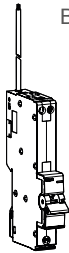# :hager

6LE007925A.e

BS EN 60898-1 (GB)
BS EN 62606

ARMxxxU
MCB with dangerous arc detection

ARM906U
MCB with dangerous arc detection
1M 6A B 6kA

ARM910U
MCB with dangerous arc detection
1M 10A B 6kA

ARM916U
MCB with dangerous arc detection
1M 16A B 6kA

ARM920U
MCB with dangerous arc detection
1M 20A B 6kA

ARM925U
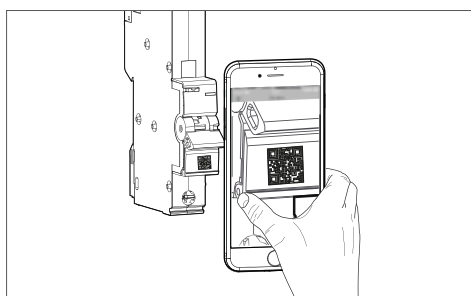MCB with dangerous arc detection
1M 25A B 6kA

ARM932U
MCB with dangerous arc detection
1M 32A B 6kA

ⓘ Information

For more Information, scan the QR-Code on the product.

For further technical information and for installation in Hager Distribution Board, review the Installation Guidance Notes available in the products download section on Hager website.

Safety notice

The AFDD (Arc Fault Detection Device) may only be installed, connected and serviced by a competent electrician.
Before mounting, the AFDD must be checked for external damage. If any damage or other defect is found, the device must not be mounted.
The national regulations, safety regulations and installation standards BS 7671 must be observed.
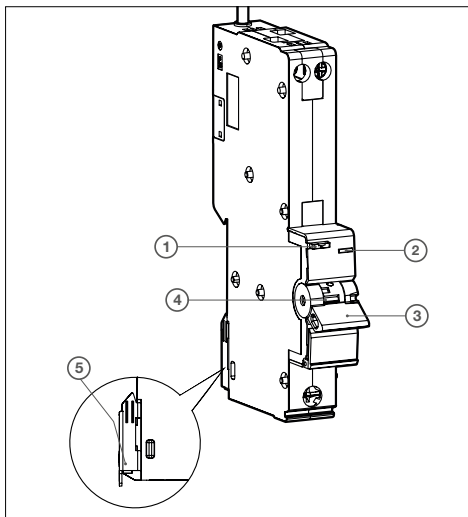
Design and layout of the device

Fig 1: Layout of the device MCB-AFDD

① Test button
② LED status display
③ Handle
④ Yellow flag
⑤ Mounting metal DIN rail clip

Function

MCB-AFD in 1 module ARMxxxU is a single device consisting of a miniature circuit breaker (MCB) unit with integrated Arc fault detection (AFD) unit (2 in 1).

The AFDD mitigates the risk of a fire in the final electrical circuits of a fixed installation due to arcing fault currents, which under certain conditions present a fire ignition risk due to dangerous arc fault.

Tools

		LINE	LOAD
⊏	(mm²)	1 to 16 ▢	1 to 25 ▢
⊏⟷		12 mm	10 mm
⊡		✱ PZ2	✱ PZ2
✎		3,5 Nm	2,4 Nm

Fig 2: Tools

Information for electricians

Installation and electrical connection

⚠ DANGER !

Electric shock when touching live parts!

Electric shock can lead to death!

● Before commencing work ensure suitable isolation procedures have been followed.
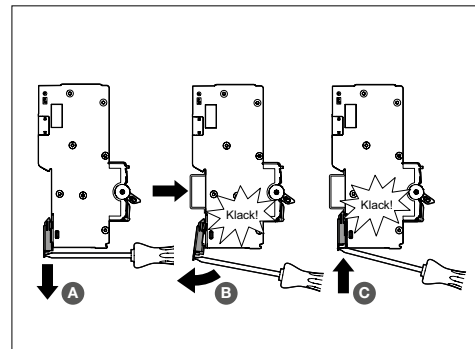
Mount device

Fig 3: Mounting the MCB-AFDD

● Open the rail clip.
● Insert the AFDD until it is connected.
● Press the metal clamp down.
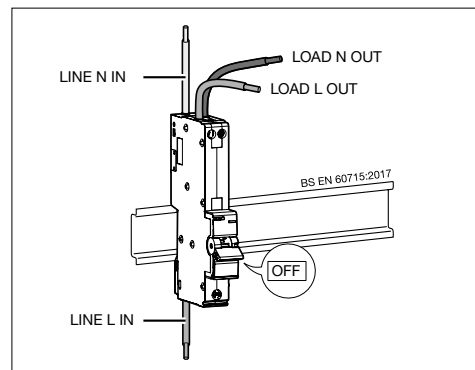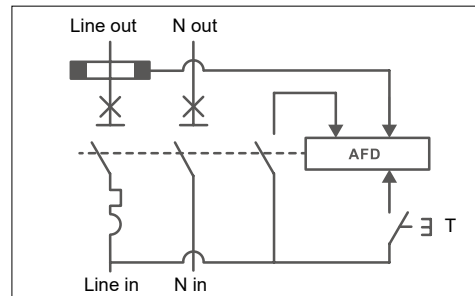   The AFDD is fixed on the rail.

Connect device

Fig 4: Connect the MCB-AFDD

Wiring diagram

Fig 5: Wiring diagram

Disassembly

1

2

3

Testing

The test button **T** is used for testing the device. The AFDD should trip following a short press of the test button. Following this the device can be switched on again.

Test device

⚠️ **ATTENTION !**

Insulation tests at 500V DC may damage this product!

Do this test only when the handle is off.

If the handle is OFF you don't have to disconnect the cable.

ℹ️ **Notice**

– The AFDD function must be tested after installation. The supply voltage must be present.

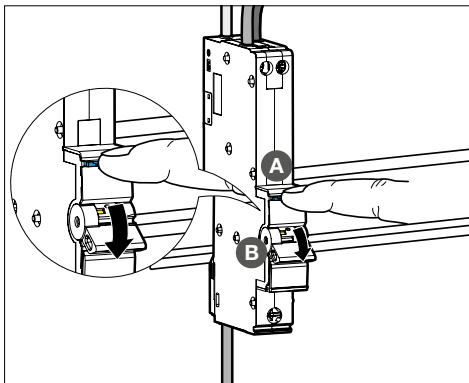– The MCB- AFDD must trip within one second. If the device does not trip, it must be replaced by an competent electrician.
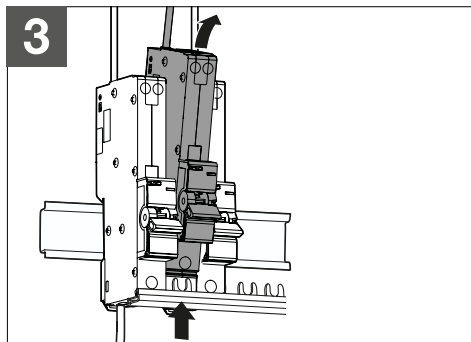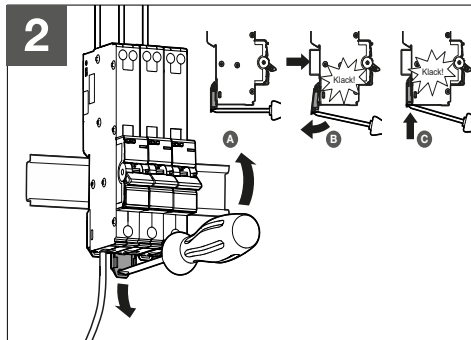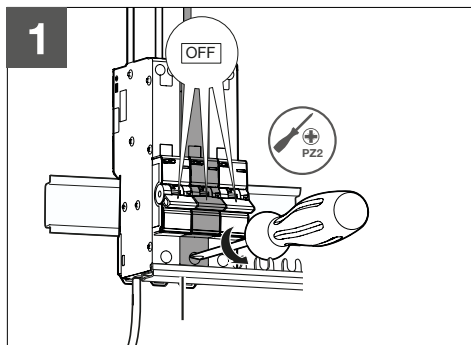

Fig 6: Testing the device

● Short press the test button **T**.

The MCB-AFDD tripped, i.e. the circuit must switch off.

ℹ️ **Notice**

If the AFDD does not trip, check the status of the LED (table 1).
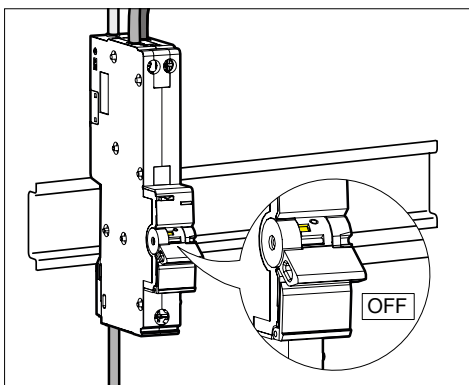
LED status for troubleshooting

Fig 7: Handle position during testing: OFF

The handle is in the **OFF** position.

● Keep the test button **T** pressed, to open the color code.

INDICATOR		STATE
Steady GREEN		AFDD is ON
LED is OFF		AFDD is OFF
Blinking RED/GREEN + yellow flag absence		AFDD manual tripped
Blinking RED/GREEN + yellow flag presence		Overload or Short-Circuit
Blinking RED/YELLOW		Series arc fault
Blinking RED		Parallel arc fault
Steady YELLOW		Overvoltage
Blinking YELLOW		Internal failure

Table 1: LED status display for a standard troubleshooting

ℹ️ **Notice**

In case of an internal failure, replace the AFDD and contact the Hager technical support.

Connection to mobilephone

A mobile phone (iphone, operating with IOS14 or above, or Android, operating with Android 7 or above) is required to use those functions.

ℹ️ **Notice**

Using the connected functions with your mobile phone requires to activate network functions (Bluetooth, WiFi) and to accept the application terms of use & privacy notice. Only bluetooth 4.2 or above is supported.

● Install the Hager Pilot mobile application on your mobilephone.

● Follow further instructions on the mobile application.
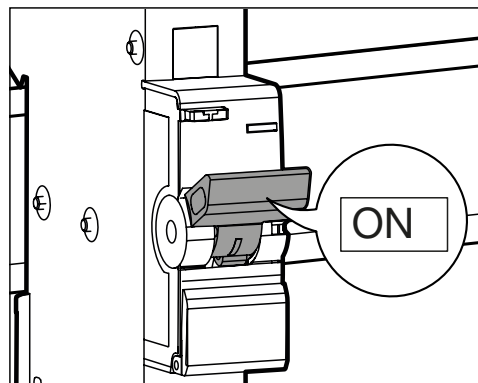
LED status for Bluetooth® connection

Fig 8: Handle during testing: ON

The handle is in the **ON** position.

● Press the test button **T** for **5 seconds** to activate bluetooth mode.

INDICATOR		STATE
	Blinking BLUE	Bluetooth enabled
	Steady BLUE	Bluetooth connected
	Blinking RED/BLUE	Update mode (only overload and short-circuit protection in this mode)
	Blinking BLUE/YELLOW	Trace mode (use for technical Hager support)
	Blinking (BLUE/GREEN)	Firmware update confirmation requested

Table 2: LED status display for Bluetooth® connection

EU and UKCA Declaration

Hereby, Hager Electro SAS , declares that the AFDD products are in compliance with SI 2017/1206 Radio Equipment Regulations 2017 and with radio emission directive 2014/53/EU

– Operating frequency band 2.4 to 2.483 GHz.

– Maximum radio frequency power 10mW.

Declarations of conformity can be downloaded on www.hager.com

---