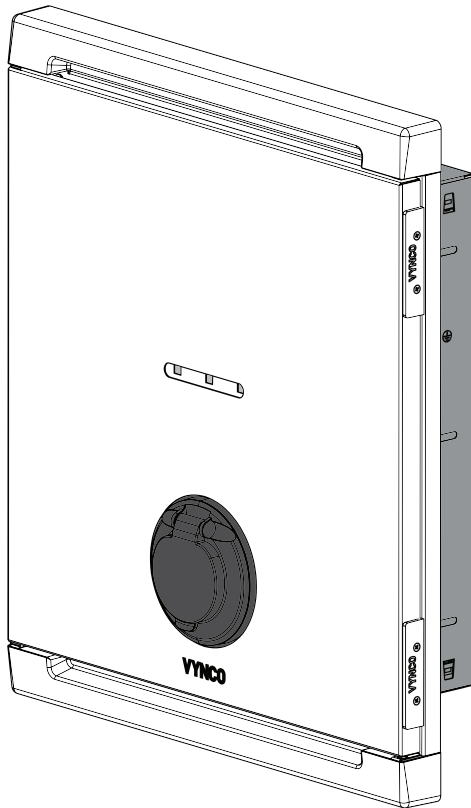


# VYNCO

## INSTALLATION INSTRUCTION

# VMEV

## FLUSH ELECTRICAL VEHICLE CHARGER





### VMEV

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## CARTON CONTENTS

The following parts should be inside the carton:

- VMEV Charger
- Installation Manual
- User Operating Manual
- Cover Screw Pack

If any of the parts are missing or damaged contact your supplier or Vynco for assistance before installing the charger.

The SDoC for the VMEV is available from [VYNCO.CO.NZ](http://VYNCO.CO.NZ)

Note: Commercial installations may require that the VMEV charger is tested and tagged every 12 months.

## SAFETY PRECAUTIONS

To ensure your safety, please read and follow all instructions carefully.

This electric vehicle charger is designed to be installed indoors only. Avoid areas where it could be exposed to moisture or high levels of dust.

Do not install this charger where it may get damaged from vehicles, bikes, machinery, or other moving objects.

Ensure there is adequate clearance around the charger for safe operation.

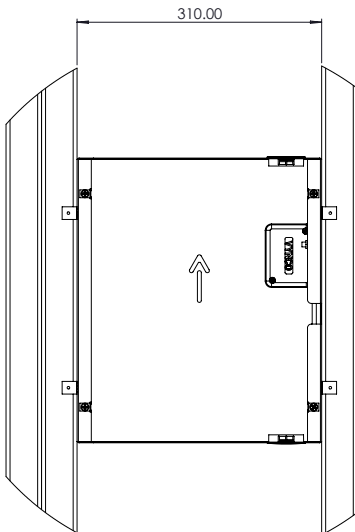
Ensure all electrical connections are safe and comply with the AS/NZS 3000 Wiring Rules and the Worksafe Electric Vehicle Charging Safety Guidelines.

### VMEV

## MOUNTING INSTRUCTIONS

The VMEV is designed to be installed in a hollow wall cavity, resulting in a slim flush finish.

1. Select a suitable mounting position on an indoor wall. The position must be at least 800mm above the floor or ground and 300mm from any wall or corner.
2. Frame the installation location to suit the dimensions of the base box. Ideal framing will allow the secure fixing of the base box on a minimum of two sides, leaving the top open for wiring installation.
3. Fold out the 4x side tabs of the base box. Insert the base box into the pre-prepared framing. Ensure the arrow is orientated upwards. The side tabs will place the box at the correct height on the framing to align with standard 10mm wall linings.
4. Securely fasten the base box to the framing through the internal mounting slots.
5. Finish wall lining around the base box. A standard 10mm wall lining should finish flush with the front sides of the base box leaving an open space for an EV charger to be installed in.



NOTE: Wall lining can be installed after wiring is complete, prior to the door and cover being installed.

### VMEV

## WIRING INSTRUCTIONS

CAUTION: This product must be installed and wired according to the AS/NZS 3000 Wiring Rules and the Worksafe Electric Vehicle Charging Safety Guidelines – available at [worksafe.govt.nz](http://worksafe.govt.nz).

All electrical connections are to be carried out by a New Zealand Registered Electrician.

This EV charger must be permanently connected to a power supply and be supplied from a dedicated final sub-circuit.

**This VMEV Charger is fitted internally with a 6mA DC RDC-DD (Residual Direct Current Detecting Device) and only requires a Type A RCD to be fitted at the switchboard to protect the incoming supply circuit.**

The final sub-circuit to the VMEV charger must be protected by a suitable MCB and Type A RCD.

This EV charger requires a Single Phase 32A Supply - (Phase, Neutral and Earth).

VMEVU / VMEVUB must be installed in the VMEVB Wall Box and with the VMEVC / VMEVCB Full Cover fitted.

## ELECTRICAL CONNECTIONS

1. Run the supply cable to the VMEV mounting position and into the installed base box through the top cable opening.  
\*See Image A on Pg4
2. Install the main charging unit into the pre mounted base box, securing with 4x screws provided. Ensure that the earth lead from the base box and the supply cable are accessible through the wiring opening.
3. Terminate supply cable and earth connections in the terminal block.  
⊕ = Earth (Green / Yellow)  
N = Neutral (Blue or Black)  
L = Phase (Brown or Red)  
\*See Image B on Pg4
4. Secure the cover and door to the main charger unit with 4x screws provided.

VMEV

### ELECTRICAL CONNECTIONS

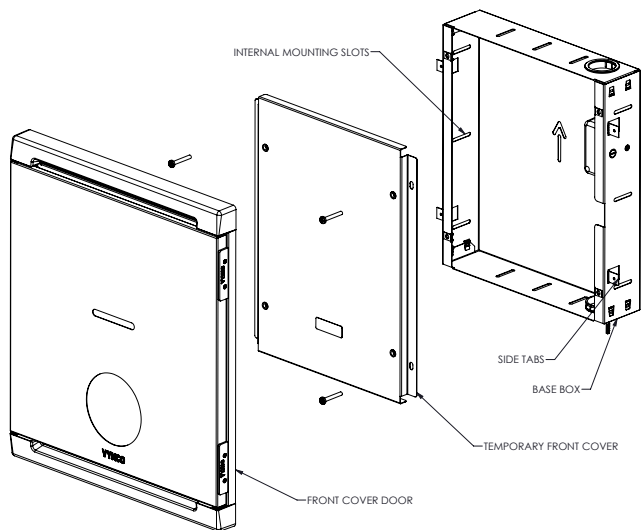


Image A

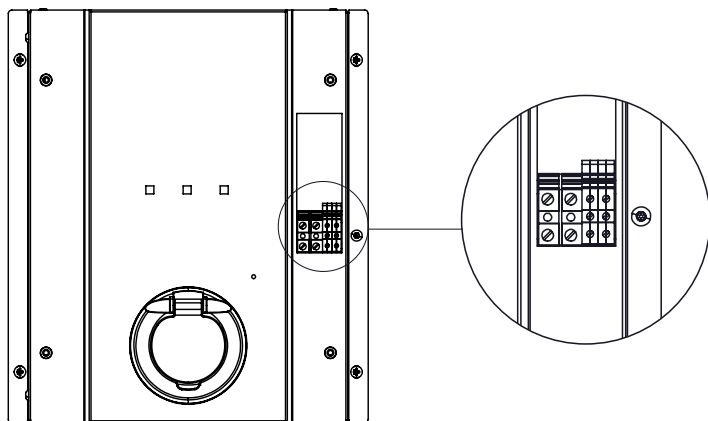


Image B

### VMEV

## COMMISSIONING

**CAUTION:** After installation the installer is required to ensure the VMEV Charger functions and is safe to use.

- Ensure that the installation complies with the requirements listed in the WorkSafe New Zealand Electric Vehicle Charging Safety Guidelines.
- Verify that the RCD at the switchboard is correct for this installation – normally a Type A 30mA RCD. All Type A RCDs have the following symbol on them.



- Verify that the overcurrent protection device (MCB) is suitable for single phase – 32A.
- Verify that the VMEV Charger is in an area accessible to the electric vehicle for charging and it is minimum of 800mm off the floor.
- Verify that there is an isolator located close to the VMEV Charger and labelled.
- The VMEV Charger must be tested to ensure that it operates before handing over to the owner.
- Check if the VMEV Charger functions by charging an electric vehicle or use a specialised EV tester.
- Check if the earth monitoring system built into the VMEV Charger functions and turns the charger OFF if there is a missing earth or earth fault.
- Press the test button on Type A RCD at the switchboard and ensure it trips.

**Procedure for testing the VMEV Charger's internal 6mA RDC-DD if required:**

1. Check that the power is on to the VMEV Charger, and the display is blue.
2. Plug the VMEV Charger into a specialised electric vehicle tester using a standard charging lead.
3. Plug an RCD tester with a 10mA DC setting into the load output of the tester.
4. Set the tester to DC and 10mA then connect to Phase and Earth.
5. Press the ramp button on the tester and the VMEV Charger should turn Red to show a fault.
6. Remove the charging lead from the VMEV and the display should reset to Blue.
7. If the VMEV Charger does not turn red to show a fault (RDC-DD disconnecting the power) check the settings on the tester and the connections. Repeat this test.
8. If the VMEV Charger repeatedly shows a fault, contact Vynco or your supplier for further assistance.

### VMEV

## TECHNICAL SPECIFICATIONS

| Electrical Ratings  |  |
|---------------------|--|
| Rated Input Voltage | 230-240V AC +- 10%<br>Single phase           |
| Frequency           | 50Hz   |
| Maximum Power       | 7.4kW  |
| Rated Current       | 32A maximum @ 20°C<br>(Permanent connection) |
| Standby Power       | <6W  |

| Electrical Protection          |  |
|--------------------------------|--|
| RDC-DD Protection              | 6mA DC complying with IEC62955   |
| Additional Internal Protection | Under/Over Voltage,<br>Short Circuit, Under/Over<br>Temperature,<br>Phase Protection |
| Protection Class               | Class 1  |

| Operational Ratings   |   |
|-----------------------|---|
| Activation Method     | Plug in and charging starts automatically after 20 seconds                  |
| LED Status Indicators | Blue - Power Available<br>Green flashing - Charging<br>Red flashing - Fault |
| Charging Method       | Mode 3 - Plug in and charging starts  |



### VMEV

#### Environmental Ratings

|   |  |
|---|--|
| Suitable For Use                        | Indoors Only<br>Restricted access location |
| Protection Rating                       | IP41                                       |
| Working Temperature Range               | -30°C to +55°C                             |
| Working Humidity                        | 5% to 95% without condensation             |
| Maximum Elevation                       | <2000 metres                               |
| Average Mean Time Before Failure (MTBF) | 100,000 operations                         |
| Overall Dimensions (L x W x D)          | 477mm x 402mm x 127mm                      |
| Installation                            | Flush wall mount                           |
| Weight                                  | < 6.4kgs                                   |

### NOTES

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### VMEV

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## SERVICING AND REPLACEMENT PARTS

### SERVICING

The VMEV Electric Vehicle Charger does not contain any user serviceable parts.

### REPLACEMENT PARTS

Only Vynco supplied replacement parts can be used to repair this electric vehicle charger. Contact Vynco for assistance.

### WARRANTY

The VMEV is covered by the standard 3 year Vynco Warranty - proof of purchase is required. Please contact Vynco for details of returns procedure.

### Compliance

|   |   |
|---|---|
| Electrical Standards Compliance                           | IEC 61851-1:2017, IEC 62955:2018<br>IEC 61851-23 (Mode 3)   |
| Supplier Declaration of Conformity<br>SDoC / Instructions | Available from <a href="http://VYNCO.CO.NZ">VYNCO.CO.NZ</a> |

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