# **ARM 300**

# Arc stabilisation filter for cable fault pre-location with the ARM-Method



- Reliable arc stabilisation
- Easy operation
- For portable use or test van installation

## **DESCRIPTION**

High resistance and intermittent faults can be easily located with the ARM-Method. Typically, the fault resistance is too high for direct measurement with a TDR. Therefore a surge generator in combination with the ARM 300 creates a stable low resistance arc at the fault, which the TDR Teleflex may then locate, just like a low resistance fault. The ARM 300 is an accessory for surge generators and TDRs and also connects the Teleflex measurement pulses to the faulty cable. The Teleflex shows a comparison of the traces with and without the arc.

It is an easy, clear and precise method, making it the most commonly used fault locating procedure today.

This compact and easy to use Arc stabilisation filter is suitable for use as a modular system, or it can be installed in a cable test van. The ARM 300 is an effective aid to prelocate the majority of cable faults quickly and accurately and is suitable for use by operators of all experience levels.

Firstly, the Teleflex TDR sends a low voltage reflection measurement through the cable, ignoring the high resistance fault. The result is then stored for reference. Secondly, the energy from the surge generator is released into the faulty cable, passing through the ARM 300. This surge causes a flashover at the weak spot in the cable. Simultaneously, the ARM 300 activates the TDR and automatically couples a standard TDR reflection measurement onto the HV surge. The TDR now captures an image of the low resistance arc at the weak spot, "seeing" it as a short circuit. This image is stored as a fault-picture and compared with the previously measured reference picture. The fault is located at the point where the two traces separate, and the TDR Teleflex will indicate the distance to the fault.

The ARM 300 features a switch that enables the operator to bypass the ARM filter after prelocation is complete. The surge generator is immediately ready for acoustic fault pinpointing without the need to disconnect the ARM 300.

### **TECHNICAL DATA\***

Recommended surgeSWG 1750-C, SWG 1750-CD,generatorsSWG 1750-C-4 and othersRecommendedTeleflex VX, Teleflex SX

reflectometers (TDR's)

**Arc duration**  $\geq 5.0 \text{ ms at } 8 \text{ kV}$ 

≥ 1.0 ms at 32 kV

**Dimensions (W x H x D)** 520 x 270 x 455 mm

Weight 18.5 kg

### **FUNCTIONS**

- Compact design
- Easy operation
- Precise triggering for best TDR results

ORDERING INFORMATION	
Product	Order no.
Arc stabilisation instrument 32 kV inc. ARM 300,	
set of cables, HV connection lead 4 m	813274

\* We reserve the right to make technical changes.

#### **SALES OFFICES**

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#### ARM300\_DS\_EN\_V01

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