#### Contact us

ABB S.p.A. Electrification Business Viale dell'Industria, 18 20009 Vittuone (MI) Italy https://new.abb.com/low-voltage



Warning! Installation by person with electrotechnical expertise only. Warnung! Installation nur durch elektrotechnische Fachkraft. Avvertenza! Fare installare solo da un elettricista qualificato.

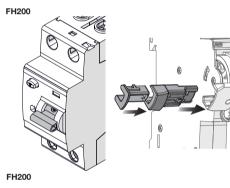
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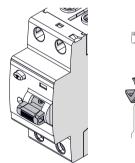
# **1.Packaging Content**

- Autoreclosing device Installation manual
- Toggle adapters
- Safety sticker

# 2.Mounting

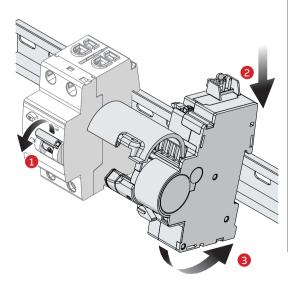
#### 2.1.Toggle adapter







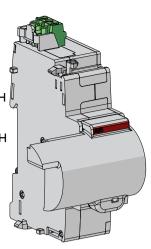
#### 2.2.Assembly



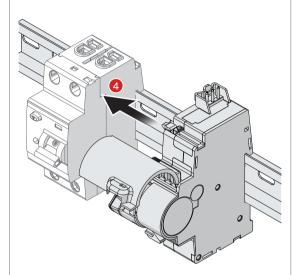
#### Autoreclosing unit

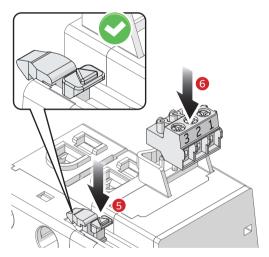
# **INSTALLATION AND OPERATING INSTRUCTIONS**

F3C-AR230 C 2/30 H F3C-AR230 C 2/300 H F3C-AR230 C 4/30 H F3C-AR230 C 4/300 H



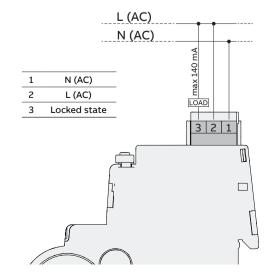






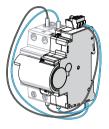
Operate toggle OFF-ON-OFF to verify proper assembly

### 2.3. Wiring Diagram





Integrated wires for assessment



Power supply from line side



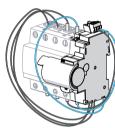
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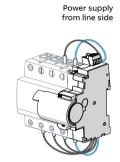
LOAD

Integrated wires for assessment

Integrated wires for assessment

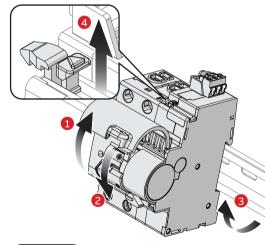


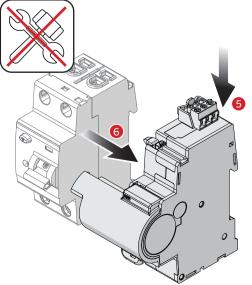
Power supply from line side



Integrated wires for assessment

### 3.Dismounting

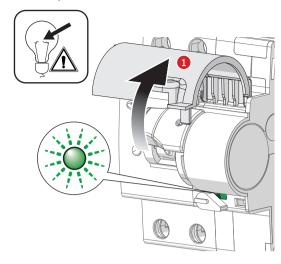


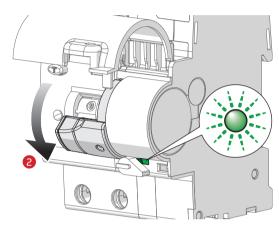


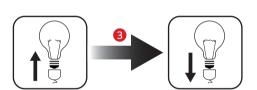
# 4.Operations

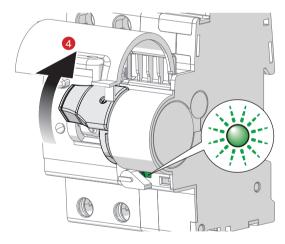
#### 4.1. Disconnection of installation

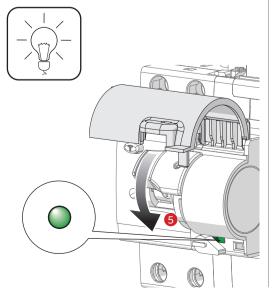
Warning: before accessing active parts, disable the automatic re-closing function and switch off the main protection device.



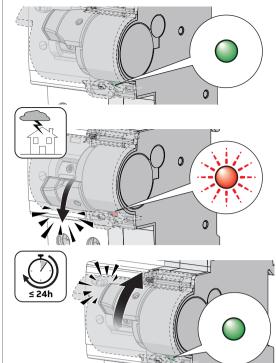




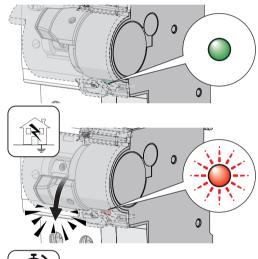


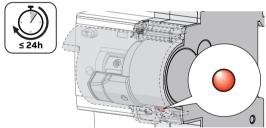


#### 4.2. Temporary fault



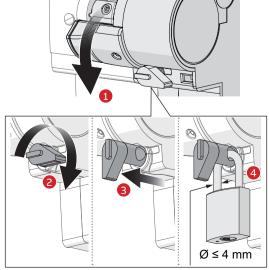
#### 4.3. Permanent earth fault



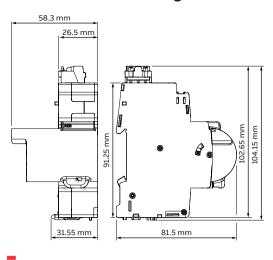




# 5.Locking in isolating state



# 6.Dimensional drawings



# 7.Technical Data

| F3C-    | F3C-    | F3C-    | F3C-    |
|---------|---------|---------|---------|
| AR230 C | AR230 C | AR230 C | AR230 C |
| 2/30 H  | 2/300 H | 4/30 H  | 4/300 H |

|  |                        | AR230 C<br>2/300 H  |   |                |
|--|------------------------|---|---|----------------|
| Rd0 (rated non<br>operating resistance<br>between live parts<br>and earth) | 8 kΩ                   | 800 Ω   | 8 kΩ  | 800 Ω          |
| Rd (rated operating resistance between live parts and earth)               | 22 kΩ                  | 8 kΩ  | 22 kΩ   | 8 kΩ           |
| Earthing system  |                        | TT-   | -TN   |                |
| Standard:  |                        |   | 3024<br>3024  |                |
| F  | CCBs FH2               | 00 (up to 6   | 3A, A and   | AC types)      |
| Suitable for:  | 2P,<br>230 V,<br>30 mA | ,   | 4P,<br>400 V,<br>30 mA                                  | ,              |
| Number of modules  |                        | 1,  | ,5  |                |
| Operating voltage  | 230                    | -240 V AC   | (-15% +1  | 0%)            |
| Automatic reclosure<br>after untimely<br>tripping                          | 1<br>2<br>3            | Ye<br>24 hours<br>System<br>st time: ≈<br>nd time: ≈<br>rd time: ≈<br>e to 48th t | after the<br>check:<br>3 second<br>2 minute<br>5 minute | ds<br>es<br>es |
| Earth leakage check  |                        | Ye  | es  |                |
|  |                        |   |   |                |

|  | 3rd time: ≈ 5 minutes<br>4th time to 48th time: ≈ 30 minutes |
|--|--|
| Earth leakage check                                    | Yes  |
| Max number of consecutive automatic reclosure attempts | 48   |
| Reset time for counter of automatic reclosing attempts | 45 s   |
| Power consumption during operation                     | <26 VA   |
| Power consumption at rest                              | <1,5 VA  |
| Closing time   | <1 s   |
| Opening time   | <1 s   |
| Protection degree<br>acc. To EN 60529                  | IP40 (housing)/IP20 (terminals)                              |
| Operating temperature                                  | -5+40 °C   |
| Storage temperature                                    | -40+70 °C  |
| Overvoltage category                                   | III  |
| Pollution degree acc.<br>to EN 60664                   | 2  |
|  |  |

| temperature  |  |  |  |
|--|--|--|--|
| Storage temperature  | -40+70 °C  |  |  |
| Overvoltage category   | III  |  |  |
| Pollution degree acc.<br>to EN 60664                                     | 2  |  |  |
| Shock resistance acc.<br>to IEC/EN 60068-2-27                            | 25g, 2shocks, 13ms   |  |  |
| Vibration resistance<br>acc. to IEC/<br>EN 60068-2-6                     | 1g - 20 cycle at 5 1505 Hz<br>28 cycles with 55°C/90-96%<br>and 25°C/95-100% |  |  |
| Environmental<br>conditions (damp<br>heat) acc. to IEC/<br>EN 60068-2-30 |  |  |  |
| Terminal type  | plug-in  |  |  |
| Cross-section of conductors  | 0,22,5 mm <sup>2</sup>   |  |  |
| Tightening torque  | 0,4 Nm   |  |  |
| Stripping length of the cable  | 5 mm   |  |  |
| Locked state   | Terminal 3   |  |  |