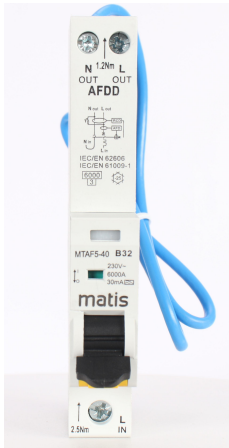


**MTAF5-40**
**RCBO+AFDD**
**Arc Fault Detection Device**

RCBO MTA5-40 With Arc Fault Protective

----- Standard\_ IEC62606


**Protection**

- ① Arc Fault Protection
- ② Overload Protection
- ③ Short-Circuit Protection
- ④ Earth-Leakage Protection

**Technical Data**

|                                        |                                                                   |                                                        |
|----------------------------------------|-------------------------------------------------------------------|--------------------------------------------------------|
| Electrical Features                    | Mode                                                              | Electronic                                             |
|                                        | Type                                                              | A                                                      |
|                                        | Rated current $I_n$                                               | 6,10,16,20,25,32,40A                                   |
|                                        | Poles                                                             | 1P+N                                                   |
|                                        | Rated voltage $U_e$                                               | 230V~                                                  |
|                                        | Insulation voltage $U_i$                                          | 400V                                                   |
|                                        | Rated frequency                                                   | 50Hz                                                   |
|                                        | Rated residual operating current ( $I_{\Delta n}$ )               | 30mA                                                   |
|                                        | Break time under $I_{\Delta n}$                                   | $\leq 0.1s$                                            |
|                                        | Rated breaking capacity                                           | 6,000A                                                 |
|                                        | Energy limiting class                                             | 3                                                      |
|                                        | Rated impulse with stand voltage (1.5/50) $U_{imp}$               | 4,000V                                                 |
|                                        | Dielectric test voltage at ind.Freq.for 1min                      | 2kV                                                    |
|                                        | Pollution degree                                                  | 2                                                      |
| Thermo-magnetic release characteristic | B                                                                 |                                                        |
| Mechanical Features                    | Electrical life                                                   | 4,000Cycles                                            |
|                                        | Mechanical life                                                   | 10,000Cycles                                           |
|                                        | Contact position indicator                                        | Yes                                                    |
|                                        | Protection degree                                                 | IP 40 in Sentry MCU & Enclosures                       |
|                                        | Reference temperature for setting of thermal element              | 30°C                                                   |
|                                        | Ambient temperature (with daily average $\leq 35^\circ\text{C}$ ) | $-5^\circ\text{C} \sim +40^\circ\text{C}$              |
|                                        | Storage temperature                                               | $-25^\circ\text{C} \sim +55^\circ\text{C}$             |
| Installation                           | Terminal connection type                                          | Cable/Pin-type busbar                                  |
|                                        | Tightening torque for L-LINE                                      | $2.5\text{Nm}^2$                                       |
|                                        | Tightening torque for L&N-LOAD                                    | $1.2\text{Nm}^2$                                       |
|                                        | Mounting                                                          | On DIN rail EN60715(35mm) by means of fast clip device |
|                                        | Connection                                                        | Power supply from button                               |

# MTAF5-40

# RCBO+MTAF

# Arc Fault Detection Device

RCBO MTA5-40 With Arc Fault Protective

Standard\_ IEC62606

## Characteristics

| Tripping Current Range | Type | Tripping current I <sub>Δ</sub> /A |                                                           |                                                         |
|------------------------|------|------------------------------------|-----------------------------------------------------------|---------------------------------------------------------|
|                        |      | Lagging Angle                      | I <sub>Δn</sub> > 0.01A                                   | I <sub>Δn</sub> ≤ 0.01A                                 |
| A                      |      | 0°                                 | 0.35I <sub>Δn</sub> ≤ I <sub>Δ</sub> ≤ 1.4I <sub>Δn</sub> | 0.35I <sub>Δn</sub> ≤ I <sub>Δ</sub> ≤ 2I <sub>Δn</sub> |
|                        |      | 90°                                | 0.25I <sub>Δn</sub> ≤ I <sub>Δ</sub> ≤ 1.4I <sub>Δn</sub> | 0.25I <sub>Δn</sub> ≤ I <sub>Δ</sub> ≤ 2I <sub>Δn</sub> |
|                        |      | 135°                               | 0.11I <sub>Δn</sub> ≤ I <sub>Δ</sub> ≤ 1.4I <sub>Δn</sub> | 0.11I <sub>Δn</sub> ≤ I <sub>Δ</sub> ≤ 2I <sub>Δn</sub> |

## Characteristics

| As per IEC60898 | Thermal Tripping    |                                 |                    | Magnetic Tripping           |                             |               |
|-----------------|---------------------|---------------------------------|--------------------|-----------------------------|-----------------------------|---------------|
|                 | No tripping current | Tripping current I <sub>2</sub> | Time Limits t      | Hold current I <sub>4</sub> | Trip current I <sub>5</sub> | Time Limits t |
| BCurve          | 1.13×I <sub>N</sub> | ≥ 1h                            | 3× I <sub>N</sub>  | ≥ 0.1s                      |                             |               |
|                 | 1.45×I <sub>N</sub> | < 1h                            | 5× I <sub>N</sub>  | < 0.1s                      |                             |               |
| CCurve          | 1.13×I <sub>N</sub> | ≥ 1h                            | 5× I <sub>N</sub>  | ≥ 0.1s                      |                             |               |
|                 | 1.45×I <sub>N</sub> | < 1h                            | 10× I <sub>N</sub> | < 0.1s                      |                             |               |

The rated voltage is 230V  
 The limit of action discrimination as follows:

| Test arc current (Valid values) | 3 A | 6A   | 13A   | 20A   | 40A   | 63 A  |
|---------------------------------|-----|------|-------|-------|-------|-------|
| Maximum section time            | 1s  | 0.5s | 0.25s | 0.15s | 0.12s | 0.12s |

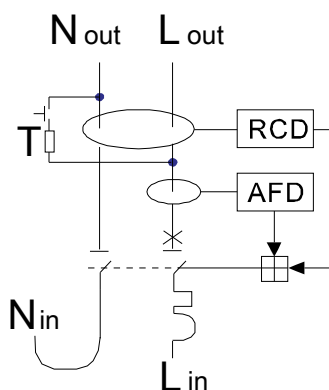
The test arc current is the expected current in the test circuit

The small arc current below 63A runs down the limit value of the ADD5-40

## LED Warnings

- With power connected and the switch in the off position, The LED are not lit. when you move the switch to the on position, the green LED is on, which shows the product is working.
- Test button—RCBO should be tested every month by pushing the Test button
- Arc fault ---If the product trips, the causes are either overload or Arc fault. Disconnect any equipment on this circuit and switch the device on. If the red LED flashes 5 or 6 times that indicates an arc fault. If the fault is still present the device will trip, DO NOT Reset the device again. If the red LED doesn't flash, that indicates the problem is an overload or short circuit. Switch the device to the OFF position and consult a qualified Electrician.
- If the device trips for any reason, please consult a qualified electrician.

## Circuit Diagram



## Overall and Installation Dimension(mm)

