## **RM-FVA voltage and current protector (3 Phase)**



The **RM-FVA Voltage and Current Protector (3 Phase)** by **Relitech** is a highly dependable protection device designed to safeguard electrical equipment and systems operating on a three-phase power supply. With industrial environments becoming increasingly dependent on sensitive and expensive electrical machinery, ensuring a stable and safe power supply has never been more critical. The RM-FVA provides robust protection against voltage fluctuations, overvoltage, under-voltage, and current imbalances, making it an essential device for factories, workshops, and commercial electrical systems.

#### **Key Features**

# 1. Wide Voltage Supply Range

- The protector is designed to work with a rated supply voltage of 380V AC, making it ideal for three-phase industrial systems.
- o It supports a wide **operating voltage range of AC 50V to 400V**, ensuring compatibility with various electrical networks and conditions.

## 2. Accurate Over-Voltage and Under-Voltage Protection

- o Adjustable over-voltage protection (U>) from 220V to 300V per phase (S/R/T).
- Adjustable under-voltage protection (U<) from 120V to 210V per phase (S/R/T).
- These adjustable settings allow engineers and operators to fine-tune the device to their specific system requirements, providing maximum flexibility and safety.

## 3. High Isolation Rating

 With an isolation voltage rating of 440–400V, the RM-FVA ensures reliable separation and enhanced protection for connected equipment.

## 4. Stable Operation on Industrial Frequency

o Operates on both **50Hz and 60Hz systems**, making it suitable for global use.

#### Why You Need a Voltage and Current Protector

Three-phase power systems are widely used in industrial and commercial applications due to their efficiency in transmitting and distributing electricity. However, these systems are vulnerable to electrical issues such as voltage sags, surges, or unbalanced loads. Without protection, such disturbances can lead to:

- **Equipment damage**: Motors, pumps, compressors, and other machinery can be permanently damaged by repeated exposure to voltage fluctuations.
- **Unexpected downtime**: Power instability can cause unplanned stoppages in production, leading to losses in time and money.
- **Safety risks**: Electrical faults can increase the risk of fires, equipment malfunctions, and accidents.

The **RM-FVA Voltage and Current Protector** acts as a safeguard, constantly monitoring the incoming three-phase supply and disconnecting the load whenever unsafe voltage conditions are detected. Once the power stabilizes, it automatically restores the connection, ensuring smooth and reliable operation.

#### **Applications**

The RM-FVA is a versatile device suitable for a wide range of industries and settings, including:

- **Industrial machinery** Protects motors, CNC machines, conveyor belts, and pumps from power fluctuations.
- **Commercial buildings** Ensures stable power supply for elevators, HVAC systems, lighting, and sensitive electronic equipment.
- **Workshops and factories** Provides reliable protection for welding machines, compressors, and heavy-duty electrical tools.
- **Agricultural equipment** Safeguards irrigation pumps, grain dryers, and other electrically powered farming machinery.
- **Data centers and IT infrastructure** Prevents costly downtime due to unstable power conditions.

### **Technical Specifications**

- **Brand:** Relitech
- Model: RM-FVA Voltage and Current Protector (3 Phase)
- Rated Supply Voltage: AC 380V
- Operating Voltage Range: AC 50V ~ 400V
- Rated Frequency: 50/60Hz
- Over-Voltage Adjustment Range (U>): 220V ~ 300V per phase (S/R/T)
- Under-Voltage Adjustment Range (U<):  $120V \sim 210V$  per phase (S/R/T)
- Rated Isolation Voltage: 440V 400V

#### Benefits of Choosing Relitech RM-FVA

- 1. **Enhanced Equipment Protection** Extends the lifespan of electrical systems and machinery.
- 2. **Customizable Settings** Allows precise adjustment of over- and under-voltage thresholds.
- 3. **Energy Efficiency** Reduces unnecessary downtime and prevents energy wastage from malfunctioning equipment.
- 4. **Global Compatibility** Operates on both 50Hz and 60Hz networks, making it suitable worldwide.
- 5. **Trusted Brand** Relitech is known for delivering reliable and durable electrical protection devices.

#### Conclusion

The **Relitech RM-FVA Voltage and Current Protector** (3 **Phase**) is a must-have solution for industries and businesses that rely on stable power to operate efficiently. With its wide operating range, adjustable voltage settings, and high isolation rating, it provides comprehensive protection against power instability. Whether you're running heavy machinery in a factory, managing a

commercial facility, or safeguarding agricultural equipment, the RM-FVA ensures uninterrupted operation and peace of mind.

Invest in the **RM-FVA Protector** today and protect your valuable electrical assets from unexpected power disturbances.