



Defence
Infrastructure
Organisation

Safety Alert

Parts A, B & C

**Subject: Schneider Electric. Product Safety Notice PRB 225808
MasterPact MTZ-2 and MTZ-3 ACBs**

Number: SA 2021/03

DIO Sponsor: Bryan Dunn

Date of issue: 31st March 2021

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This Safety Alert is to be read by the following so appropriate action can be taken:

1. **DIO's Maintenance Management Organisations and their Supply Chains**
2. **DIO Regional Delivery Manager (or equivalent for non-NGEC contracts)**
3. **Head of Establishments**
4. **Others**

Others interested in the content of this Safety Alert might include:

Assurance Managers, Estate Facility Managers, Assurance Managers in Regional (Service) Delivery Health & Safety Advisors, Top Level Budget Holders, Prime Contractors, Project Managers, Infrastructure Managers and Property Managers with responsibility for MOD projects and Property Management Works Services (including the legacy work of EWCs/WSMs), Authorised Persons (Electrical), Authorising Engineer (Electrical) etc.

When it takes effect: Immediately

When it is due to expire: When updated or rescinded.

Health and Safety

This Safety Alert does not necessarily cover all aspects of the subject matter and readers should make themselves aware of other potential issues. Readers should also not rely on DIO Publications as their only means of becoming aware of safety issues, but they should consult widely across other media to maintain awareness.

Aims

1. The aim of this Safety Alert is to bring to the attention of appropriate persons or organisations Schneider Product Safety Notice PRB-225808 that advises of a potential defect to MTZ-2 and MTZ-3 range of air circuit breakers (ACBs) that has the potential for personal injury and/or property damage.

Introduction

2. Compliance with the contents of this Safety Alert will enable compliance with the Health & Safety at Work etc. Act 1974 and Electricity at Work Regulations 1989.
3. Any work required as a result of this Safety Alert must be carried out in accordance with the Management of Health & Safety in Ministry of Defence - JSP375.

Background

4. The Schneider Electric Product Safety Notice Reference PRB-225808 has recently been brought to our attention and is included at Annex A to this Safety Alert for background.
5. It is possible that Schneider Electric, from their records, have contacted establishments directly to alert them to the Product Safety Notice. Where the Product Safety Notice has previously been brought to the attention of the DIO Regional Delivery Manager and who can confirm either no affected ACBs are installed on site or the required remediation has been satisfactorily completed no further action is necessary. Otherwise, the requirements in Parts A, B and C are to be followed.

Part A

6. This Safety Alert concerns all Schneider Masterpact ACBs manufactured between date codes 16261 to 20065 as detailed below and within Annex A.
7. Access to plantrooms containing Schneider Masterpact ACB's should be controlled, and warning signs are to be displayed until it has been confirmed the ACB is not within the manufacturer's date range or appropriate remediations have taken place.
8. The MMO, on direction from the DIO Regional Delivery Manager or Equivalent, shall initiate the following task:
 - a) Establish all sites with Schneider Masterpact ACBs manufactured between date codes 16261 to 20065 as detailed within Annex A.
 - b) The effected ACB's are MasterPact MTZ2 and MTZ3 of 2500 amps and above. Those below 2500 amps are not impacted by this Safety Alert. The ACB's are large devices that would likely be located within the feeder pillar fed from the transformer or the incoming device(s) of the main low voltage panel for a substantial building or facility.
 - c) The date range given for potentially affected product is **16261** to **20065**. If the trip unit serial number is **16261** this means the trip unit was manufactured in **2016**, week **26**, day **1**. The affected units were manufactured Circa June 2016 to Circa February 2020.
 - d) ACB with designations which include HA/ HF, N, NA, HA10 or L1 are not impacted by PRB-225808.
 - e) Refer to Annex A, Appendix 02 for further guidance on identification.

f) If it is established that an ACB is within the date range listed, follow Annex A, with particular attention to Appendix 01 - section 3.2.

9. The MMO is to notify the DIO Regional Delivery Safety Alerts Team (DIO-RDSafetyAlerts@mod.gov.uk) through their respective DIO Regional Delivery Manager identifying the location, quantity, date of manufacture, and a completed copy of Annex A-Appendix 04.

10. The requested data is required within 1 calendar month from issue date of this Safety Alert.

Part B

11. The MMO, on direction from the DIO Regional Delivery Manager or equivalent, shall follow instructions as detailed within Annex A to remediate any Schneider Masterpact ACBs manufactured between date codes 16261 to 20065.

12. If an ACB is identified within the date codes of 16261 to 20065, a risk assessment and control measures need to be put in place downstream of the ACB until remediation takes place. The risk associated with this assessment will determine the duration to complete the remediation.

13. It is recommended that remediation action should be completed within a maximum of 3 months from the date of issue of this Safety Alert. Until the remediation is completed access should be controlled as detailed within Part A.

Part C

14. The MMO is to notify the DIO Regional Delivery Safety Alerts Team (DIO-RDSafetyAlerts@mod.gov.uk), through their respective DIO Regional Delivery Manager or equivalent, of the actions resulting from implementing the actions in Part B at paragraph 8, when completed.

Engineering Bulletin covering Schneider Electric Product Safety Notice PRB – 225808.

A PRODUCT SAFETY NOTICE
NOTICE OF POTENTIAL UNSAFE CONDITION

PLEASE DELIVER IMMEDIATELY TO THE RESPONSIBLE PERSON IN YOUR ORGANIZATION

Dear Valued Customer,

Schneider Electric is committed to delivering high quality products to our customers. According to our records, your company has recently purchased **MasterPact MTZ2 2500A, 3200A, 4000A and MTZ3 Air Circuit Breakers** with a MicroLogic date codes **16261 to 20065** (please refer to Appendix 02 to get details on the exact performance rating impacted). These products have either been purchased for incorporation into a finished offer such as a Low Voltage Switchboard or Generator Set for example (LV switchboard Builder or OEM) or have been supplied directly to an installation.

As part of our ongoing quality monitoring process, we bring to your urgent attention a safety issue that has exhibited itself on a small number of the MasterPact MTZ2 2500A, 3200A, 4000A and MTZ3 Air Circuit Breakers ("MasterPact").

The suspected MasterPact may contain a nonconforming component that may result in the circuit breaker not operating as intended. Should this condition occur, a potential for **PERSONAL INJURY AND/OR PROPERTY DAMAGE** may exist. Hence Schneider-Electric has decided to carry out a full investigation and remedial action.

All immediate necessary corrective actions have already been implemented at Schneider Electric manufacturing plants to prevent this issue being repeated on shipment of any new MasterPact.

We are presently mobilizing an action to contain and resolve the issue. The purpose of this letter is to inform you about the potential risk and ask you to provide the proper identification and information needed to carry out the remedial work.

While the reports of the existence of this condition have been very low, **we urge you to comply with the requests in this document and follow the containment actions described in appendix 01.**

Schneider Electric takes Quality at all levels extremely seriously. This is why we offer you a 12 months extended or reactivated warranty on each affected MasterPact.

We regret any inconvenience this may cause. Thank you for understanding and assistance, if you like to discuss this further please contact 0870 608 8 608 Option 1 quoting PRB-225808

Yours faithfully,

Power Products- Customer Satisfaction & Quality

Schneider Electric

Stafford Park 5 Telford TF33BL

schneider-electric.com

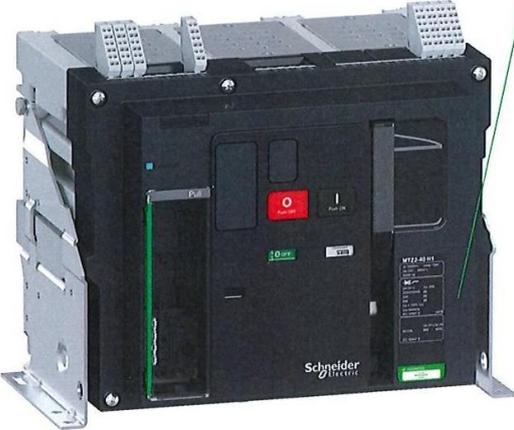
Appendix 01: Containment Actions

1. **To identify potentially affected MasterPact(s) using the device reference and date code, please refer to Appendix 2**
2. If you are not able to determine if your MasterPact is potentially affected, contact your local helpdesk 0870 608 8 608 Option 1 quoting PRB-225808
3. **If you have identified potentially affected MasterPact(s), please follow these instructions:**
 1. **Check on each affected MasterPact that the Micrologic is powered on, please refer to Appendix 03. In case of any issue please contact your local helpdesk 0870 608 8 608 Option 1 quoting PRB-225808**
 2. If you are using an external 24Vdc power supply or VPS MasterPact MTZ accessory, this will already provide a redundant power source for the Micrologic Control Unit. This power source must be maintained.
 3. In all cases:
 1. If you are a Schneider Electric Partner:
 1. If the affected MasterPact is still at your facilities, please contact your local helpdesk 0870 608 8 608 Option 1 quoting PRB-225808 before shipping to customers.
 2. If you have already sold the affected MasterPact, complete the Information sheet (Appendix 04) or contact your local helpdesk 0870 608 8 608 Option 1 quoting PRB-225808 confirming if you will forward this Safety Notice to your customer or if you would like Schneider Electric to do so by providing information to us regarding the resale.
 2. If you are an End User:
 1. Please verify the location of the affected MasterPact(s) in your facility then complete the Information sheet (Appendix 04) or contact your local helpdesk 0870 608 8 608 Option 1 quoting PRB-225808. This information is critical to ensure that we have the correct site address and site contact details in order to schedule the remediation.
 2. Upon receipt of the Information sheet, Schneider Electric will contact you to discuss relevant option. You can also contact your local helpdesk 0870 608 8 608 Option 1 quoting PRB-225808 for any information.
 2. Please make sure your circuit breaker firmware is updated to the latest available version. Please follow the Firmware Update procedure link below.

<https://download.schneider-electric.com/files?pDocRef=DOCA0174EN>
- 3.5. **In all situations, you are to monitor at minimum on monthly basis the condition of your circuit breaker, please refer to Appendix 03**
- 3.6. Please refer to safety instruction, Appendix 05 for any intervention

Appendix 02: Identification of potential affected products

Identification of potential affected circuit breaker



MTZ2-40 H1

Ui 1000V~ Uimp 12kV
 Ue 220 ... 690V~
 50/60 Hz

 Icu (kA)
 220/415/440 66
 525 66
 690 66
 Ics = 100% Icu
 Icw 66kA/3s
 IEC 60947-2 cat.B

Ue (V~) Ie (A)
 AC23A 690 4000

IEC 60947-3

IP ADDRESS

PLACE IP STICKER HERE

Circuit breaker potentially Impacted:

MTZ 2 25, 32, 40 (2500 A to 4000 A)
 H1, H2, H2V, H3, H10
 (excluded N, NA, HA, HA10, L1)

MTZ 3 all rating (4000 A to 6300 A)
 H1, H2 (excluded HA)

Example

MTZ240H1

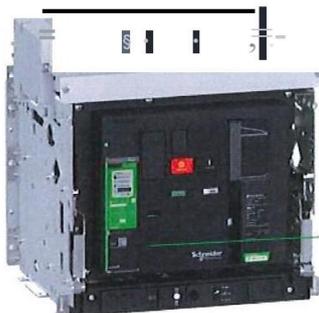
MTZ Rating Performance
 type

Identification of potential affected circuit breakers by **Micrologic date code direct reading.**

Or

Identification of potential affected circuit breakers by **Micrologic date code on QR code.**

Micrologic date codes of MTZ impacted are **between 16261 and 20065**




Direct reading

Flashing QR Code

Date code
(5 digits)

Date code
(5 digits)

The date code corresponds to the 7th to 11th digit in the Micrologic ID:

#####**XXXXX**#####LV8#####

6 digits **Date code**
(5 digits)



Appendix 03: Identification of Micrologic powered ON

Visually check if MicroLogic is ON or OFF.

- MicroLogic **powered ON**: The **"Ready" led is flashing green** (32ms each 2s).
- If it is OFF: **the "Ready" led is not flashing.**
Please first check that you are not in the "Low Load" situation as it would also have as consequence to power off the MicroLogic.
Low load situation corresponds to a load below ~20% of the MTZ rating.
To check if you are in "Low Load", use the mini USB hub to plug an APC external power bank and check if the load is high enough to power on the MicroLogic X.
Example of external power bank: LV850055SP



Micrologic ON



Appendix 04: Information sheet

PRODUCT SAFETY NOTICE: PRB-225808
INFORMATION SHEET

Please return form to: Schneider Electric via email at gb-rssquality@se.com or by calling your local 0870 608 8 608 Option 1 quoting PRB-225808

CUSTOMER INFORMATION SECTION

- Please state your full name and title: _____
- Please confirm your company name and address**
Company _____
Address _____
City _____ State _____ Zip Code _____
- Please provide your: Phone number: (_____) _____
Pager/mobile number : (_____) _____
Email Address: _____

TECHNICAL INFORMATION SECTION

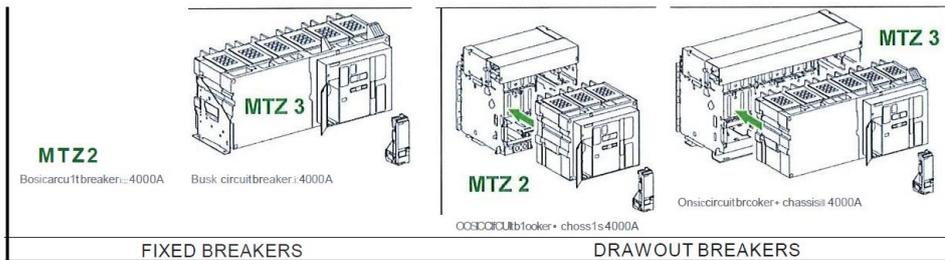
4. Is the network voltage above 600V? Yes No

5. What is the breaker information?
Look at Firm Plate of the Breaker.

- Breaker type: MTZ2 MTZ3
- Breaker rating: 25 30 32
 40 50 63
- Breaker performance: H1 H2 H2V
 H3 H10



6. Is it a fix or drawout breaker? Fix Drawout



7. What is the MicroLogic X Serial Number? _____

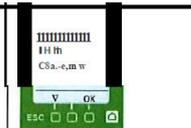
Direct reading number

Flashing QR code

Serial number

The serial number corresponds to the 16 first digits in the MicrologicID:
LVS#####11
Serial number (16 digits)

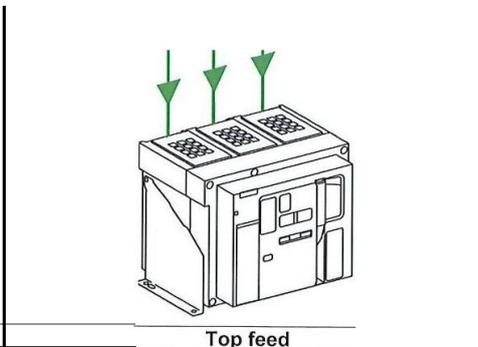
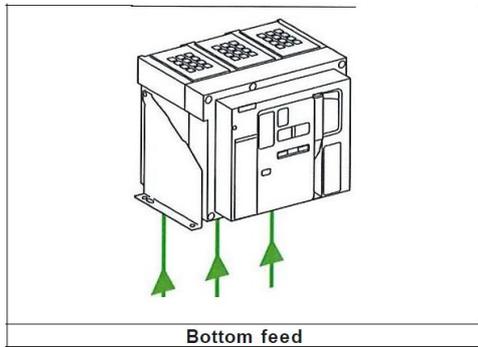
8. What is the MicroLogic X Firmware version? _____

	Step 1 SELECT MAINTENANCE menu Press OK		Step 2 SELECT ASSISTANCE menu Press OK
	Step 3 SELECT Firmware version menu Press OK		Step 4 READ Firmware version ex 002.000.004

9. Is the MicroLogic supplied by external 24V? Yes No
10. Is the external 24V power supply secured power? Yes No
 Example:
 - supply from UPS
 - connected on separate powersystem
11. What is the external 24V power supply secured brand and reference?
 Brand: _____
 Reference: _____
12. Is the MicroLogic X with Voltage Power Supply (VPS)option? Yes No
 VPS = Internal power supply



13. How MasterPact is connected to power system? Bottom feed Top feed



Signature _____
 Print Name _____

Date _____
 Title _____

Additional Comments:-----

Appendix 05: Safety instructions for any intervention

Important Information

NOTICE

Read the instructions carefully, and look at the equipment to become familiar with the device before trying to install, operate or maintain it.

The following special messages may appear throughout this document or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a

 **DANGER**
DANGER indicates an imminently hazardous situation which if not avoided, will result in death or serious injury.

 **WARNING**
WARNING indicates a potentially hazardous situation which, if not avoided, can result in death or serious injury.

 **CAUTION**
CAUTION indicates a potentially hazardous situation which, if not avoided, can result in minor or moderate injury.

NOTICE
NOTICE is used to address practices not related to physical injury.

PLEASE NOTE

Electrical equipment should be installed, operated, serviced and maintained only by qualified personnel.

No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

A qualified person is one who has skills and knowledge related to the construction and operation of electrical equipment and the installation, and has received safety training to recognize and avoid the hazards involved.

Safety instructions

 **DANGER**

HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

- Apply appropriate personal protective equipment (PPE) and follow safe electrical work practices. See NFPA 70E, CSA Z462 or local equivalent
- This equipment must only be installed and serviced by qualified electrical personnel.
- Unless specified otherwise in the maintenance procedures, all operations (inspection, test and preventive maintenance) must be carried out with the circuit breaker (device and chassis) and the auxiliary circuits de-energised.
- Checks to ensure that the circuit breaker is de-energised must be carried out on the upstream and downstream terminals.
- Always use a properly rated voltage sensing device to confirm power is off.
- Install safety barriers and display a danger sign.
- During the tests, it is strictly forbidden for anyone to touch the circuit breaker or the conductors while voltage is applied.
- Before putting the equipment back into operation, it is mandatory to check that all connections are made with the correct tightening torque, the inside of the cabinet is clean, all devices, doors, and protective covers are in position and the circuit breaker is off (open position.)

Failure to follow these instructions will result in death or serious injury.