

Product changeover from MRU/MRI to MRM

As part of the consolidation of our product portfolio, the monofunctional monitoring relays of **MRU** and **MRI** are being consolidated with the multifunctional monitoring relays **MRM**. The MRM series combines the functionality of the MRI and the MRU in one device.

This document provides an overview of the similarities and differences between the MRU/MRI and the MRM.

1 Technical compatibility

There are only a few points to consider when switching from the MRU/MRI to the MRM. In most applications, the replacement can be carried out directly, as the devices are largely identical in terms of function and connection.

1.1 Hardware

MRU, MRI and MRM share the same hardware. In particular, form factor of the housing, contacts, terminal location, measurement range and electrical specifications are identical.

1.2 Firmware

There are small differences in the firmware between the MRU, MRI and MRM. As a result, the response times of the MRM is slightly longer compared to the MRU resp. MRI version.

The following table shows how different models compare.

MRU

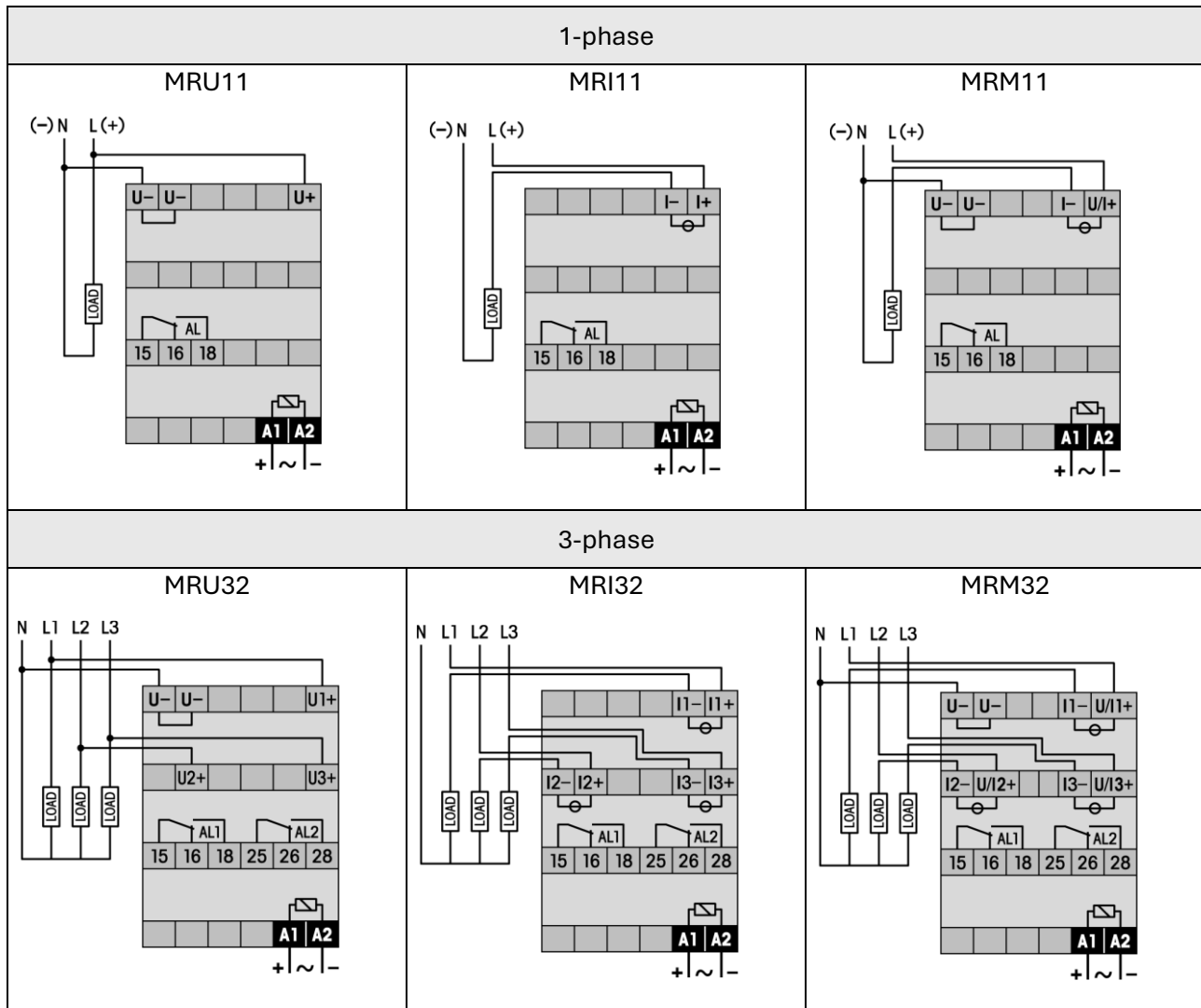
	1-phase		3-phase	
	MRU11	MRM11	MRU32	MRM32
Fast Mode	60 - 120 ms		60 - 210 ms	
Slow Mode	120 - 150 ms	120 - 210 ms	120 - 660 ms	

MRI

	1-phase		3-phase	
	MRI11	MRM11	MRI32	MRM32
Fast Mode	60 - 120 ms		60 - 150 ms	60 - 210 ms
Slow Mode	120 - 150 ms	120 - 210 ms	120 - 400 ms	120 - 660 ms

1.3 Wiring

The wiring is identical between the MRU/MRI and MRM:



1.4 Monitoring and alarm settings

The menu of the MRM merges the menu of the MRU and the MRI. Therefore, there are more parameters available for monitoring:

Unit	MRU	MRI	MRM
Voltage	✓	x	✓
Current	x	✓	✓
Power in Watt	x	x	✓
Power in VA	x	x	✓
Power factor	x	x	✓
Frequency	✓	✓	✓
Phase angle & sequence	x	✓	✓

The menu navigation is the same for MRU, MRI and MRM.

2 Product overview

Industry Variants	
MRU11/UC110-240V	MRM11/UC110-240V
MRI11/UC110-240V	
MRU11/UC12-48V	MRM11/UC12-48V
MRI11/UC12-48V	
MRU32/UC110-240V	MRM32/UC110-240V
MRI32/UC110-240V	
MRU32/UC12-48V	MRM32/UC12-48V
MRI32/UC12-48V	
Railway Variants	
MRU11R/UC110-240V	MRM11R/UC110-240V
MRI11R/UC110-240V	
MRU11R/UC12-48V	MRM11R/UC12-48V
MRI11R/UC12-48V	
MRU32R/UC110-240V	MRM32R/UC110-240V
MRI32R/UC110-240V	
MRU32R/UC12-48V	MRM32R/UC12-48V
MRI32R/UC12-48V	

The MRU and MRI devices can be directly replaced by an MRM without technical modifications.

The MRM data sheets are available on our website and contains all relevant technical information: <https://www.comatreleco.com/en/Products/Monitoring-Measuring-Devices/Multifunction-Monitoring/MRM-Series/>

If you have any further questions, our technical support team will be happy to assist you: support@comatreleco.com