

PRODUCT SERVICE ADVISORY

440R-P23071, Minotaur MSR22LM Monitoring Safety Relay, Series A

Ref: ACIG 2007-04-002

Date: April, 2007

Dear Rockwell Automation Customer,

The purpose of this Product Service Advisory is to inform you of a functional issue that exists with:

- 440R-P23071, Minotaur MSR22LM Monitoring Safety Relay, Series A.

This Advisory explains the functional issue and the steps being taken to rectify the situation.

- Issue Description -

With the 440R-P23071, Series A, hereafter referred to as MSR22LM, the following functional issue exists:

Functional Issue – Series A product was shipped with Series B functionality prior to its release with Series A installation instructions.

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1. In protective mode, Auto and Manual start is possible for **every** light curtain and are selectable through internal rotary switches
2. In muting mode:
 - a. The muting times have been amended with longer times. The infinite muting setting also provides **infinite time between sensors being blocked**.
 - b. With longer muting times, the synchronizing time is now longer when longer muting times are selected. **The time between sensors AND breaking the light curtain is no longer fixed at 3 seconds. It is now a function of the overall muting time.**

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The differences between the X440R-P23071 Series A and Series B are:

1. The software is modified in such a way that existing functionality is maintained for the benefit of the current users of Series A product.
2. The software upgrade eliminates the necessity for muting sequencing using Series B products. Sensor 1 can be broken before or after sensor 2 before the light curtain is broken and the muting function will still be performed.
3. If one sensor is momentarily blocked and then cleared, the MSR22LM will maintain its safety outputs on. This avoids nuisance stops due to inadvertent, repeated, momentary blocks of one sensor.
4. A package can block the light curtain and then back out of the light curtain without turning off the safety outputs. If the package backs out further and clears one of the muting sensors, the safety outputs turn off.
5. The upgrade provides ten settings for synchronization times in Series B products compared to six settings in Series A.
6. In protective mode:
 - a. EDM is also selectable through external contactors.
 - b. Indicator response is amended (please refer to the installation instructions for the indicator status)
7. Certain failures can now be reset with the start/restart button; momentary disconnection of the power supply is then not necessary to reset the MSR22LM.
8. Override function is possible when an object is stopped in the light curtain. Pressing the start/restart button for 3 seconds energizes the safety outputs of the MSR22LM for 12 seconds if the start/restart button is held depressed. If additional time is needed, press and hold the start/restart button again. This enables the clearing of objects that may be “stuck” in the light curtain. Indicator response is amended (please refer to the installation instructions for the indicator status)
9. In stepping (PSDI) mode: Indicator response is amended (please refer to the installation instructions for the indicator status).
10. Please refer to the installation instructions for the diagnostic failure code indicator status.
11. Changes to the technical data :
 - a. Automatic start: max. 1.5 s (was 40 ms)
 - b. Automatic restart: max. 55 ms (N/A)
 - c. Reaction time: max. 30 ms (was 23 ms)

-Temporary Workarounds -

There is no temporary workaround available for this issue.

- Product Identification -

Product **affected** by this Mandatory Product Service Advisory 440R-P23071, Minotaur MSR 22LM Monitoring Safety Relay with the following series:

- 440R-P23071, Minotaur MSR22LM Monitoring Safety Relay, Series A
- Rockwell Automation shipped the affected products between **June 12, 2006 and March 16, 2007**.
- Date code of the product as identified by label printed on the side of the unit and printed on the packaging label..
- The affected date codes are **0624 XXXXXX AND 0711 XXXXXX**.

- Issue Correction -

The functional issue described above has been **corrected** in the following versions of the product.

- 440R-P23071, Minotaur MSR22LM Monitoring Safety Relay, Series B
- Review changes as described under Issue Description and evaluate the effect of changes on the installation.

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-Requested Customer Action-

Each notified customer should take the following actions:

- Confirm that you have the affected products.
- Contact your local Rockwell Automation Sales and Support office to determine the appropriate course of action. Together, you and the local office will determine the correction for your situation.

If you require any further technical assistance, contact Rockwell Automation Technical Support (**440**) **646-5800** and select **Option 2, Option 4, Option 1, Option 2, Option 1 and Option 3 for Safety Relays** or your local Rockwell Automation Sales and Support office.

We appreciate your cooperation in this matter. If you have any questions, please contact us.