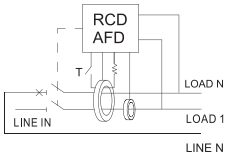
FuseBox 2024 MINI AFDD/RCBO
6KA 1P+N 6-40A TECHNICAL DATA

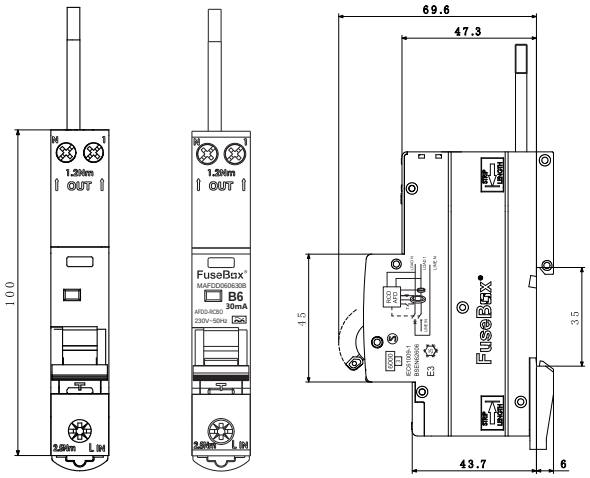
FuseBox®

	AFDD_RCBO (ARC FAULT DETECTION DEVICE)						
RATING (A)	6	10	16	20	25	32	40
RATED RESIDUAL OPERATING CURRENT (IΔn)	30mA	30mA	30mA	30mA	30mA	30mA	30mA
PART NUMBER	MAFDD060630B	MAFDD061030B	MAFDD061630B	MAFDD062030B	MAFDD062530B	MAFDD063230B	MAFDD064030B
GTIN-13	5060523526253	5060523526260	5060523526277	5060523526284	5060523526291	5060523526307	5060523526314
PART NUMBER	MAFDD060630C	MAFDD061030C	MAFDD061630C	MAFDD062030C	MAFDD062530C	MAFDD063230C	MAFDD064030C
GTIN-13	5060523526321	5060523526338	5060523526345	5060523526352	5060523526369	5060523526376	5060523526390

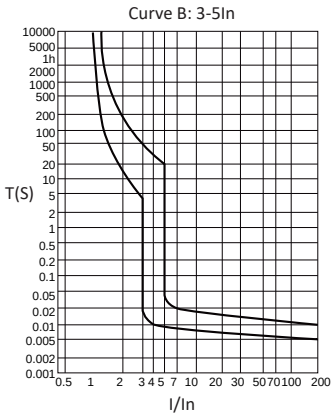
STANDARD	IEC 61009-1, BS EN 62606
NUMBER OF POLES	1P+N (Switched)
RATED VOLTAGE (Un/AC)	230V
FREQUENCY (Hz)	50/60
RATED BREAKING CAPACITY (Icn)	6000A (6kA)
RATED CURRENT (In)	6, 10, 16, 20, 25, 32, 40
TRIPPING CHARACTERISTICS	B CURVE : 3-5In C CURVE : 5-10In
RESIDUAL CURRENT CHARACTERISTICS	TYPE A (AC AND PULSATING DC UP TO 6mA)
RATED RESIDUAL OPERATING CURRENT (IΔn)	0.03
MECHANICAL ENDURANCE	10,000
PROTECTION DEGREE (IP)	20
MAXIMUM TERMINAL CAPACITY	1-16mm² IN L / 1-10mm² OUT N L
RECOMMENDED TIGHTENING TORQUE (Nm)	2.5Nm IN L / 1.2Nm OUT N L
FLYING NEUTRAL CABLE LENGTH (mm)	450 (can be cut to suit)
OVERVOLTAGE PROTECTION	>285V
MATERIAL	PA6 (Nylon 6)
WEIGHT (1PC) Kg	0.158
INNER CARTON QUANTITY	1
OUTER CARTON QUANTITY	80
ENERGY LIMITING CLASS	3
MOUNTING	35mm DIN RAIL MOUNTING
ORIGIN OF MANUFACTURE	CHINA

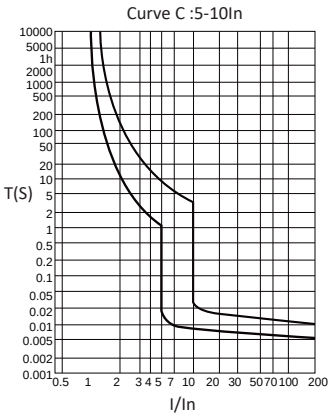


DIMENSIONS



TRIPPING CHARACTERISTICS





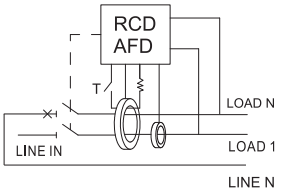
Combined AFDD/RCBO

Combined AFDD RCBO (1P+N) with switched LINE and NEUTRAL.
Used for the protection against ARC FAULTS (SERIES AND PARALLEL), overload, short circuit and earth leakage.
Type A for AC and pulsating DC sensitivity.
Short circuit capacity of 6kA with a maximum rating of 40A.
Designed to fit all FuseBox consumer units.

TESTING: Line and Neutral conductors MUST be disconnected for IR (insulation resistance) testing.

NEUTRAL CABLE CSA	
6A	2.5 mm²
10A	2.5 mm²
16A	2.5 mm²
20A	2.5 mm²
32A	4.0 mm²
40A	4.0 mm²

Connections



sales@fusebox.co.uk

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INSTRUCTIONS

1a AFDD/RCBO must be installed by a qualified electrician in accordance with the current IET Wiring Regulations BS 7671.

1b Total load must not exceed the rating of the AFDD/RCBO or any additional limitation.

2 Installation

2a AFDD/RCBO range designed to fit FuseBox consumer units and modular enclosures.

2b 35mm top hat din rail mounting.

2c Clip securely on to the din rail making sure the din rail clip at the bottom is pushed in, locking the AFDD/RCBO onto the din rail, ensure lever is in the OFF position.

2d Cut, dress and connect cables as shown in the **wiring diagram.**
Lin (Line) terminal connect to the bus bar.
Neutral flying lead to the neutral terminal bar (can be cut to size to suit).
Connect the load to the L OUT and N OUT terminals at the top of the AFDD/RCBO and the Load earth to the terminal bar.

3 Connections

3a **Before powering up the circuit check all connections are TORQUED.**

Loose connections cause fires!!!!

4 Testing

4a **CONNECTIONS TO THE AFDD/RCBO DO NOT REQUIRE TO BE DISCONNECTED IF THE LEVER IS IN THE "OFF" POSITION FOR IR TEST.**

4b On completion of the installation, it must be tested in accordance with the latest edition of the IET Wiring Regulations for Electrical Installations (BS 7671).

Operation of the TEST button on AFDD/RCBO

When newly fitted systems do not trip on the TEST button or using the MFT the problem is normally caused by an earth to neutral fault on the circuit (PME supply). Installers can easily check the AFDD/RCBO by removing the LOAD connections on the device and applying power. If the TEST button works the fault is in the circuit.

RCBO TEST

Combined AFDD/RCBO ARE MANUFACTURED IN ACCORDANCE WITH **IEC 61009-1** AND MUST BE TESTED TO THIS SPECIFICATION USING A CALIBRATED TEST METER

0.5IΔn	RCBO will not trip
1Δn	RCBO must trip within 300ms
5IΔn	RCBO must trip within 40ms

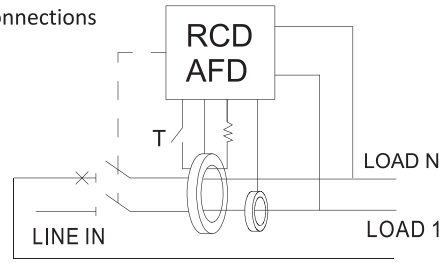
What to do if an AFDD/RCBO trips

1 Reset tripped AFDD/RCBO to **ON** position
2 Note LED indication - see table below
3 If AFDD/RCBO trips again then disconnect all appliances connected to this circuit.
4 Switch AFDD/RCBO to ON position and connect 1 appliance at a time to see which one trips the device.
5 Once faulty appliance has been identified DO NOT USE until it has been checked.
6 Switch AFDD/RCBO to ON position.
7 If fault does not clear phone a qualified electrician to check installation

LED Indication

Green LED on	Device operable	●
Red flash x1	Serial or parallel arc detected	●○●○●○●○●
Yellow flash x2	Overvoltage >285V	●●○●●○●●○●●○●●
Yellow flash x3	Residual current detected	●●●○●●●○●●●○●●●○●●●
Red LED on	Self test failed	●
NO LED	No supply voltage	

Connections



WASTE ELECTRICAL PRODUCTS SHOULD NOT BE DISPOSED OF IN HOUSEHOLD WASTE.
CONTACT YOUR RETAILER OR LOCAL AUTHORITY FOR RECYCLING INFORMATION

RoHS Compliant

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sales@fusebox.co.uk