

# Defence Infrastructure Organisation

SAFETY ALERT Subject: Schneider Electric Vigi Eart Insulation Monitoring Modules – Proc				
DIO Secretariat Sponsor: RA Cawthorne		Date of issue: 13 December 2011		
Contact if different from above Sponsor:				
Hom Limbu       Professional & Technical Services, Hard FM         Defence Infrastructure Organisation       Kingston Road, Sutton Coldfield, West Midlands B75 7RL         Tel: 94421 3214/0121 311 3214 Email: DIOOpsNorth-PTS8d@mod.uk       DIOOpsNorth-PTS8d@mod.uk				
Who Should Read this: Who Should Read this: CEstOs, Top Level Budget Holders, Project Sponsors, MOD Project Managers and others within the IPT (for both Prime, PFI/PPP and traditionally procured contracts), Defence Estates Advisors and Property Managers/Site Estate Representatives with responsibility for MOD projects and Property Management Works Services (including the legacy work of EWCs/WSMs) Coordinating Authorising Engineers, Authorising Engineers Electrical, Authorised Persons Electrical, purchasers and installers of final electrical distribution equipment.				
When it takes effect: Immediately	When it is due except on up	e to expire: No Expiry odate.		

# **Document Aim:**

The aim of this Safety Alert is to bring to the attention of all responsible persons the Product Safety Notice issued by Schneider Electric for their Vigi Earth-Leakage Protection Modules and Insulation Monitoring Modules manufactured between 4<sup>th</sup> May 2009 and 11<sup>th</sup> May 2011.

# 1. Introduction

a. COMPLIANCE WITH THE CONTENTS OF THIS ALERT WILL ENABLE COMPLIANCE WITH THE HEALTH & SAFETY AT WORK ETC ACT 1974 AND ITS SUBORDINATE REGULATIONS.

b. The appropriate MOD officer shall arrange for the Maintenance Management Organisation (MMO) contractor to carry out all actions in accordance with this Alert.

c. Any work required as a result of this Safety Alert must be carried out in accordance with JSP 375 Volume 3 – MOD's Safety Rules & Procedures.

d. On MOD Establishments occupied by United States Visiting Forces (USVF) responsibility is jointly held by USVF and DIO (USF). At base level this jointly managed organisation is to take appropriate action to implement the contents of this Alert. Where this Alert contains procedures which differ significantly from USVF practice DIO (USF) code of practice will be issued.

# 2. Background

a. This Safety Alert has been raised in response to a recent Product Safety Notice issued by Schneider Electric for their Vigi Earth-Leakage Protection Modules and Insulation Monitoring Modules manufactured between 4<sup>th</sup> May 2009 and 11<sup>th</sup> May 2011.

b. Schneider Electric have identified a potential issue with these products. All versions (3P, 4P, ME, MH and MB) of Earth Leakage Modules (also called Vigi) and Insulation Monitoring Modules for Compact NS/NR and NSX are affected.

c. The problem is associated with potential pollution of raw material used in the manufacture of these products during the given period. This pollution may lead to a potential issue in their tripping operation. Testing has revealed that exposure to wet conditions could accelerate this phenomenon and increase the non tripping rate. This issue can appear several months after the installation of the product.

d. Schneider Electric have taken the decision to replace these products.

# 3. Requirement

a. **URGENT**: Addressees of this Safety Alert are to bring its contents to the attention of their Authorising Engineers (Electrical) (AE(E)), or equivalent, in order to make them aware of the potential risks posed by the affected Vigi Earth-Leakage Protection Modules and Insulation Monitoring Modules which may be in service on their sites.

b. Responsible persons are to take immediate action as required by the Schneider Electric Product Safety Notice, which is attached.

c. For further information relating to the Product Safety Notice the point of contact in Schneider Electric is:

Nadine Duce Tel: 01952 209678 Fax: 01952 209273 Email: Nadine.duce@schneider-electric.com

Product	Vigi Earth-Leakage Protection Modules and Insulation Monitoring Modules manufactured between 4 <sup>th</sup> May 2009 and 11 <sup>th</sup> May 2011.	
Manufacturer/Supplier	Schneider Electric.	
Problem	Potential tripping issues due to use of polluted raw material during manufacture.	
Scope	All versions (3P, 4P, ME, MH and MB) of Earth Leakage Modules (also called Vigi) and Insulation Monitoring Modules for Compact NS/NR and NSX.	
Risk	<ul> <li>Exposure to electric shock and/or damage to equipment due to:</li> <li>For Earth Leakage Modules: Non tripping of the Circuit Breaker on earth leakage detection.</li> <li>For Insulation Monitoring Modules: Non switching of the Auxiliary Contact.</li> </ul>	
Action	<ul> <li>Determine if you have this equipment using the manufacturer's Product Safety Notice attached to this Safety Alert.</li> <li>If the equipment is discovered, immediately follow instructions given in the attached Product Safety Notice issued by Schneider Electric.</li> </ul>	



# Open Immediately Product Safety Information Enclosed

# A PRODUCT SAFETY NOTICE

### **DELIVER IMMEDIATELY TO THE RESPONSIBLE PERSON WITHIN YOUR ORGANISATION**

Dear Sir/Madam,

#### Ref: Vigi Earth-Leakage Protection Modules & Insulation Monitoring Modules

Please find attached a copy of our Product Safety Notice concerning the above referenced products.

We have been advised by «Referred\_By» that you have purchased potentially affected products

# In order to address this reliability issue, we have decided to proceed with a global replacement of affected modules and would kindly request your cooperation by carrying out the following actions:

- 1. Inspect the date code of the Earth Leakage Module and/or Insulation Monitoring Module to determine if it was manufactured within the affected date codes between N09191/1 and N1106/7 or between S0927/1 and S1119/3 (see appendix 2 for date code location)
- 2. If the module was manufactured within the affected date codes and if already installed, perform 3 times the test with the "T" Button. (see appendix 3 for Test Button procedure)
  - **2a** If the Circuit Breaker does not trip or the Auxiliary Contact does not switch, the module is not functioning correctly. In this event please contact us immediately using the Confirmation of Receipt of Product Safety Notice. As an additional precaution and if it is acceptable according to your constraints, you may switch off the equipment containing the affected item.
  - **2b** If the Circuit Breaker trips or the Auxiliary Contact switches, the module is still functioning correctly. However, as stated in the Product Safety Notice, the module may not continue to function correctly over it's expected life period. Please complete the Confirmation of Receipt of Product Safety Notice and return to us.
- **3.** If the Earth leakage Module or Insulation Monitoring Module is manufactured within the affected date codes and is not yet installed or in operation, DO NOT USE IT. Please contact us using the Confirmation of receipt of Product Safety Notice and we will arrange a replacement.

We regret any inconvenience this Product Safety Notice may cause you or your customers and thank you in advance for your assistance in this matter.

Contact details:

Nadine Duce Tel: 01952 209678 Fax: 01952 209273 Email: <u>Nadine.duce@schneider-electric.com</u>

Regards On behalf of Schneider Electric Ltd

Product Support Department Power LV Division



# A PRODUCT SAFETY NOTICE

# **DELIVER IMMEDIATELY TO THE RESPONSIBLE PERSON WITHIN YOUR ORGANISATION**

## SUBJECT: Vigi Earth-Leakage Protection Modules & Insulation Monitoring Modules

DATES of MANUFACTURE: May 4<sup>th</sup> 2009 to May 11<sup>th</sup> 2011

Schneider Electric has identified a potential issue with installations involving Earth Leakage Modules (also called Vigi) and Insulation Monitoring Modules for Compact NS/NR & NSX. (see appendix 1 for examples of products)

All versions are impacted: 3P, 4P, ME, MH & MB.

A small number of events involving these products have been reported and although this number is very small in relation to the installed base, we are committed to offer you the highest levels of reliability in the products that you purchase from us.

We have therefore, made the decision to replace these products.

After analysis, we have identified a potential pollution of raw material from our supplier within the manufacturing period from May 4<sup>th</sup> 2009 to May 11<sup>th</sup> 2011.

This pollution may lead to a potential issue in the tripping operation. The consequences could be:

- For Earth Leakage Modules: Non tripping of the Circuit Breaker on earth leakage detection
- For Insulation Monitoring Modules: Non switching of the Auxiliary Contact

Testing has revealed that exposure to wet conditions could accelerate this phenomenon and increase the non tripping rate. This issue can appear several months after the installation of the product.

Tripping of the Circuit Breaker on overload, or by MN, MX is not affected by this issue. These operations are independent and operate correctly.

For Installation Monitoring Modules, the illumination of the red LED remains operative in the case of defect.

Please contact us, using the details below, so that arrangements can be made to replace your products:

Nadine Duce Tel: 01952 209678 Fax: 01952 209273 Email: <u>Nadine.duce@schneider-electric.com</u>

# Examples of products



Vigicompact NSC 100N



Vigicompact NG160



Compact switch-disconnector equipped with a Vigi earthleakage module



Vigicompact NSX100 to 630.

# Examples of front faces



Compact NS



Compact NSX

#### Appendix 2 Manufacturing Date Coding

#### Location on products:

### DANGER: <u>TURN OFF POWER TO CIRCUIT BREAKER OR USE PROPER PERSONEL PROTECTIVE</u> EQUIPMENT BEFORE INSPECTING THE DATE CODE

The date code must be read on the Earth Leakage Module or Insulation Monitoring Module on the right hand side. (DO NOT USE THE DATE CODE OF THE CIRCUIT BREAKER)



The date code is also on the packaging of the product:

	LV432456 x1
MERLIN GERIN	4P 200-440V AC 0.3-30A Vigi MB Vigi MB 4P 200-440V CA 0.3-30A Biogue Vigi MB 4P 200-440V CA 0.3-30A
compact NS	Compact NSX 00/630
VIGI/ME 100/160A 0.3A	LV432456 Made in Italy N1107/1
29212	A CONTRACTOR OF A CONTRACTOR O
996625E	3 606480 018855 AAV34722
	Schneider
3303430292128	OElectric

#### How to read the date code?

The Vigi date code begins with a letter "N" or "S" followed by the production date with the year, week and day of the week: Nyywwd

Example: N0919/1 = 2009, week 19, day 1 of the week (Monday)

#### Affected date codes (inclusive) :

Products with date code from or products with date code from

S0927/1 to S1119/3 : Affected N0919/1 to N1106/7 : Affected

#### Caution:

Products with date code ending with letter "K" are not affected by the recall: from **N0919/1 K** to **N1106/7 K: Not affected** 

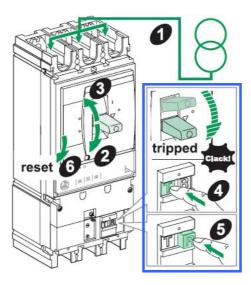


#### Appendix 3 - Push to Test by "T" Button

#### A/ Vigi Earth Leakage protection module (VIGI) :

- 1 .....Power supplied
- 2, 3.....Circuit Breaker ON,
- 4 ......Push T button on Vig : Circuit Breaker must trip
- 5 .....Push R button on Vigi: Vigi rearmed
- 6 .....Reset Circuit Breaker

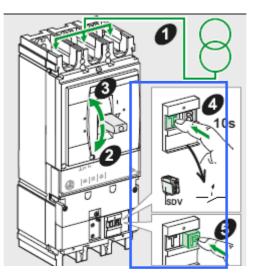
Perform three times operations 2 to 6



#### B/ Insulation Monitoring module :

- 1 .....Power supplied
- 2, 3.....Circuit Breaker ON,
- 4 .....Push T button on Vigi: Red led lights, auxiliary contact must switch
- 5 .....Push R button on Vigi: module rearmed

Perform three times operations 4 and 5



# Confirmation of Receipt of Product Safety Notice PSA 110516-303 / Vigi Compact / Installers and Users

## Please complete this form and :

Mail to :	Nadine Duce Schneider Electric Ltd Stafford park 5			
	Telford Shropshire			
	TF3 3BL <b>OR</b>			
Fax to :	Nadine Duce 01952 209273			
Email to :	OR Nadine.duce@schneider-electric.com			
Your details :				
Name :	Phone :			
Company : Address :				
-				
Email :				
Please tick one or seve	ral boxes :			
0 🗌 We have receiv	red the notice and we have read it			
1a 🔄 We have not ye	et inspected the date code of installed module(s)			
1b We have inspe- us	cted the date code of installed module(s) and the Product Safety Notice does not impact			
1c Modules are installed at our customer(s)				
1c We have inspected the date code of installed module(s) and they are manufactured within the affected period				
2 We have not ye	et performed the push to test with "T" button			
2a 🔄 We have perfor	2a We have performed the push to test and we have module(s) not functioning correctly			
	2b We have performed the push to test and the module(s) are functioning correctly, we will perform this test on a monthly basis.			
	3 We have in our stock brand new module(s) manufactured in the affected period and we will not install them			

If you are impacted, we will contact you to organize the replacement of the affected module(s)