

# ACS880 SPEED REFERENCE TRIMMING SETUP.

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## **Description:**

This document will discuss how to setup the ACS880 for Speed Reference Trimming. In this paper I will provide information for configuring parameters to enable this feature. Please note that motor ID and standard configuration has or will need to be completed as outlined in the ACS880 Primary Control Program or Quick Start Guide. Also, the speed loop will need to be tuned with a load prior to tuning the trim loop.

## **Title for the main body of the document:**

ACS880 Reference Trimming Setup.

## **Documents or other reference material:**

ACS880 Primary Control Program 3AUA000008597

ACS880 Quick Start Guide 3AUA0000098062

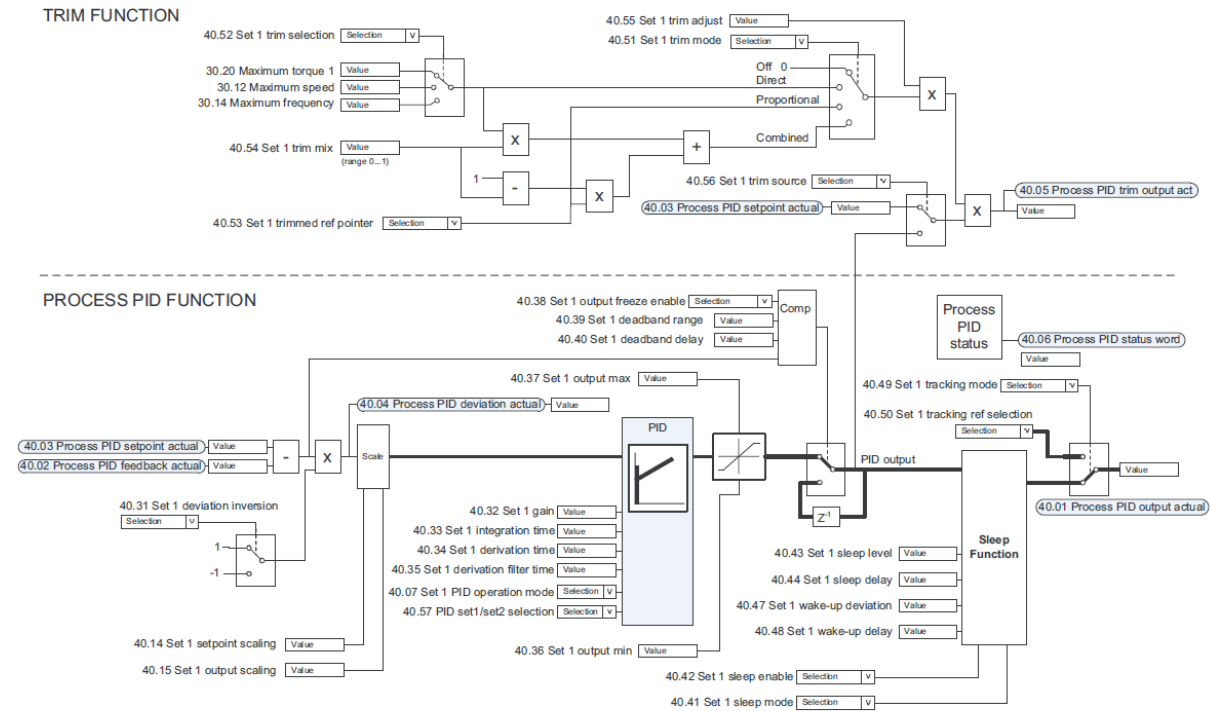
## **Corrective Actions:**

To set up Reference Trimming start with the "Factory" Macro Default settings. To configure the Reference Trim Function review the following parameters.

- 22.11 Speed ref1 source = AI1 or 2 scaled (check JX settings) or FB"A" or FB"B" reference.
- 22.15 Speed additive 1 source = Select "OTHER" Then parameter 40.05
- 40.07 Set 1 PID operation mode = "On when drive running"
- 40.08 Set 1 feedback 1 source = AI1 or 2 scaled (check J1 or J2 for voltage or current settings)
- 40.21 Set 1 internal set point 1 = 50%
- 40.51 Set 1 trim mode = Review if you need "Direct" or "Proportional" trimming.
- 40.52 Set 1 trim selection = "Speed"
- 40.53 Set 1 trimmed ref pointer = AI1 or 2 scaled (check JX settings) or FB"A" or FB"B" reference.
- 40.55 Set 1 trim adjust = Depending on your application requirements (0.1 = 10%)
- 40.56 Set 1 trim source = If you are using the PID in the drive set to "PID Output"

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Please note the above parameters will give you Speed Reference Trimming with PID adjustment on the feedback for stability. See Speed Trim and PID blocks below for additional information on tuning refer to the ACS880 Primary Control Program Manual. If the Speed Reference is coming from a source that has the speed ramp already accounted for adjust your ACCEL (23.12) and DECEL (23.13) rates to something less than the reference ramp rate. If using the analog inputs verify they are scaled properly.



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