



Optidrive Applications Support Library

Application Note	AN-ODE-2-030
Title	Using the 2nd Deceleration Ramp Time
Related Products	Optidrive E2
Level 2	1 – Fundamental - No previous experience necessary 2 – Basic – Some Basic drives knowledge recommended 3 – Advanced – Some Basic drives knowledge required 4 – Expert – Good experience in topic of subject matter recommended

Overview

In some applications it may be required to have two independent deceleration ramp times. Typically the first is for the normal operation and another for fast-stop operation during certain conditions. This document describes how to activate the second deceleration ramp time.

Parameters

P - 24 Second deceleration ramp time

This parameter specifies the second deceleration ramp time. This parameter should be set to the required deceleration ramp time. Note that the deceleration ramp time is defined as the time required to decelerating from rated speed (P-09) to zero.

Fast Stop on Mains Loss Function

The second deceleration ramp time can be enabled in case of mains supply loss – automatic fast-stop.

If parameter P-05 = 2, interrupting or disconnecting the mains supply to the drive during normal operation will result in the Optidrive automatically ramping to stop using the second deceleration ramp time.

Note: In this case, if the second deceleration ramp time in P-24 = 0, then the drive output will be disabled immediately on mains supply loss.

Selecting the 2nd Deceleration Ramp Time Using Digital Inputs

Some settings of P-12 and P-15 allow the 2nd deceleration ramp time to be selected using digital inputs, e.g. if P-12 = 0 and P-15 = 5, closing digital inputs 1 and 2 simultaneously causes the drive to stop using the 2nd deceleration ramp time.

Appendix

Revision History			
Issue	Comments	Author	Date
01	Document Creation	OS	03/08/11
02	Revised to new format	KB	24/04/14