



# What should be done when iARC trips?

*This diagnosis must be performed by a qualified person. All connections, disconnections and inspections must be performed with the entire circuit powered off.*

## Step 1

### Analyze the context



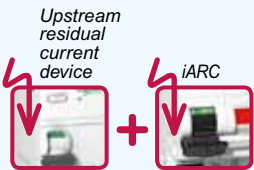
**Tripping on short-circuit or overload**  
Apply the usual electrical fault detection procedure.



**Only the arc detector trips.**

**List the circumstances under which tripping occurred.**

- What happened prior to tripping?
- What loads were connected and operating?
- When and how many times did the arc detector trip?



**Tripping on leakage current**  
Apply the usual leakage current detection procedure.

**Look for signs of deterioration, overheating or sparking (on power cords, sockets, cables, etc.).**

**If no deterioration is evident, go to**

**Step 2**

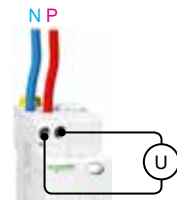
## Step 2

### Check that the arc detector is working correctly



**Disconnect the cables downstream of iARC**

**Check the voltage (max. 275 V AC)**



**196 V AC < U < 275 V AC**

**U < 196 V AC**

**U > 275 V AC**

**Network problem:** contact the electricity supplier



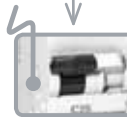
Press for "T" 1s



**The device trips without the 'T' button being pressed**



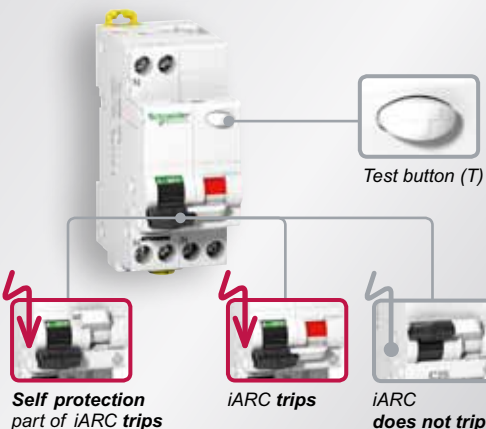
**iARC is working;** go to **Step 3**



**It is defective;** replace it and repeat **Step 1**

**CONDITION OF iARC**

KEY

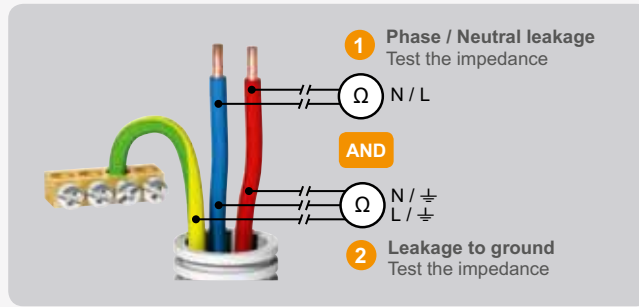


# Step

# 3

Check current leakage risk

Disconnect all loads that could be damaged during this test.



**Leakage current detected:**  
make good (change the cable or repair the area concerned)



**No leakage current detected:**  
go to Step 4

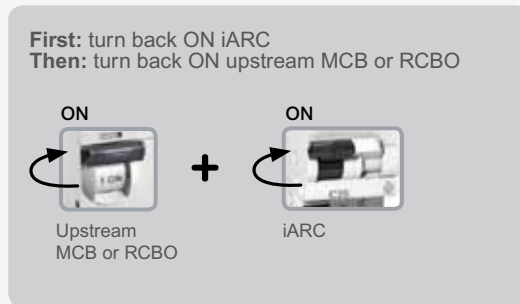


# Step

# 4

Test parallel arc risk

Turn off iARC. Reconnect the cables downstream of iARC. Disconnect all loads powered by this circuit.



**Risk of parallel arc:** change the cable or repair it

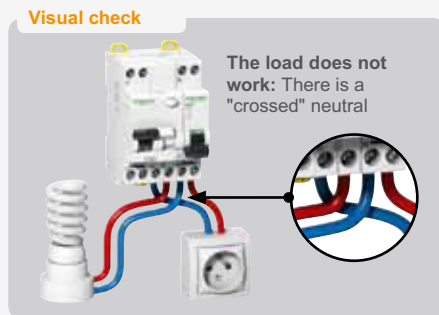


Go to Step 5

# Step

# 5

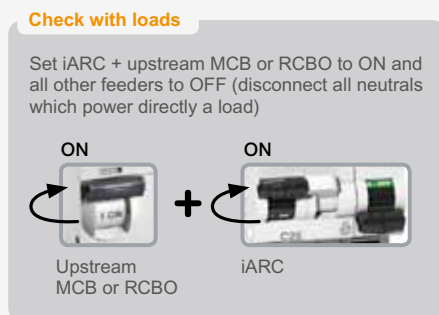
Check whether there is a crossed neutral with another feeder



Change wiring in case of wrong wiring of neutral or phase

No cross neutral validated  
Go to Step 6

OR



Connect and turn ON a load powered by iARC

The load works



Change wiring if the load does not work

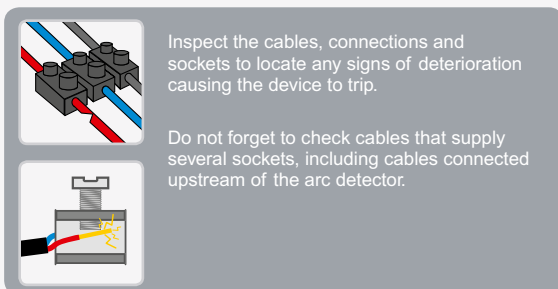
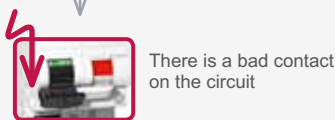
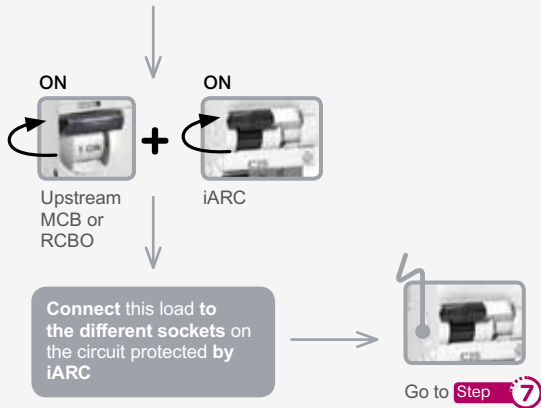
CIRCUIT CONDITION

## Step 6

### Test serial arc risk in cable and connection

Disconnect all loads powered by this circuit.

Prepare a 1000 W resistive load (heater, kettle, etc.) in good working order



**If you have not located the deterioration:** lock off the circuit and replace the cables, connections and sockets

**If you have located the deterioration:** make good (change any damaged elements)

## CIRCUIT CONDITION

## Step 7

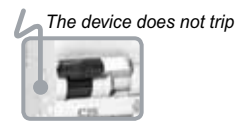
### Examine the loads involved



Check that the loads identified at Step 1 are in good condition.

Connect and activate these different loads **one by one, then all together**, repeating the tripping circumstances described at Step 1.

Check whether iARC trips



Inspect the load(s) involved (connections, power cords, etc.) to locate any deterioration

**If deterioration is detected:** make good or change the damaged loads

iARC initially tripped due to a transient cause as overvoltage: install a voltage level recorder

**If an overvoltage is discovered (> 275 V):** contact your electricity supplier

**If no overvoltage or deterioration has been discovered:**

- Note the iARC serial number (above the test button) or note the serial number that appears using the QRcode product.



- Contact Schneider Electric, giving all the information related to the previous steps and the serial number



- You will have to replace iARC or allow specialists to carry out further tests on site.

## LOAD CONDITION

### Schneider Electric Industries SAS

35, rue Joseph Monier  
CS 30323  
F- 92506 Reuil Malmaison Cedex

RCS Nanterre 954 503 439  
Capital social 896 313 776  
www.schneider-electric.com

CA908055E

As standards, specifications and designs change from time to time, please ask for confirmation of the information given in this publication.



Printed on ecological paper

Publication: Schneider Electric Industrie SAS

11-2016