

TRAINING, INSTRUCTION & MAINTENANCE RECORD VeSafe™





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Welcome to VeSafe™

When safety is paramount and critical loads need to be maintained, there is one system that will cater to not only your electrical requirements, but also your safety obligations.

VeSafe™ is a unique product that allows you to add or replace a circuit, inspect or change the rating of a circuit breaker and provide new cable without affecting other circuits in the switchboard.

This is done via an arrangement on the Isobar power chassis in combination with a special isolation neutrals allowing both the active and neutral to be disconnected one pole at a time.

This provides complete isolation of all live conductors including the neutral, allowing a safe working state to remove or add cables.

All connections are covered preventing inadvertent contact. The main switch and chassis termination are completely covered by insulated enclosures.

Wall mount units up to 48 poles. Floor mount up to 96 poles.

Compliance

- Form 4ah to AS/NZS61439
- AS/NZS3000:2018
- Complies with OH & S Regulation
- Inspected by Workcover NSW

Standard Features

- 250A MS3250 Isolator
- 250A Isobar Chassis (size as nominated)
- Fully populated with C60N 6kA single pole circuit breakers c/w terminal covers
- Clearly numbered earth and neutral terminations
- Oversized neutral to deal with harmonics
- Generous cable tray system built in.
- Top or bottom access with cable entry system interchangeable top to bottom
- Neoprene sheet seal pre-punched aluminium cable entry plate
- 1/4 turn locks for external door
- Lift off or hinged escutcheon.
- Internal schedule holders and document pocket for manual
- Operation manual, link to training software, and Training and Authorisation Program

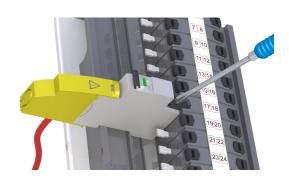


GENERAL INFORMATION

INDIVIDUAL POLE DISCONNECTION

The image opposite shows the Isobar chassis where it is possible to disconnect an individual pole to any given circuit without isolation of adjacent circuits.

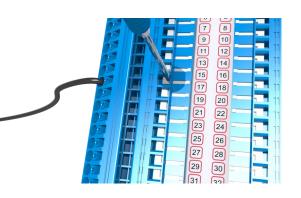
* For clarity, the image shows only an single circuit breaker mounted on the chassis.



TOTAL CIRCUIT DISCONNECTION

This image shows the neutral slide being activated with a screwdriver to disconnect the specific neutral from the main neutral bar, thus allowing for total circuit isolation and safe access.

A cable or circuit breaker may be safely replaced by following the procedures in the Training Manual and relevant Safe



Additional Options

- Power monitor. Also available with RS485 output
- Software package for remote monitoring
- 10kA circuit breakers
- Single pole RCD circuit breakers c/w terminal covers
- Three phase circuit breakers
- Additional cable entry plate for top and bottom entry
- Surge diverters, indicating lamps.
- Individual branch current or power monitoring
- Alternate keying for front door
- Additional customizing on request







This equipment should <u>ONLY</u> be operated and maintained by qualified personnel who have completed the training and authorization process.

The VeSafe™ system includes a Training and Authorisation Program.

Before commencing any operation of the VeSafe™ system, you must have completed the "Training and Autorisation Program" supplied, in conjunction with any additional requirement of the owner of this equipment

If you are not VeSafe™ authorised and trained, do not attempt to use this system.

You are violating safe work procedures and the OH & S regulation

Personal injury or damage to equipment may occur!



OPERATIONAL PROCEDURE

Verify any test equipment before commencing this process.

This equipment should <u>ONLY</u> be operated and maintained by qualified personnel who have completed the training and authorization process.

PROCESS A

REMEMBER TO WORK SAFELY

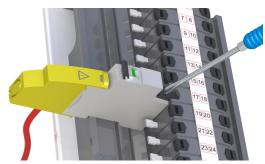
Replacing a circuit breaker

- 1. Identify the ACTIVE, NEUTRAL & EARTH of the circuit you wish to replace.
- 2. Switch the circuit breaker toggle to the OFF position.
- 3. Using the black chassis slide, isolate the circuit breaker pole.



DO NOT OPERATE THE BLACK ISOLATION SLIDE WITH THE CIRCUIT BREAKER ON

- 4. Using the insulated NEUTRAL slide, disconnect the neutral terminal from the neutral bar. Ensure full operation of the disconnect.
- 5. Test the NEUTRAL connection to EARTH with a voltage tester to ensure the terminal is safe.



DO NOT OPERATE THE BLACK ISOLATION SLIDE WITH THE CIRCUIT BREAKER ON



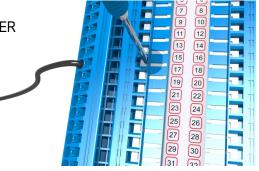
DO NOT OPERATE THE NEUTRAL SLIDE IF THE CIRCUIT BREAKER IS ON OR THE CHASSIS SLIDES ARE ENERGISED.

- 6. Remove the circuit breaker terminal cover.
- 7. Test the terminal connection to earth with a voltage tester to ensure the terminal is safe.
- 8. Remove the cable from the circuit breaker and locate safely.
- 9. Undo the line side termination of the circuit breaker with the correct sized screwdriver and remove.



DO NOT OPERATE THE BLACK ISOLATION SLIDE WITHOUT THE CIRCUIT BREAKER INSTALLED

- 9. Fit new circuit breaker into position ensuring the toggle is in the off position.
- 10. Securely do up the line side termination screw with the correct sized screwdriver.
- 11. You may now reconnect the ACTIVE cable to the circuit breaker and do up securely.
- 12. Replace the circuit breaker terminal cover.
- 13. Re-connect the insulated NEUTRAL slide to the neutral bar and ensure it is fully extended into position.
- 14. With the circuit breaker still in the OFF position, operate the black isolation slide so it is pushed all the way towards the circuit breaker and re-check.
- 15. Ensure that no tools are left in the switchboard and that all connections are sound.
- 16. Close the escutcheon.
- 17. The circuit breaker may now be switched on.



DO NOT OPERATE THE NEUTRAL SLIDE IF THE CIRCUIT BREAKER IS ON OR THE CHASSIS SLIDES ARE ENERGISED.

Always remember NEUTRAL is last off, first on.



OPERATIONAL PROCEDURE

Verify any test equipment before commencing this process.

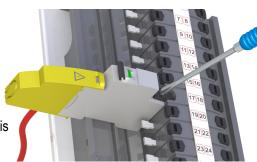
This equipment should <u>ONLY</u> be operated and maintained by qualified personnel who have completed the training and authorization process.

PROCESS B

REMEMBER TO WORK SAFELY

Adding a new circuit to a circuit breaker

- 1. Decide on OVERHEAD or UNDER FLOOR entry.
- 2. Select the pre-punched hole in the combination neoprene/aluminium entry plate and push the cable through.
- 3. Start with holes to the rear of the board.
- 4. Draw cables to the required point.
- Sheath of the cable should be left on until near the circuit breaker. This
 assists with easy identification of which NEUTRAL and EARTH are
 associated with the relevant ACTIVE.
- 6. Switch the circuit breaker toggle to the OFF position.
- 7. Using the yellow chassis slide operator, operate the BLACK chassis isolation slide, isolate the circuit breaker pole.

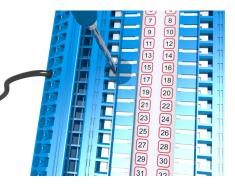


DO NOT OPERATE THE BLACK ISOLATION SLIDE WITH THE CIRCUIT BREAKER ON



DO NOT OPERATE THE BLACK ISOLATION SLIDE WITH THE CIRCUIT BREAKER ON

- 8. Using the insulated NEUTRAL slide, disconnect the NEUTRAL terminal from the neutral bar. Ensure full operation of the disconnect.
- 9. Test the NEUTRAL connection to EARTH with the voltage tester to ensure the terminal is safe.



DO NOT OPERATE THE NEUTRAL SLIDE IF THE CIRCUIT BREAKER IS ON OR THE CHASSIS SLIDES ARE ENERGISED.



DO NOT OPERATE THE NEUTRAL SLIDE IFTHE CIRCUIT BREAKER IS ON OR THE CHASSIS SLIDES ARE ENERGISED.

- 10. Bring the cable through the duct fingers with sufficient length for termination.
- 11. Strip the required lengths of ACTIVE at 14mm, and NETRAL and EARTH at 16mm each.
- 12. Select the correct EARTH termination and push a terminal screwdriver into the spring clamp release.
- 13. Insert the stripped section of the EARTH conductor and release the screwdriver, clamping the EARTH in position.
- 14. Select the correct NEUTRAL termination and push a terminal screwdriver into the spring clamp release.

Always remember NEUTRAL is last off, first on.

Continued......



OPERATIONAL PROCEDURE

Verify any test equipment before commencing this process.

This equipment should <u>ONLY</u> be operated and maintained by qualified personnel who have completed the training and authorization process.

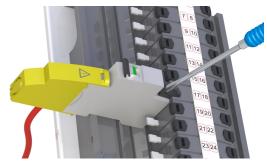
PROCESS B

PEMEMBER TO WORK SAFELY

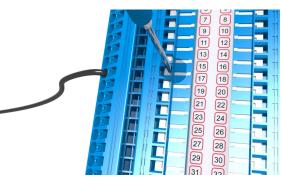
Adding a new circuit to a circuit breaker

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- 15. Remove the circuit breaker cover.
- 16. Test the terminal connection to earth with a voltage tester to ensure the terminal is safe.
- 17. Connect the ACTIVE cable to the circuit breaker and check the terminal is done up securely.
- 18. Replace the circuit breaker terminal cover.
- 19. Re-connect the insulated neutral slide to the NETURAL bar and ensure it is fully extended into position.
- With the circuit breaker still in the OFF position, operate the BLACK isolation slide so it is pushed fully towards the circuit breaker and recheck.
- 21. You will now have the ACTIVE, EARTH & NEUTRAL connected.
- 22. Ensure that the load end of the cable or equipment is safe to energise.
- 23. Ensure that no tools are left in the switchboard and that all connections are sound.
- 24. Close the escutcheon.
- 25. The circuit breaker may now be switched to the ON position.



DO NOT OPERATE THE BLACK ISOLATION SLIDE WITH THE CIRCUIT BREAKER ON



DO NOT OPERATE THE NEUTRAL SLIDE IF THE CIRCUIT BREAKER IS ON OR THE CHASSIS SLIDES ARE ENERGISED.

Always remember NEUTRAL is last off, first on.



AUTHORISATION SHEET

Authorisation to work on VeSafe™ can only be provided after reviewing documents, operational procedures and having completed the Training and Authorisation Program contained on the disc provided. Authorisation is finally accepted after you have completed and signed this Authorisation Sheet accepting that you have a complete understanding of the operation of this system.

Permission must also be provided by the equipment owner prior to works taking place.

Training and	, have inspected the docu d Authorisation program and have a complete understandin owed to ensure safe operation. I agree to follow these proc pment.	g of the procedures that
Signed:		
Company:		
Date:		_

COPY THIS SHEET FOR ADDITIONAL USE



MAINTENANCE & WORK LOG

DATE	COMPANY	WORK PERFORMED	SIGNED

COPY THIS SHEET FOR ADDITIONAL USE