

## Remote Assistance for electrical systems - RAISE

Bringing the wisdom and experience of ABB experts to you when and where you need it most through the power of augmented reality

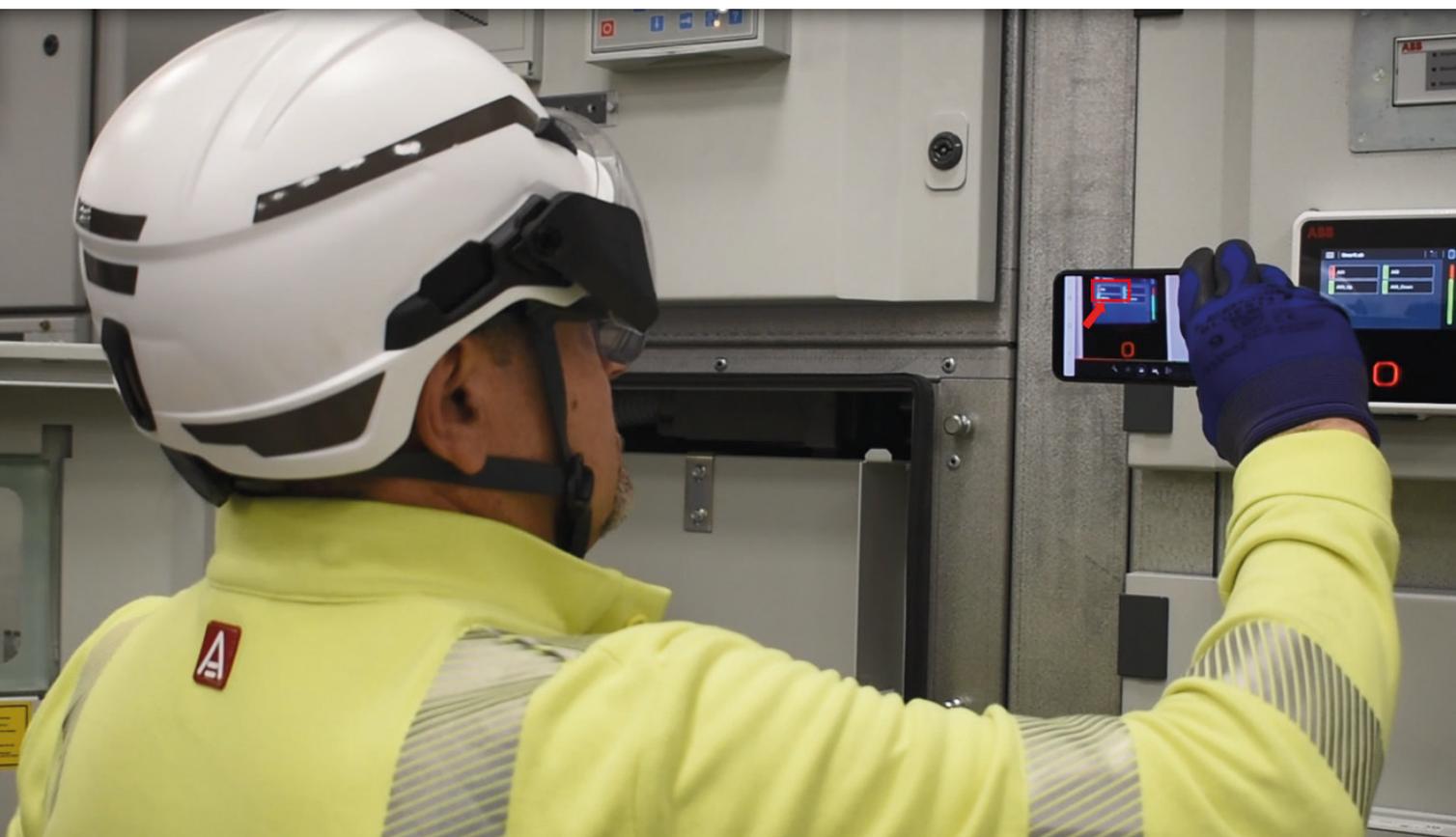


ABB is embracing the power of augmented reality (AR) to bring significant improvements to field service.

Through the remote support of an ABB Expert, this innovative solution simplifies service assistance by reducing downtime, increasing equipment effectiveness and improving safety.

ABB Remote Assistance for electrical systems (RAISE) brings together Field Operators and ABB Experts in different locations, offering significant improvements to field service.

The solution consists of a video connection that improves interaction by providing shared views for instruction and guidance. It enables ABB Experts to guide technicians through text chat, placing augmented reality instructions into their field of view and sharing images, videos and documents on their own devices such as smartphones, tablets or supported wearables. RAISE can be included into ABB Service Agreements such as Power Care - to access the 360° ABB service support.

**Remote Assistance for electrical systems provides:**



**Continuous Operations**

- Speed up maintenance with a direct connection with an ABB Expert from remote
- Improve quality of repairs and extend assets life thanks to ABB Expert support
- Improve first time fix rate thanks to prior knowledge of conditions
- Reduce downtime by resolving issues more quickly
- Reduce costs associated with ABB Expert on site trips



**Ease of use**

Field personnel can easily access the RAISE user friendly service solution to get in direct contact with an ABB Expert. Collaboration between ABB Experts and Field Operators is facilitated via augmented reality technology.



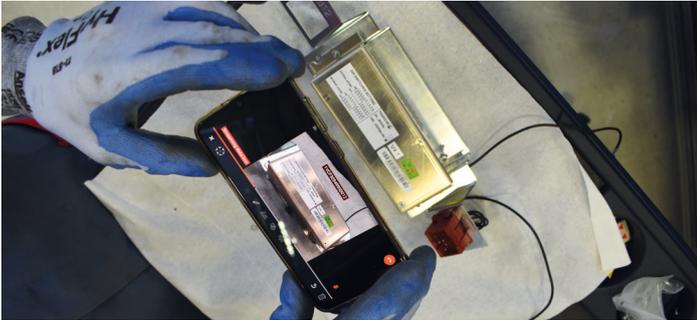
**Sustainability**

Reduced CO2 environmental impact resulting from limited travel requirements.



With the AR technology ABB Expert remotely guides the field operator, in real-time, providing support for:

- Repair procedures
- Guided maintenance steps
- Information on equipment operation and use
- Identification of the correct spare parts to be replaced
- Analysis of monitoring and diagnostic alarms/warnings and results
- Installation and commissioning activities
- Trouble shooting



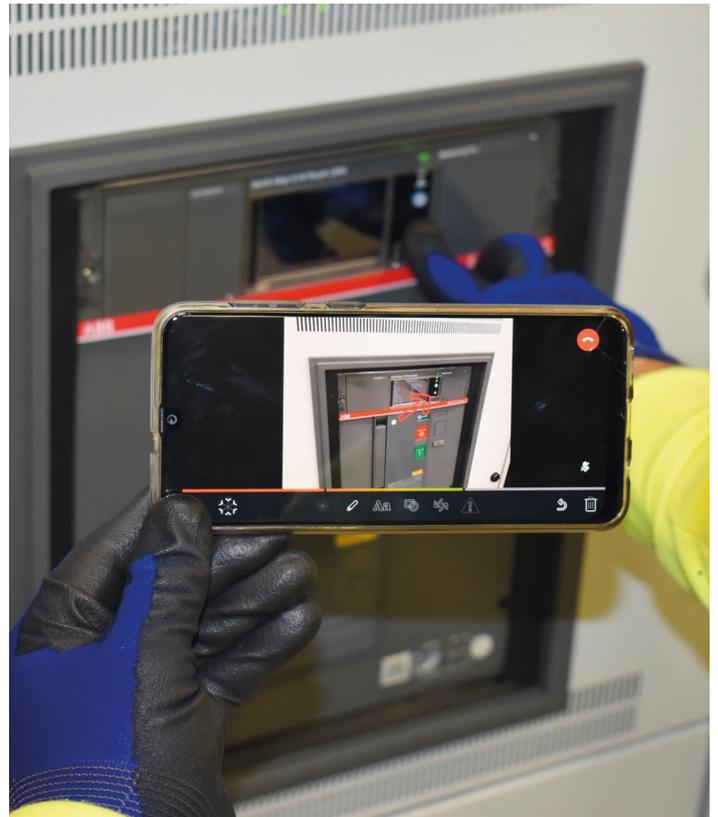
On site field operator's view



ABB Expert's view

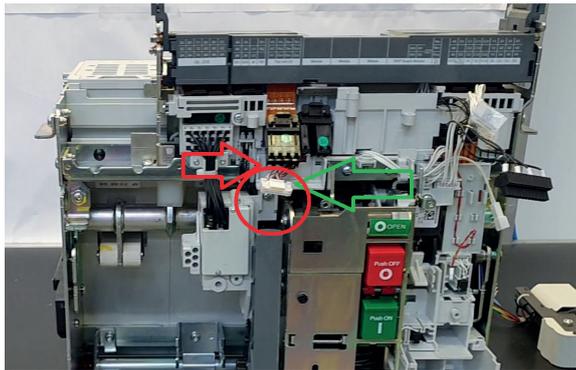
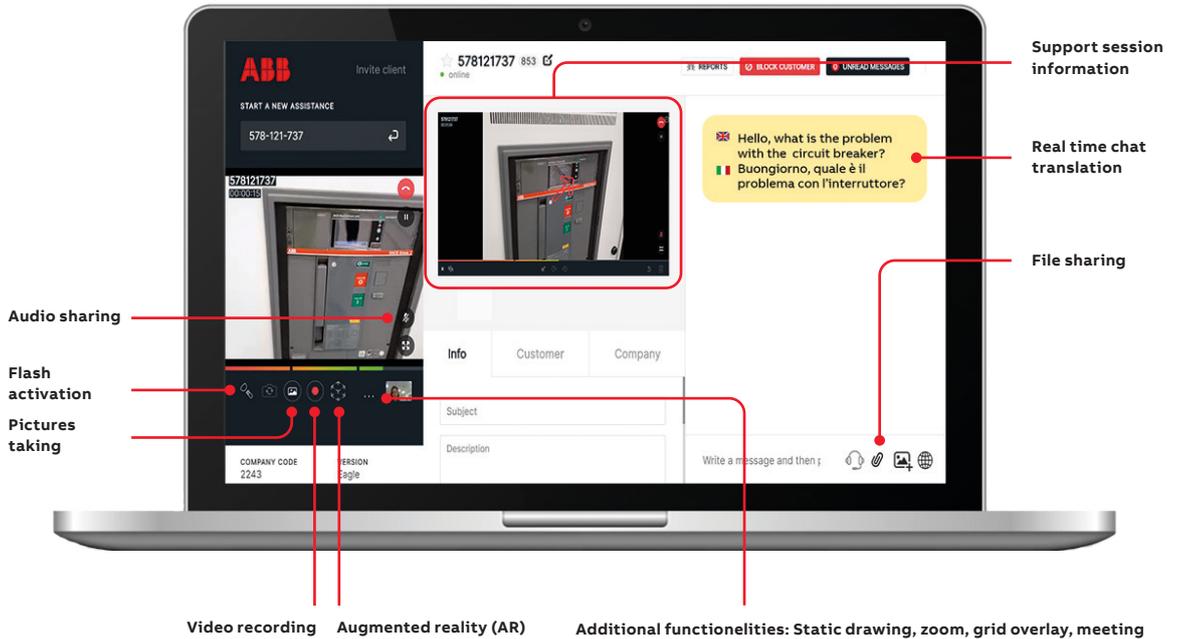


With smartphone holder



With smartphone

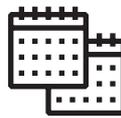
## Functionalities



The ABB Expert drives the support session, choosing among the functionalities which better help him to remotely guide the field operator.

Both ABB Expert and field operator can use the Augmented Reality functionality, adding digital overlays (e.g. arrows, symbols) to the real-time video stream and in this way facilitating interactions and understanding between the two.

### RAISE connection steps



1. Contact your ABB Electrification Service representative to schedule a remote support session

2. Video call with an ABB Expert: experience an active interaction through Augmented Reality (AR) with a smartphone or smartglasses

3. Get professional expert support from ABB