

# 2V67B Software

## Multi Stage Voltage Relay

relay monitoring systems pty ltd

### **Advanced Protection Devices**



User Guide



Test Manual



Relay Software



µMATRIXwin





# 2V67B Relay Software

## Links to Other Documents

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User Guide: [http://www.rmspl.com.au/userguide/2v67\\_user\\_guide.pdf](http://www.rmspl.com.au/userguide/2v67_user_guide.pdf)

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

## Version Control

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Issue	Date	Summary of changes
H	15/09/2008	UMX updated
C	10/10/2002	Bios was 3.11
D	28/07/2003	UMX updated
E	29/08/2003	New format
F	24/01/2007	63.5V tap removed (QCR686).
G	31/01/2008	UMX updated and 63.5V VT tap added to the connection diagram

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## 1.0 OVERVIEW

The 2V67 Series relay is a voltage monitoring relay with four stages of adjustable voltage pick up & drop out points. Each voltage set point can be set for under or overvoltage operation & has an independent time delay driving an output relay. An undervoltage lockout is used to disable the four voltage outputs when the voltage falls below a preset level. A single status input is used to enable the four voltage sensing stages.

The 2V67 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.

An RS232 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 **UMX2V067B.umx** file.

DATE	SOFTWARE	CHANGES	BIOS	FIRST HARDWARE
10/06/2002	02.00	Initial release.	03.11 – 03.14+	2V67K4
26/07/2003	0.250	Single phase configuration updated	03.11+	2V67K4
30/10/2003	05.00	Feature upgrade	05.xx	2V67K4
31/01/2008	05.10	Voltage scaling added for Ph-Ph and Ph-N measurements	05.xx	2V67K4
04/03/2008	05.11	Fix Calibration Adjust Initialisation error	05.xx	
21/08/2008	05.12	Fix Phase B Comparator fault	05.xx	



### **3.0 DESCRIPTION – UMX2V067B.UMX**

#### **3.1 Standard Features**

The 2V67 provides a range of standard features as described in the RMS Technical Bulletin that may be downloaded from:

<http://www.rmspl.com.au/handbook/2v67.pdf>

#### **3.2 Special Features of this Software UMX Version**

The B UMX software supports 2V67 single phase hardware.



#### 4.0 USER INTERFACE

Refer to the  $\mu$ MATRIX Users Guide for detailed instructions on the operation of the user interface.

To download a PDF version of the guide:  
[www.rmspl.com.au/digital/umatrixinfo.pdf](http://www.rmspl.com.au/digital/umatrixinfo.pdf)

To download further  $\mu$ MATRIX software & documentation:  
[www.rmspl.com.au/umatrix.htm](http://www.rmspl.com.au/umatrix.htm)

#### 5.0 LOAD SOFTWARE

Loading a UMX requires at least the following:  
A PC with Windows 98 or later and at least one COM port.  
UMatrixWin software.  
The correct serial 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 Userguide.*

#### 5.1 Loading the UMX

Before loading the UMX2V067B 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](http://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.

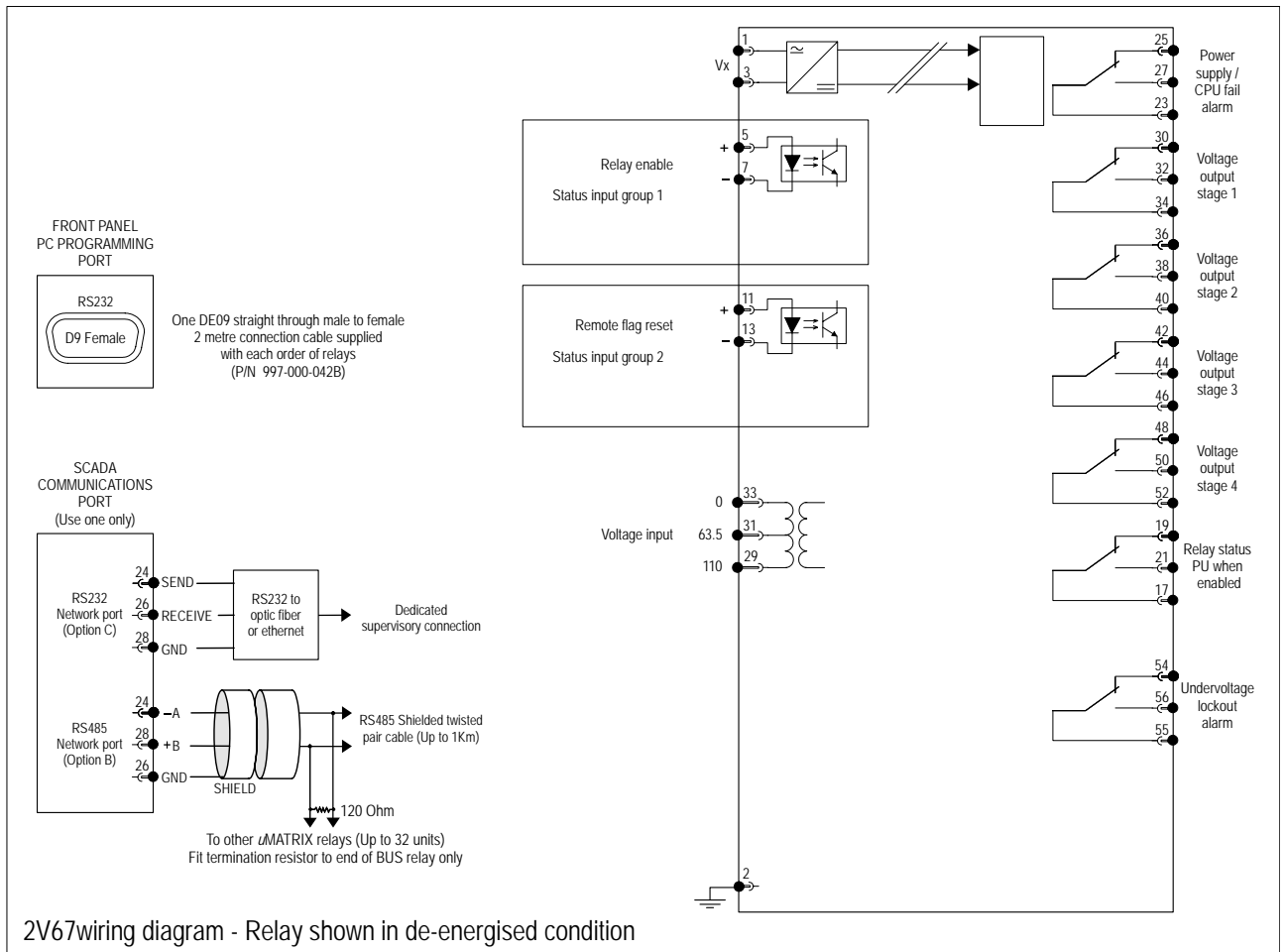
UMP file name

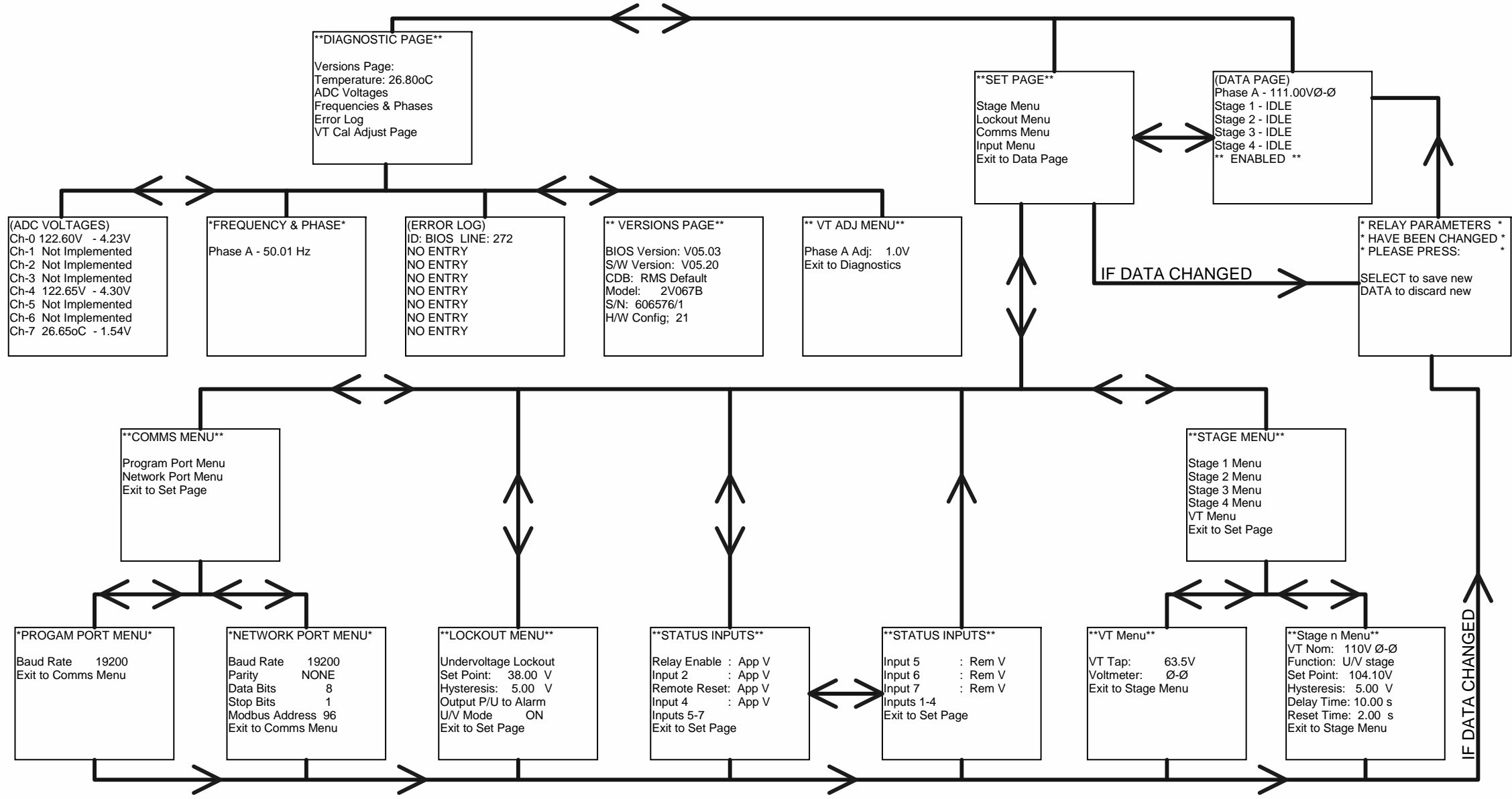
The Relay is now ready for field use.

SOFTWARE INSTALLED BY


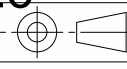
DATE :

## 6.0 CONNECTION DIAGRAM





MATERIAL: See *	for Materials List	FINISH: N.A.
Unless otherwise stated:		
SMD Resistors are 1/8W 1% 0805 Metal Film		
SMD Capacitors <100P are 50V 0805 NPO		
SMD Capacitors >100P and < 1n0 are 100V 0805 NPO		
SMD Capacitors >1n0 and < 1u0 are 50V 0805 X7R		

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<a href="http://www.rmspl.com.au">www.rmspl.com.au</a>		<b>TYPE No. 2V067B</b>		<b>MENU STRUCTURE</b>		<b>V1.20</b>	
DRAWN: D.W.B. DATE: 25/01/2008		<b>(1 PHASE, 4 STAGE, U/V LOCKOUT)</b>		<b>2V067_B_MENU_120</b>			
SHEET: A3 SCALE: D.N.S.		SHEET: 1 OF: 1		RMS-A3.SCHDOT Iss A		3rd Angle projection	
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