Title: Eaton DG1 VFD Firmware Standardization

Site: AUS2, AUS3, AKC1, PCW1, RDU1, LIT1, DEN4, IGQ1, BFL1, DSM5, MQY1, HOU6, MTN1, SYR1, LAS1, GYR3, KSBD

Name: Michael Midkiff, midkiffm

Date: 2022, 04, 20

MCM Number: 57080994

EAM WO Number: #########

# Current Problem

Currently Eaton DG1 firmware isn’t standardized, leading to various incompatibility issues when being installed.

## Business Need

Leaving the firmware as is leads to extensive downtime. Going forward standardizing the firmware in the field, and on our spare VFD/Profibus cards will alleviate some of the downtime associated with DG1 drives.

# Proposed Solution

## Summary Overview

Update all DG1 and DG1 Profibus cards on site to a standard firmware.

## Engineering Overview

Focus for this MCM:

* In-field drives will be flashed to most up to date firmware for their hardware, either V35 or V36.
* Backup VFDs are flashed to their most up to date firmware for their hardware, either V35 or V36.
* Backup Profibus cards are flashed to V35 firmware.

To perform the job plans attached to this MCM should be followed.

## Original values:

## Updated Values:

# Risk

## What are the risks?

If the in-field drives are flashed incorrectly, compatibility issues, or damage to the drive may occur.

## How to mitigate those risks

A job plan has been created outlining the process to perform the needed updates. It is recommended any inexperienced technicians first perform this task on a lower criticality drive (such as a spare, or a single lane VFD). If the user is still uncomfortable performing the update with the provided instruction, they should reach out to the site AE owner.

# Other Options Considered

## List Other Options

Drives can be left as is, and flashed in the field as necessary. This will lead to longer then intended downtimes.

# Expected Outcome

## Define “Success”

All drives will be flashed to the most up to date firmware available for the hardware version. Either V35, or V36.

## Define “Complete”

All field drives, and shelved backup drives have up to date firmware.

# Resources

## Labor

Software change: 2 hours per merge

2-4 hours to update spare drives and cards (depends how many instock).

## Parts

No parts are needed.