

Product datasheet

Specifications



voltage measurement relay RM4-U - range 1..100 V - 220..240 V AC

RM4UA02M

ⓘ Discontinued

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications



Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

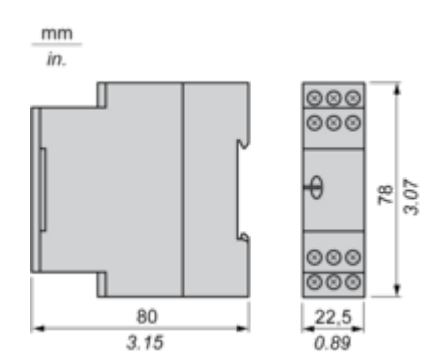
Use Longer

Lifetime extension	
Repair	No

Dimensions Drawings

Voltage Measurement Relays

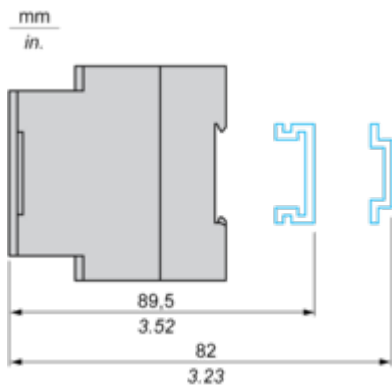
Dimensions



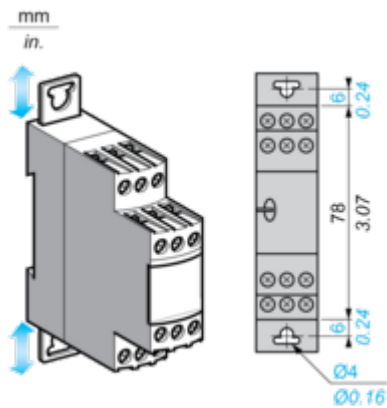
Mounting and Clearance

Voltage Measurement Relays

Rail mounting



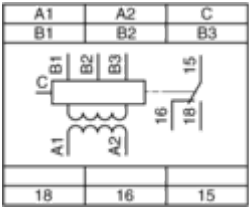
Screw fixing



Connections and Schema

Voltage Measurement Relays

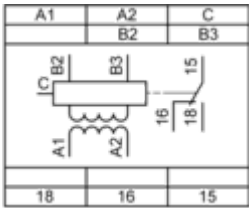
RM4UA01 and RM4UA02 Wiring Diagram



A1-A2 Supply voltage
B1, B2, B3, C Voltages to be measured (see table below)

Connection and current values to be measured		
RM4UA•1	B1-C	0.05...0.5 V
	B2-C	0.3...3 V
	B3-C	0.5...5 V
RM4UA•2	B1-C	1...10 V
	B2-C	5...50 V
	B3-C	10...100 V

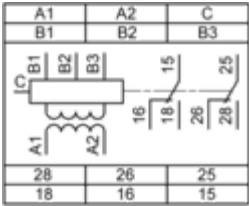
RM4UA03 Wiring Diagram



A1-A2 Supply voltage
B2, B3, C Voltages to be measured (see table below)

Connection and current values to be measured	
B2-C	30...300 V
B3-C	50...500 V

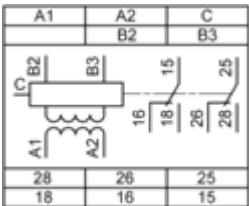
RM4UA31 and RM4UA32 Wiring Diagram



A1-A2 Supply voltage
B1, B2, B3, C Voltages to be measured (see table below)

Connection and current values to be measured		
RM4UA•1	B1-C	0.05...0.5 V
	B2-C	0.3...3 V
	B3-C	0.5...5 V
RM4UA•2	B1-C	1...10 V
	B2-C	5...50 V
	B3-C	10...100 V

RM4UA33 Wiring Diagram



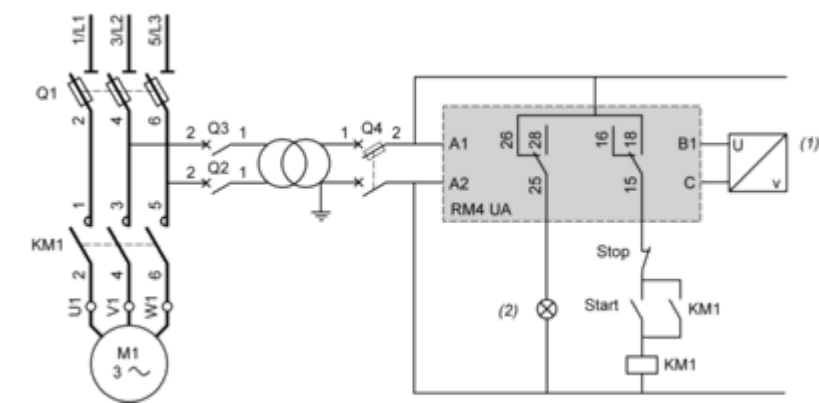
A1-A2 Supply voltage
B2, B3, C Voltages to be measured (see table below)

Connection and current values to be measured	
B2-C	30...300 V
B3-C	50...500 V

Voltage Measurement Relays

Application Scheme

Example: overspeed monitoring (undervoltage function)



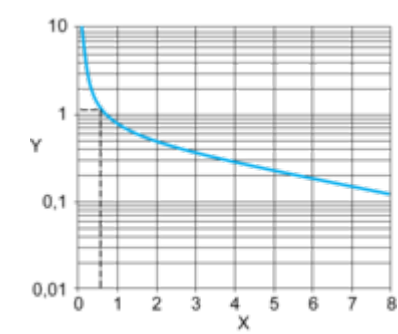
- (1) Tachogenerator
- (2) Overspeed

Performance Curves

Electrical Durability and Load Limit Curves

AC Load

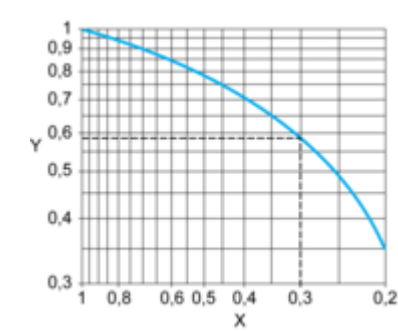
Curve 1: Electrical durability of contacts on resistive load in millions of operating cycles



X Current broken in A

Y Millions of operating cycles

Curve 2: Reduction factor k for inductive loads (applies to values taken from durability Curve 1)

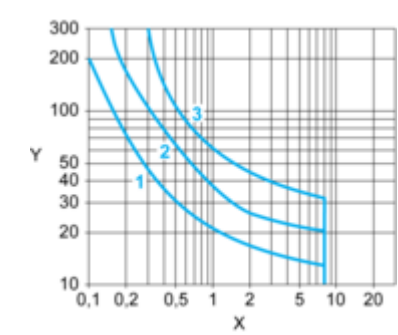


X Power factor on breaking (cos φ)

Y Reduction factor K

DC Load

Load limit curve



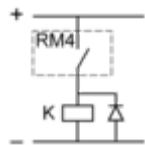
X Current in A

Y Voltage in V

1 L/R = 20 ms

2 L/R with load protection diode

3 Resistive load

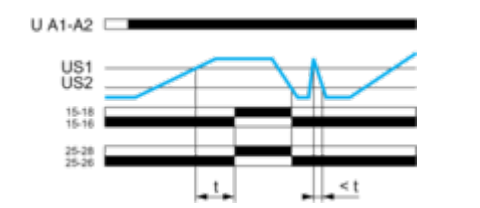


Technical Description

Function Diagram

Overvoltage Control

Function “>”



Legend

- t Time delay
- U A1-A2 Supply voltage
- US1 Setting voltage threshold
- US2 Voltage measured
- 15-18, 15-16; 25-28, 25-26 Output relays connections
- Relay status: black color = energized.