



PLECS

DEMO MODEL

Synchronous Generator Feeding a Rectifier

Last updated in PLECS 4.3.1

www.plexim.com

- ▶ Request a PLECS and PLECS Coder trial license
- ▶ Get the latest RT Box Target Support Package
- ▶ Check the PLECS and RT Box documentation

1 Overview

A system level overview of the model is given in Fig. 1.

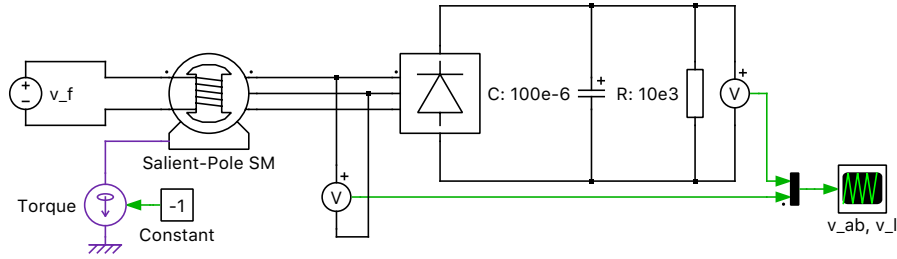


Fig. 1: System level overview including electrical, mechanical and control circuit

Please notice that when a diode rectifier is directly connected to the machine terminals, the machine must be implemented in “voltage-behind-reactance” form. Otherwise, an RC snubber circuit across the terminals is required.

Revision History:

PLECS 4.3.1 First release

How to Contact Plexim:

| | | |
|---|--|-------|
| ☎ | +41 44 533 51 00 | Phone |
| | +41 44 533 51 01 | Fax |
| ✉ | Plexim GmbH Technoparkstrasse 1 8005 Zurich Switzerland | Mail |
| @ | info@plexim.com | Email |
| | https://www.plexim.com | Web |

PLECS Demo Model

© 2002–2026 by Plexim GmbH

The software PLECS described in this document is furnished under a license agreement. The software may be used or copied only under the terms of the license agreement. No part of this manual may be photocopied or reproduced in any form without prior written consent from Plexim GmbH.

PLECS is a registered trademark of Plexim GmbH. MATLAB, Simulink and Simulink Coder are registered trademarks of The MathWorks, Inc. Other product or brand names are trademarks or registered trademarks of their respective holders.