



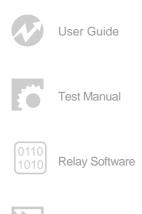
2SY212A Software Synchronism Check Relay

relay monitoring systems pty ltd

Advanced Protection Devices



Synchronising Check



*μ*MATRIXwin

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2SY212ARelay Software

Links to Other Documents

User Guide: http://www.rmspl.com.au/userguide/2sy212_user_guide.pdf

User Guide: http://www.rmspl.com.au/userguide/2sy212-s_user_guide.pdf

Software Downloads: http://www.rmspl.com.au/digital/umatrix.htm

Version Control

Issue	Date	Summary of changes
Α	17/12/2010	Initial release
В		
С		
D		
Е		
F		

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1.0 OVERVIEW

The 2SY212 synchronism check relay is designed to measure the phase angle between the monitored single phase voltages on the line & bus sides of a circuit breaker & verify that this angle is less than setting. If the measured angle has met this criteria for the time period defined by the setting & the voltage magnitudes meet the criteria established by the Live Line/Bus & U/V Line/Bus settings, the output relay will be energised & the breaker permitted to close. Resetting will occur if either the phase angle or voltage magnitude stray outside the pre-set limits or if the sync check enable input is de-energised. Front panel LED's provide visual indication of relay status & sync check function. Bus or Line U/V, Differential Voltage and Frequency Slip Close block functionality together with flexible synchronism check bypass logic caters for a diverse range of applications.

The 2SY212 relay is built on the Micro MATRIX digital platform. The standard Micro MATRIX human machine interface (HMI) is combined with fully solid-state voltage sensing & measuring circuitry to provide high accuracy, simple set up & flexible operation. Self-monitoring is carried out by hardware & software watchdogs. A CPU software watchdog records abnormal events & performs automatic periodic checks High speed, high contact rating output relays are used.

A programming port is provided for ease of establishing relay settings using a PC & \(\mu\)MATRIXwin.

2.0 SOFTWARE VERSION CONTROL REGISTER

The following table is a register of the changes for the **UMX2SY212A.umx** file.

DATE	SOFTWARE	CHANGES	BIOS	FIRST HARDWARE
13/12/2010	05.50	Initial release.	05.50+	2SY212K1

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3.0 DESCRIPTION – UMX2SY212A.UMX

3.1 Standard Features

The 2SY212-S provide a range of standard features as described in the RMS Technical Bulletins that may be downloaded from the RMS website.

3.2 Special Features of this Software UMX Version

The A UMX software supports the standard 2SY212 features.

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4.0 USER INTERFACE

Refer to the μ MATRIX Users Guide for detailed instructions on the operation of the user interface.

To download a PDF version of the guide uMatrix: www.rmspl.com.au/digital/umatrixinfo.pdf

To download a PDF version of the guide uMatrix-S: www.rmspl.com.au/digital/umatrix-s_info.pdf

To download USB VCP dirvers for uMATRIX-S: www.rmspl.com.au/umatrix.htm

5.0 LOAD SOFTWARE

Loading a UMX requires at least the following:

A PC with Windows 2000 or later and at least one USB (uMatrix-S) port.

(Note: USB comms require drivers to be installed on your PC. See section 4.0 downloads.) UMatrixWin software.

A USB cable.

A general understanding of how UMX and UMP files work with the relay.

Settable parameters will be overwritten by loading a new UMX file. They can however, be saved to a UMP file and then returned to the relay later. To learn how to do this, refer to the uMatrix User guide.

5.1 Loading the UMX

Before loading the UMX2SY212A software, ensure that it is compatible with your hardware. Download the compatibility list from the RMS website at:

www.rmspl.com.au/digital/compatibility.pdf

Ensure that the bios version in the relay matches the table in section 2.0 of this document. (If the bios version is different, you may not be able to load this UMX. Contact RMS for support.)

Load the UMX via the front panel COM port using the 'uMatrixWin' software. Ensure that the UMX version matches the table in section 2.0.

To interrogate for versions, press 'SET' and 'DATA" buttons simultaneously, then select 'Version Page'. Alternatively, use uMatrixWin – Options – Utilities.

	Check versions
5.2	Customer Default UMP
	Load customer UMP file as per the Job Card. If no UMP file is requested, write N/A in check box.
	UMP file name
	The Relay is now ready for field use.
SOF	TWARE INSTALLED BY DATE :



6.0 CONNECTION DIAGRAM

