EcoStruxure™

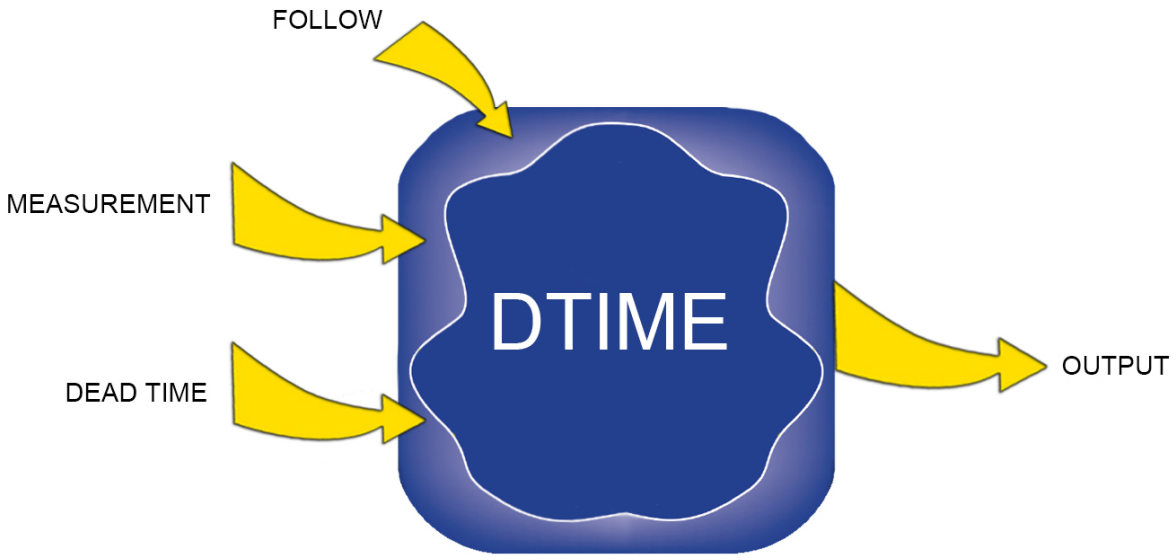
Foxboro™ DCS

Dead Time (DTIME) Block

PSS 41S-3DTIME

Product Specification

April 2019



Schneider Electric™

Legal Information

Schneider Electric, EcoStruxure, Foxboro, I/A Series, and Triconex are trademarks and the property of Schneider Electric SE, its subsidiaries and affiliated companies. All other trademarks are the property of their respective owners.

This guide and its content are protected under applicable copyright laws and furnished for informational use only. No part of this guide may be reproduced or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), for any purpose, without the prior written permission of Schneider Electric. Schneider Electric does not grant any right or license for commercial use of the guide or its content, except for a nonexclusive and personal license to consult it on an "as is" basis.

Schneider Electric products and equipment should be installed, operated, serviced, and maintained only by qualified personnel.

As standards, specifications, and designs change from time to time, information contained in this guide may be subject to change without notice.

To the extent permitted by applicable law, no responsibility or liability is assumed by Schneider Electric and its subsidiaries for any errors or omissions in the informational content of this material or consequences arising out of or resulting from the use of the information contained herein.

Overview

The Dead Time (DTIME) block is a dead time compensator which simulates the dynamic effects of pure delay, transport lag, or distance-velocity lag in a process.

The DTIME block introduces a user-specifiable delay of process measurement or control action. The effective amount of dead time compensation can be controlled in a varying manner by the variable dead time input. The algorithm used is based on a conventional analog shift register with improvements for real process control. These improvements allow for compensation of the nonlinear effects of a process on the internal state data in the analog shift register. When a change occurs in the process, a change in the dead time parameter changes the average time in transit from input to output which is equal to the appropriate value for a real process.

Standard Features

- Manual/Auto control of output which can be initiated by either a host process or another block
- True dynamic variable dead time adjustment
- Follow mode: output tracks measurement

⚠ **WARNING**: This product can expose you to chemicals including lead and lead compounds, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.p65warnings.ca.gov/.

Schneider Electric Systems USA, Inc.
38 Neponset Avenue
Foxborough, Massachusetts 02035–2037
United States of America

Global Customer Support: https://pasupport.schneider-electric.com

As standards, specifications, and design change from time to time, please ask for confirmation of the information given in this publication.

© 2014–2019 Schneider Electric. All rights reserved.

PSS 41S-3DTIME, Rev A