Technical Brief **SH Tay**

Mikro's MU 2300 Voltage Relay :

Disabling the Under voltage protection

29th January 2013

MU2300 Configuration

1. In Mikro's MU2300 voltage relay, there are two stages of under voltage settings available for the user to configure which are U<< high set under voltage and U< low set under voltage setting.

2. To disable MU2300 U<< high set under voltage protection, user will need to configure the soft switch key no. 8. Refer to table below (set to even for both groups).

	S8.7	S8.6	S8.5	S8.4	S8.3	S8.2	S8.1	S8.0
Default setting	1	1	1	1	1	1	1	1
Default setting – hexadecimal value	F (Group B)				F (Group A)			
User's setting								
User's setting – hexadecimal value								

S8.0
For enabling Group A high-set undervoltage element.

1 = Enabled
0 = Disabled

S8.1
For enabling Group A high-set overvoltage element.

1 = Enabled
0 = Disabled

S8.2
For enabling Group A low-set residual overvoltage

1 = Enabled
0 = Disabled

S8.3
For enabling Group A low-set negative sequence overvoltage

1 = Enabled
0 = Disabled

3. There is no direct way to disable the U< low set under voltage. To disable it, user would need to configure the digital input as blocking input and configure it to block U< under voltage protection.

4. To configure digital input to block, user would need to set the soft switch 9A. Set 9A.3 is set to 1. See table below.

	S9A.7	S9A.6	S9A.5	S9A.4	S9A.3	S9A.2	S9A.1	S9A.0
Default setting	0	0	0	0	1	0	0	0
Default setting – hexadecimal value	0				8			
User's setting								
User's setting – hexadecimal value								

S9A.0
The input is configured for switching between Group A setting and Group B setting.

1 = Selected.
0 = Not selected.

S9A.1
The input is configured as remote trip reset input.

1 = Selected.
0 = Not selected.

S9A.2
The input is configured as external tripping input source.

1 = Selected.
0 = Not selected.

S9A.3
The input is configured as blocking input.

1 = Selected.
0 = Not selected.

5. Then, user would need to configure soft switch 9B to determine which protection to block. In this case, user would need to enable S9B.0 and S9B.1 to block both high and low set under voltage protection.

	S9B.7	S9B.6	S9B.5	S9B.4	S9B.3	S9B.2	S9B.1	S9B.0
Default setting	0	0	0	0	0	0	0	0
Default setting – hexadecimal value	0				0			
User's setting								
User's setting – hexadecimal value								

S9B.0
Low-set undervoltage blocked.

1 = Block
0 = Unblock

S9B.1
High-set undervoltage blocked.

1 = Block
0 = Unblock

S9B.2
Low-set overvoltage blocked.

1 = Block
0 = Unblock

S9B.3
High-set overvoltage blocked.

1 = Block
0 = Unblock

6. The user will then need to connect the digital input according the wiring below. Observe that the external digital input is always triggered.

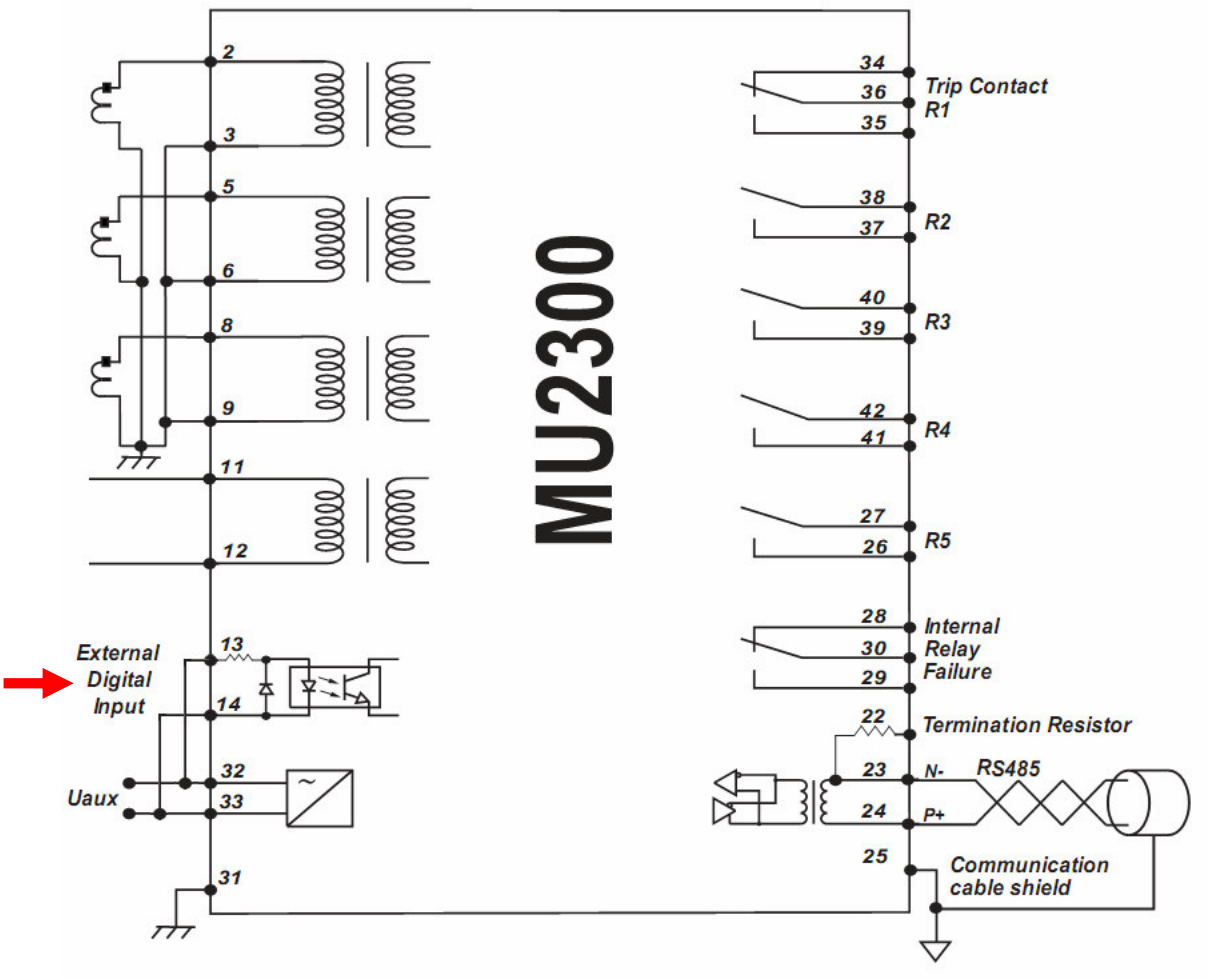

Figure 1: MU2300 Wiring Diagram for Disabling Under Voltage Protection

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