



Don't be ordinary ... *Switch on Style!*



CIRCUIT BREAKERS & DISTRIBUTION BOARDS

Understanding Protection, Isolation & Power Distribution

The foundation of every safe electrical installation starts with the correct protection devices. Learn how circuit breakers, earth leakage devices, isolators and distribution boards work together to protect people, equipment and property.

Turn the page to discover the complete VETI protection solution.

WHAT IS A MINITURE CIRCUIT BREAKER (MCB)?

A miniture circuit breaker (MCB) is an automatic protective device designed to disconnect power when excessive current flows through a circuit. Its primary purpose is to protect electrical wiring and connected equipment from damage caused by overloads and short circuits.

Circuit breakers are an essential part of every electrical installation, designed to protect cables from damage caused by overloads and short circuits, ultimately preventing insulation failure, overheating equipment damage and potential fire hazards.

Unlike a fuse, a circuit breaker can be reset after a fault has been cleared, making it a reliable and reusable form of electrical protection.



VETI MCB FEATURES

- IEC 60947-2 compliant & SANS approved
- C-Curve tripping characteristic
- Single, Double, Triple and Four Pole options
- Current ratings from 6A to 63A
- DIN rail mounting
- Top and bottom cable connection

Did You Know?

A VETI 3kA MCB can safely interrupt fault currents of up to 3,000A before damage occurs to the installation.

VETI 3KA MINIATURE CIRCUIT BREAKER RANGE

	Pole Configuration	Available Ratings	Part Numbers	Typical Application
	Single Pole	6A, 10A, 16A, 20A, 25A, 32A, 40A, 50A, 63A	V3C1P06, V3C1P10, V3C1P16, V3C1P20, V3C1P25, V3C1P32, V3C1P40, V3C1P50, V3C1P63	Lighting circuits, socket outlets and dedicated single-phase loads
	Double Pole	6A, 10A, 16A, 20A, 25A, 32A, 40A, 50A, 63A	V3C2P06, V3C2P10, V3C2P16, V3C2P20, V3C2P25, V3C2P32, V3C2P40, V3C2P50, V3C2P63	Single-phase circuits require live and neutral disconnection
	Triple Pole	6A, 10A, 16A, 20A, 25A, 32A, 40A, 50A, 63A	V3C3P06, V3C3P10, V3C3P16, V3C3P20, V3C3P25, V3C3P32, V3C3P40, V3C3P50, V3C3P63	Three-phase motors, machinery and commercial installations
	Four Pole	6A, 10A, 16A, 20A, 25A, 32A, 40A, 50A, 63A	V3C4P06, V3C4P10, V3C4P16, V3C4P20, V3C4P25, V3C4P32, V3C4P40, V3C4P50, V3C4P63	Three-phase systems requiring neutral protection and isolation

A MINITURE CIRCUIT BREAKER (MCB) IS NOT A SWITCH

Although a miniture circuit breaker (MCB) can be manually switched ON and OFF, it is designed to protect electrical circuits from overloads and short circuits using thermo-magnetic tripping mechanisms. Similarly, an earth leakage switch is designed to protect people by disconnecting power when an earth leakage fault is detected.

Neither device is intended for frequent switching. For regular switching, scheduling and automation, dedicated control devices such as isolator switches, timers and smart controls are the recommended solutions.

USE THE RIGHT DEVICE FOR THE RIGHT JOB



Circuit Breaker (MCB)
Primary Purpose:
Circuit Property Protection



Isolator
Primary Purpose:
Safe Disconnection



Earth Leakage (RCCB)
Primary Purpose:
Leakage Protection



Timer & Smart Control
Primary Purpose:
Scheduling, Automation
& Remote Control

WHEN SHOULD YOU USE A TIMER OR SMART CONTROL?

While miniture circuit breakers (MCB) are designed to protect electrical circuits, timers and smart control devices are designed to manage how and when electrical loads operate.

These solutions provide convenient control, improved energy efficiency and automation for both residential and commercial installations.

Typical Applications

- ✓ Lighting
- ✓ Geysers
- ✓ Pool Pumps
- ✓ Smart Home Systems



Circuit Breaker
Protects equipment from
overloads and short circuits.



Timer & Smart Control
Controls when and how
equipment operates.

BENEFITS OF TIMERS & SMART CONTROL

- Scheduled Switching
- Remote Operation
- Improved Energy Efficiency
- Smart Home Integration
- Automated Control
- Reduced Manual Switching

WHAT IS AN RCCB?

An RCCB (Residual Current Circuit Breaker), commonly referred to as an Earth Leakage Circuit Breaker, is designed to protect people from electric shock by monitoring the current flowing through the live and neutral conductors.

Under normal operating conditions, the outgoing and returning current should be equal. If an imbalance is detected, indicating current may be leaking to earth through faulty equipment, damaged insulation, moisture/water contact or accidental contact with a live conductor, the RCCB automatically disconnects power within milliseconds.

Unlike a circuit breaker, which protects wiring and equipment, an RCCB is specifically designed to detect earth leakage faults and help protect people from electrical hazards.

WHY IS AN RCCB IMPORTANT?

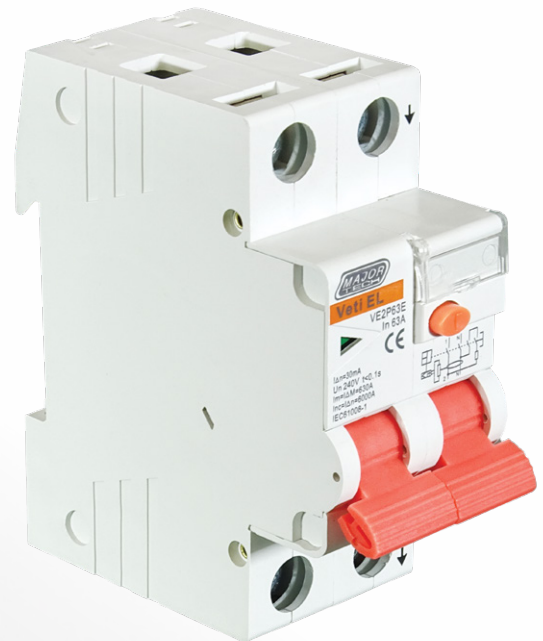
Electrical faults can occur due to damaged cables, faulty appliances, deteriorated insulation or moisture ingress. In these situations, electrical current may flow to earth through equipment, building structures or even a person.

An RCCB helps reduce the risk of serious injury by disconnecting the electrical supply when leakage current is detected.

HOW DOES AN RCCB WORK?

- 1 Continuously monitors current flowing through live and neutral conductors.
- 2 Compares outgoing and returning current.
- 3 Detects an imbalance caused by leakage to earth.
- 4 Disconnects power almost instantly when leakage exceeds the rated sensitivity.

VETI RCCB (EARTH LEAKAGE) BREAKER RANGE



Pole Configuration: Double Pole

Available Ratings: VE2P63E

Typical Application: Residential homes, apartments, offices general single-phase installations, Commercial and Industrial Installation.

WHAT IS AN ISOLATOR SWITCH?

An isolator is a switching device designed to safely disconnect electrical equipment from the power supply for maintenance, servicing or emergency shutdown procedures.

Its primary purpose is to create a safe and visible point of isolation before work is carried out on electrical equipment.

Isolators play an important role in residential, commercial and industrial installations by helping ensure equipment can be safely disconnected when required.



WHY ARE ISOLATORS IMPORTANT?

Electrical equipment often requires maintenance, inspection or replacement. Before work can begin, the equipment must be safely disconnected from the power source.

An isolator provides a dedicated means of disconnection, helping reduce the risk of accidental energisation during servicing.

WHAT DOES AN ISOLATOR DO?

- Provides Safe Electrical Isolation
- Disconnects Equipment From The Supply
- Assists During Maintenance & Servicing
- Provides A Dedicated Point of Isolation
- Safely and Reliably Disconnect MCB's & RCCB's



Key Features

- ✓ IEC 60947-3 Compliant
- ✓ Contact Position Indicator
- ✓ DIN Rail Mounting
- ✓ Top & Bottom Cable Connection
- ✓ Reliable Isolation Performance
- ✓ Suitable for Residential, Commercial & Industrial Installations

VETI ISOLATOR RANGE

	Configuration	Current Ratings	Part Numbers	Typical Applications
	Single Pole (1P)	32A, 63A, 80A, 100A	VS1P32, VS1P63, VS1P80, VS1P100	Dedicated circuits and residential installations
	Double Pole (2P)	32A, 63A	VS2P32, VS2P63	Single-phase equipment and distribution boards
	Triple Pole (3P)	32A, 63A, 80A, 100A	VS3P32, VS3P63, VS3P80, VS3P100	Three-phase motors and machinery
	Four Pole (4P)	32A, 63A, 80A, 100A	VS4P32, VS4P63, VS4P80, VS4P100	Three-phase systems requiring neutral isolation

UNDERSTANDING DISTRIBUTION BOARDS

A distribution board is the central point of an electrical installation, responsible for safely distributing power throughout a building while housing the devices that protect people, equipment and circuits. Often referred to as the “heart” of an electrical system, a distribution board provides a structured and organised way to control, protect and isolate individual circuits.

Whether in a home, office, factory or commercial building, distribution boards help ensure power is distributed safely and efficiently throughout the installation.



WHAT IS INSIDE A DISTRIBUTION BOARD?

- A typical distribution board may contain:
- DIN Rail
- Main Isolator
- Earth Leakage Switch
- Circuit Breakers
- Neutral Bar
- Earth Bar
- Bus Bar

Together, these components provide protection, isolation and power distribution throughout the installation

HOW POWER FLOWS THROUGH A MAIN MCB DISTRIBUTION BOARD

Incoming Supply - Main Isolator - Earth Leakage - Circuit Breakers

Examples:

- Lighting Circuits
- Socket Circuits
- Geysers
- Swimming Pool
- Jacuzzi

Did You Know?

A well-designed distribution board makes maintenance easier, improves fault identification and helps ensure each circuit is correctly protected according to its application.

FLUSH MOUNT VS SURFACE MOUNT

Distribution boards are generally available in two installation styles:

Flush Mount

Installed within the wall cavity for a cleaner and more discreet appearance.

Typical Applications:

- ✓ Residential Homes
- ✓ Apartments
- ✓ Offices



Surface Mount

Installed directly onto the wall surface where recess mounting is not practical.

Typical Applications:

- ✓ Commercial Buildings
- ✓ Workshops
- ✓ Industrial Installations
- ✓ Retrofit Projects



IP20 DISTRIBUTION BOARDS

The VETI VBM Distribution Board range is designed to provide safe and reliable power distribution for residential, commercial and light industrial installations. Available in both Flush Mount and Surface Mount configurations, the VBM range offers a clean and professional solution for housing circuit breakers, earth leakage and isolators while ensuring circuits remain organised and protected.

Manufactured from durable powder-coated steel and supplied complete with Earth and Neutral bars, the VBM range features adjustable DIN rails, a convenient push-to-open cover mechanism and circuit identification labels for simplified installation and maintenance.

VBM FLUSH MOUNT DISTRIBUTION BOARDS (IP20)

Designed to be recessed into the wall cavity for a clean and discreet finish.



Part Number	Din Rail Space	Total Size (mm)	Wallbox Cut-Out Size (mm)
VBM24FL	4 Way	151 × 172 × 97	123 × 152 × 77
VBM57FL	7 Way	196 × 210 × 97	169 × 192 × 77
VBM810FL	10 Way	250 × 210 × 97	220 × 192 × 77
VBM1114FL	14 Way	323 × 210 × 97	292 × 192 × 77
VBM1518FL	18 Way	394 × 210 × 97	364 × 192 × 77
VBM1922FL	22 Way	466 × 210 × 97	436 × 192 × 77
VBM2228FL	28 Way	320 × 418 × 97	290 × 400 × 75
VBM3036FL	36 Way	322 × 418 × 97	365 × 400 × 75



VBM SURFACE MOUNT DISTRIBUTION BOARDS (IP20)

Designed for installations where recess mounting is not practical, allowing for fast and convenient installation directly onto the wall surface.

Part Number	Din Rail Space	Total Size (mm)
VBM24SM	4 Way	151 × 172 × 97
VBM57SM	7 Way	196 × 210 × 97
VBM810SM	10 Way	250 × 210 × 97
VBM1114SM	14 Way	323 × 210 × 97
VBM1518SM	18 Way	394 × 210 × 97
VBM1922SM	22 Way	466 × 210 × 97
VBM2228SM	28 Way	320 × 418 × 97
VBM3036SM	36 Way	322 × 418 × 97

VBM RANGE FEATURES

- ✓ IP20 Protection Rating
- ✓ IK06 Impact Resistance
- ✓ Powder-Coated Steel Construction
- ✓ Adjustable DIN Rail System
- ✓ Earth & Neutral Bars Included
- ✓ Push-To-Open Cover Mechanism
- ✓ Distribution Board Labels Included
- ✓ Suitable For Flush & Surface Mount Installation
- ✓ Rated Current: 125A
- ✓ Voltage Rating: 1000V AC / 1500V DC
- ✓ 5 Year Warranty

IP66 WEATHERPROOF DISTRIBUTION BOARDS

The VETI VBW range is designed for installations where protection against dust, water and harsh environmental conditions is required. Manufactured from durable polycarbonate plastic with a transparent cover, the VBW range offers reliable protection for circuit breakers, earth leakage and isolators in demanding indoor and outdoor applications.

With an IP66 protection rating and IK08 impact resistance, VBW distribution boards are ideal for industrial facilities, outdoor installations, agricultural environments, coastal areas and solar applications.

This additional protection helps improve reliability and extends the service life of electrical components installed in exposed environments.

WHY CHOOSE AN IP66 DISTRIBUTION BOARD?

Unlike standard IP20 distribution boards used indoors, IP66 distribution boards provide a sealed enclosure that helps prevent the ingress of dust and water.

This additional protection helps improve reliability and extends the service life of electrical components installed in exposed environments.

Typical Applications

- ✓ Outdoor Installations
- ✓ Industrial Facilities
- ✓ Agricultural Applications
- ✓ Coastal Environments
- ✓ Solar Installations
- ✓ Washdown Areas

IP66 DISTRIBUTION BOARD RANGE

Part Number	Din Rail Space	Dimensions (H × W × D mm)	IP Rating
VBW4S	4 Way	200 × 127 × 105	IP66
VBW6S	6 Way	200 × 165 × 105	IP66
VBW8S	9 Way	200 × 219 × 105	IP66
VBW12S	12 Way	230 × 273 × 110	IP66
VBW18S	18 Way	230 × 380 × 115	IP66
VBW24S	24 Way	380 × 273 × 115	IP66
VBW36S	36 Way	380 × 380 × 115	IP66



VBM RANGE FEATURES

- ✓ IP66 Dust & Water Protection
- ✓ IK08 Impact Resistance
- ✓ Polycarbonate Construction
- ✓ Transparent Cover
- ✓ UV Resistant Materials
- ✓ Fire Resistant Up To 850°C
- ✓ Earth & Neutral Bars Included
- ✓ Durable Clip Mechanism
- ✓ Suitable For Indoor & Outdoor Installations
- ✓ 1000V AC / 1500V DC Voltage Rating
- ✓ 125A Rated Current
- ✓ 5 Year Warranty