

HSE Alert Form



Alert Number: **2014.18B** - **this alert supersedes Alert 2014.18A. Please refer to the mark in the right margin for changes to the previous version**

eSafe No		Location	Business wide	Date	06 -11-14
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Description of Hazard/Incident *(What happened?)*

Some types of Silva Link fuses have been identified within Ergon Energy's Network as containing friable asbestos material.

Extent of Impact *(Details of injury, environmental harm, equipment damage, etc.)*

- Workers and contractors can be exposed to airborne asbestos fibres when working on or removing Silva Link fuses.
- Surrounding environment can potential be contaminated by asbestos containing material (ACM)

Key Facts *(What are the key facts ?)*

- Some types of Silva Link fuses have been identified within Ergon Energy's Network as containing friable asbestos material.
- Initial investigations have confirmed that the Silva Links fuses are located in the Tropical North and Greater Downs Regions, however they have also been reported as being in our system in other locations.
- Testing indicates that Silva Link fuses can contain up to 85% asbestos material.
- The actual presence of asbestos in a fuse can only be confirmed by laboratory testing, so all Silva Link fuses are to be treated as if containing friable asbestos.
- Over time the wrapping deteriorates and the matrix that the asbestos is bonded to also deteriorates to such an extent that the asbestos becomes friable.
- A SWMS 010 – Disturbance of Asbestos (Overhead) and training video have been developed, communicated and implemented, however, WHS Qld have instructed the company to include a new process.

Silva Link Fuse with suspected Asbestos Containing Material



Silva Link fuse containing asbestos wrapped in Vinyl Mastic Tape



Actions *(Information on corrective actions implemented that may prevent harm and or assist others in preventing a similar occurrence)*

- Disregard “Remove/Isolation Link or Fuse” Activity in SWMS010 until further notice.
- Do not remove or work on Silva Link fuses
- Until further notice, avoid working on poles supporting Silva Link fuses unless necessary in an emergency or fault situation. Then, appropriate PPE is to be worn.
- Contractors are not to work on, or remove any Silva Link fuses. When identified they are to be reported to the Asbestos Manager.

Work on Poles

In an emergency or fault situation, work may be carried out on a pole fitted with Silva Link fuses so long as PPE specified below is worn and the fuses are not operated or disturbed.

1. Workers must be clean shaven
2. Wear a P2 Respirator and gloves, as a minimum, and
3. Avoid contact with the Silva Link fuses or carriages

Fuse fault

In the event of a Silva Link fuse fault, the fuses are not to be operated or removed. To restore supply an alternative fuse assembly is to be installed to bypass the Silva Link fuse. The replacement fuse installation is done to ensure workers do not disturb friable asbestos.

Fuse bypass

Method 1 utilises a Low Voltage ABC Bundle Box fuse assembly for loads less than 400Amp where one or multiple fuses are bypassed.

Method 2 utilises a single Low Voltage open wire fuse installed to bypass the single blown fuse or where load exceeds 400Amp.

Fuse bypass

Method 1.

Use this method for installation of Low Voltage ABC Bundle Box to bypass one or multiple Silva Link fuses - follow steps below:

1. Refer to construction drawing 1162 in the Overhead Construction Manual on next page.
2. Identify the Amperage. If above 400 Amps seek further advice or use the open wire switch / fuse as per Method 2.
3. Workers must be clean shaven
4. Wear a P2 Respirator and gloves, as a minimum
5. Isolate supply away from the pole in line with P53 requirements. Do not operate the Silva Link fuses. Contact OCC for an emergency switching sheet.
6. Identify the blown fuse.
7. Remove the low voltage tails from the transformer on the blown fuse phase/s and restrain.
8. Remove the low voltage tails from the overhead mains on the blown fuse phase/s and restrain.
9. Ensure the fuses are open in the LV ABC Bundle Box and fit the box to the pole in a position suitable to connect to the transformer and overhead mains while avoiding the Silva Link fuse assemblies.
10. Connect new bridge/s between the low voltage transformer bushings into the LV ABC Bundle Box fuse assemblies.
11. Connect new bridge/s from the fuses to the overhead low voltage mains.
12. Energise the transformer in line with P53 requirements and switching sheet.
13. Carry out checks to ensure correct phase rotation.

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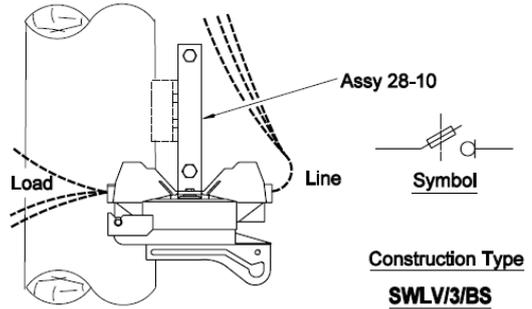
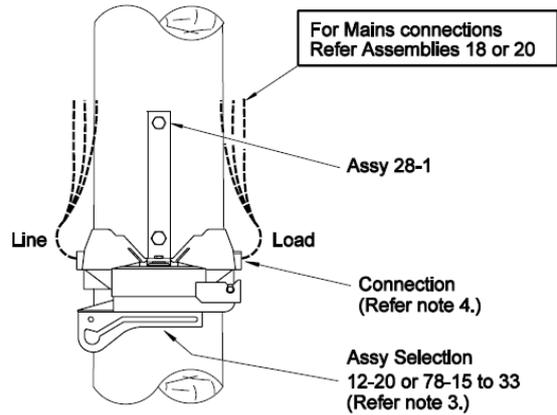


MATERIAL - SWITCH/FUSE		
ASSY	DESCRIPTION	QTY
28-1	Switch/fuse 400A (LVABC) to wood pole	1
28-10	Switch/fuse 400A (LVABC) to fuse bracket	

MATERIAL- FUSE OR SOLID LINK		
ASSY	DESCRIPTION	QTY
		3 Phase
12-20	Link solid din size 2 (400A)	3
78-14	Fuse link 50Amp din size 1	3
78-15	Fuse link 63Amp din size 1	
78-18	Fuse link 80Amp din size 1	
78-21	Fuse link 100Amp din size 1	
78-24	Fuse link 125Amp din size 1	
78-27	Fuse link 160Amp din size 1	
78-30	Fuse link 200Amp din size 1	
78-33	Fuse link 250Amp din size 1	

NOTES:

1. All metalwork that passes through or into wood shall be greased for the entire length that may come into contact with the wood.
2. For wood pole attachments and foundations refer to Construction Practices.
3. Designer to nominate fuse link size and Mains connections.
4. Designer to nominate lug size for connection of cables to switch/fuse.



A	ORIGINAL ISSUE
B	20.2.02
C	22.7.03
D	4.3.04
E	20.1.09

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Ergon Energy Corporation Ltd
ABN 50 087 646 062

APPROVED	<i>[Signature]</i>
DATE	11.5.00
PASSED	<i>[Signature]</i>
DRAWN	E. Newton

OVERHEAD DISTRIBUTION SWITCHES SWITCH/FUSE LVABC CONSTRUCTION

FILE: 5 07 1162 1 Dwg 1162 Sh

E

Method 2.

Use this method for the installation of low voltage open wire switch / fuse to bypass one Silva Link fuse or where load exceeds 400 Amp. - follow steps below:

1. Refer to following construction drawing 1108.
2. Workers must be clean shaven
3. Wear a P2 Respirator and gloves, as a minimum
4. Isolate supply away from the pole in line with P53 requirements. Do not operate the Silva Link fuses. Contact OCC for an emergency switching sheet.
5. Identify the blown fuse.
6. Remove the blown fuse low voltage tail from the transformer and restrain.
7. Remove the blown fuse low voltage tail from the overhead mains and restrain.
8. Fit the bypass fuse to the crossarm while avoiding the Silva Link fuse assemblies.
9. Connect a bridge between the low voltage transformer bushings into the fuse.
10. Connect a bridge from the fuse to the overhead low voltage mains.
11. Energise the transformer in line with P53 requirements and switching sheet.

- LV open wire switch/fuse stock codes 675132(630A) and 675159(800A) that require mounting to a wooden crossarm as below

MATERIAL - SWITCH/FUSE		
ASSY	DESCRIPTION	QTY
106-3	Switch/fuse 630A LV open wire to crossarm (100-315kVA)	3
106-5	Switch/fuse 800A LV open wire to crossarm (500kVA)	

MATERIAL- FUSE LINK		
ASSY	DESCRIPTION	QTY
		3 Phase
12-25	Cartridge fuse link 125A 2 hole HRC	3
12-28	Cartridge fuse link 160A 2 hole HRC	
12-31	Cartridge fuse link 200A 2 hole HRC	
12-34	Cartridge fuse link 250A 2 hole HRC	
12-37	Cartridge fuse link 315A 2 hole HRC	
12-40	Cartridge fuse link 350A 2 hole HRC	
12-43	Cartridge fuse link 400A 2 hole HRC	
12-46	Cartridge fuse link 350A 4 hole HRC	
12-49	Cartridge fuse link 500A 4 hole HRC	
12-52	Cartridge fuse link 710A 4 hole HRC	

NOTES:

1. All metalwork that passes through or into wood shall be greased for the entire length that may come into contact with the wood.
2. For wood pole attachments and foundations refer to Construction Practices.
3. Designer to nominate fuse link size and Mains connections.
4. Designer to nominate lug size for connection of cables to switch/fuse.

A	ORIGINAL ISSUE	HARD COPY UNCONTROLLED		APPROVED	<i>[Signature]</i>	OVERHEAD DISTRIBUTION SWITCHES SWITCH/FUSE LV OPEN WIRE CONSTRUCTION
B	20.2.02		Ergon Energy Corporation Ltd ABN 50 087 646 062	DATE	11.5.00	
C	3.10.03		DRAWN	<i>[Signature]</i>		
D	9.3.04		FILE: 5 07 1108 1	E. Newton		
E	21.1.09		Dwg 1108 Sh	E		

Contact for further Information

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