
Overall system IR

# Overall system IR

- Active insulation monitoring provides an overall IR
- EDS technology can locate the direction of earth fault
- Unable to provide an IR value for distinct circuits



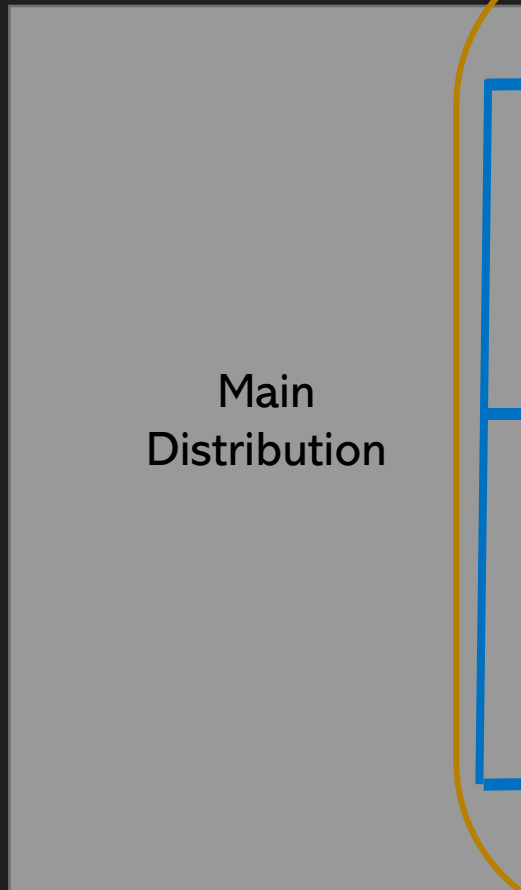
# Overall system IR



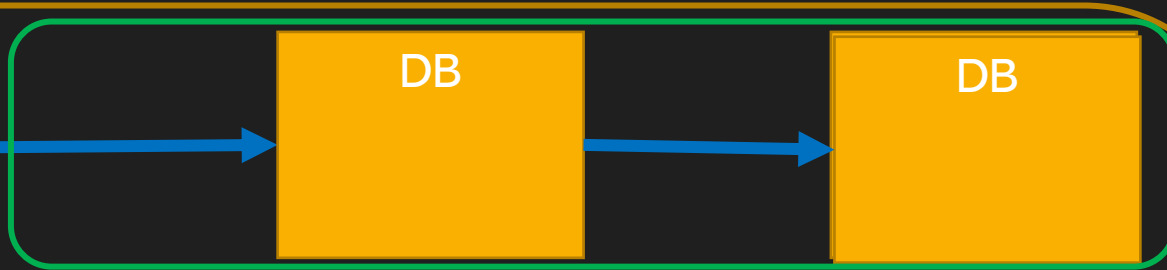
# Sectionalised Insulation Monitoring



System IR = 50kOhm  
System Ce = 30uF



Main  
Distribution

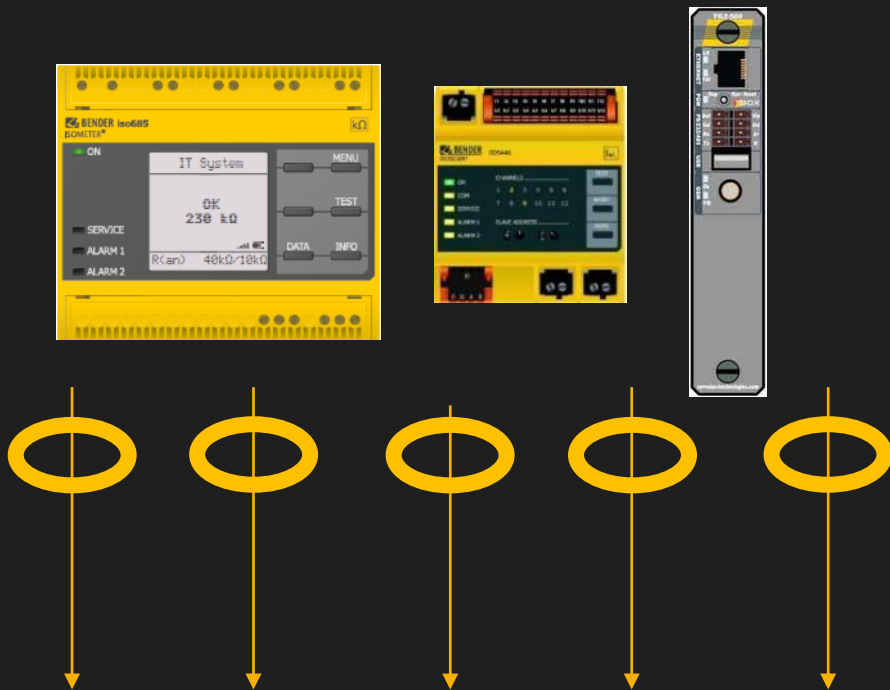


Circuit IR = 600kOhm  
Circuit Ce = 10uF

Circuit IR = 60kOhm  
Circuit Ce = 10uF

Circuit IR = 600kOhm  
Circuit Ce = 10uF

# SIM solution summary



- Individual out-going circuit IR measurement
- Existing installations can easily be upgraded
- Technology is already within iso685 and EDS440
- Type B CT is used in place of traditional Type A CT



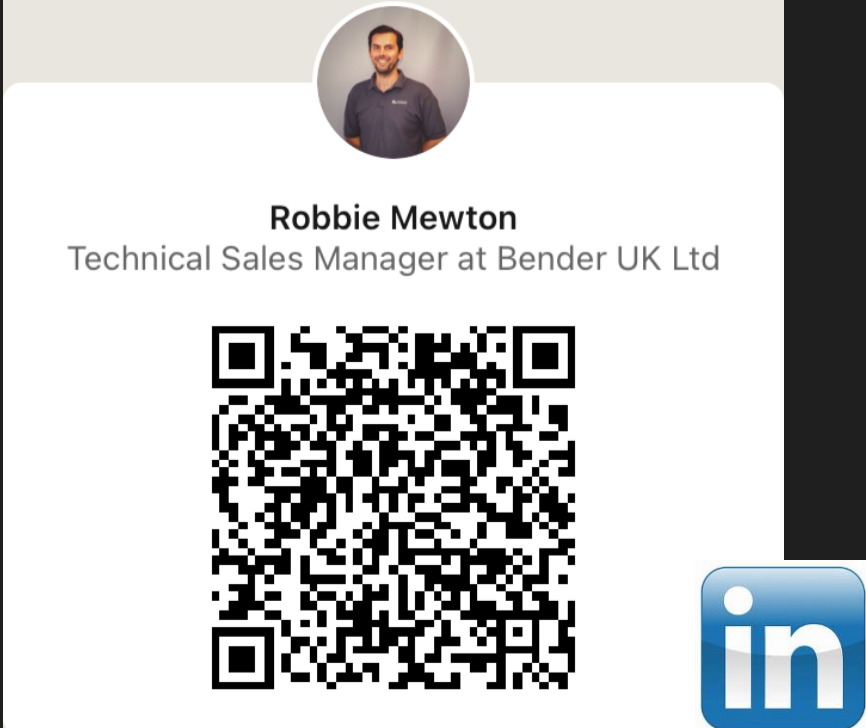
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A LinkedIn profile card for Robbie Mewton. At the top is a circular profile picture of a man in a dark blue polo shirt. Below the photo, the name "Robbie Mewton" is displayed in bold, followed by "Technical Sales Manager at Bender UK Ltd" in a smaller font. A large QR code is centered below the text. In the bottom right corner of the card is the LinkedIn logo, which consists of a blue square with rounded corners and the white lowercase letters "in".