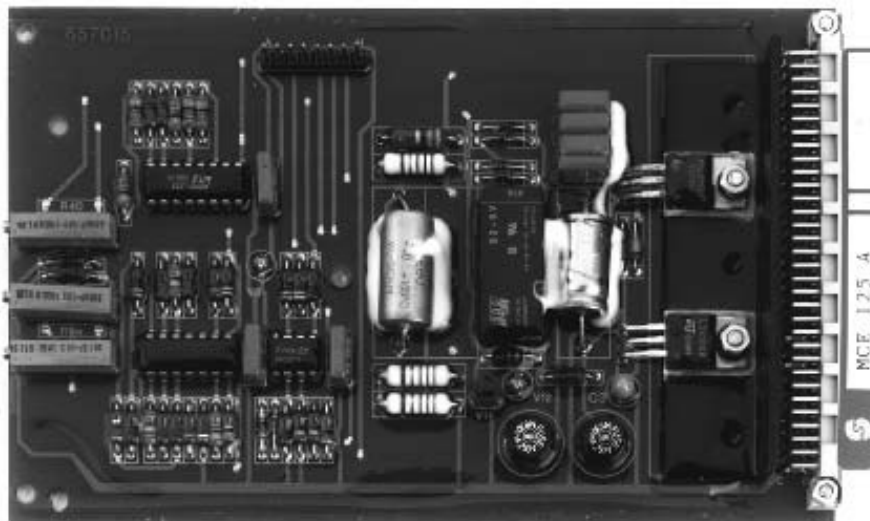


SAUER-DANFOSS MCE125A Ramp Card Amplifier User Guide

[Home](#) » [SAUER-DANFOSS](#) » SAUER-DANFOSS MCE125A Ramp Card Amplifier User Guide 



MCE125A Ramp Card Amplifier Technical Information



Contents

- [1 Overview](#)
- [2 Block Diagram](#)
- [3 Theory of Operation](#)
- [4 Dimensions and Connection Diagram](#)
- [5 Documents / Resources](#)
 - [5.1 References](#)
- [6 Related Posts](#)

Overview

DESCRIPTION

The Sauer-Danfoss MCE125A Ramp Card Amplifier provides a time-delayed control for MCV104A, MCV105A or MCV111B Electrical Displacement Controls (EDC) for hydrostatic transmissions. The adjustable ramptime is the same for up and down. The Amplifier operates uni- or bidirectionally.

FEATURES

- Proportional driving of an EDC with a potentiometer.
- Adjustable output current.
- Adjustable ramptime (0 – 8 seconds).
- ON/OFF switching of the delay time possible.
- Operates uni- or bidirectionally.
- Simple adjustments.
- 12 V DC or 24 V DC supply voltage.
- Reverse polarity and short circuit protected.
- Withstands vibration and shock.

ORDERING INFORMATION

Controller	Supply voltage [V DC]	Ramp time [seconds]	Id. No.
MCE125A1001	12 or 24	0 – 8	662338
MCE125A1002	12 or 24	0 – 20	502539

TECHNICAL DATA

Supply voltage: 12 V DC or 24 V DC

Ripple: $\leq 20\%$

Power load: 3,6 W or 7,2 W

Setpoint: External potentiometer $5\text{ k}\Omega \pm 10\%$, $\geq 1\text{ W}$

EDC ADJUSTMENT

Output current range: 40 mA – 150 mA (at $23\text{ }\Omega$)

Adjustable ramptime: 0 – 8 seconds (Up or Down)

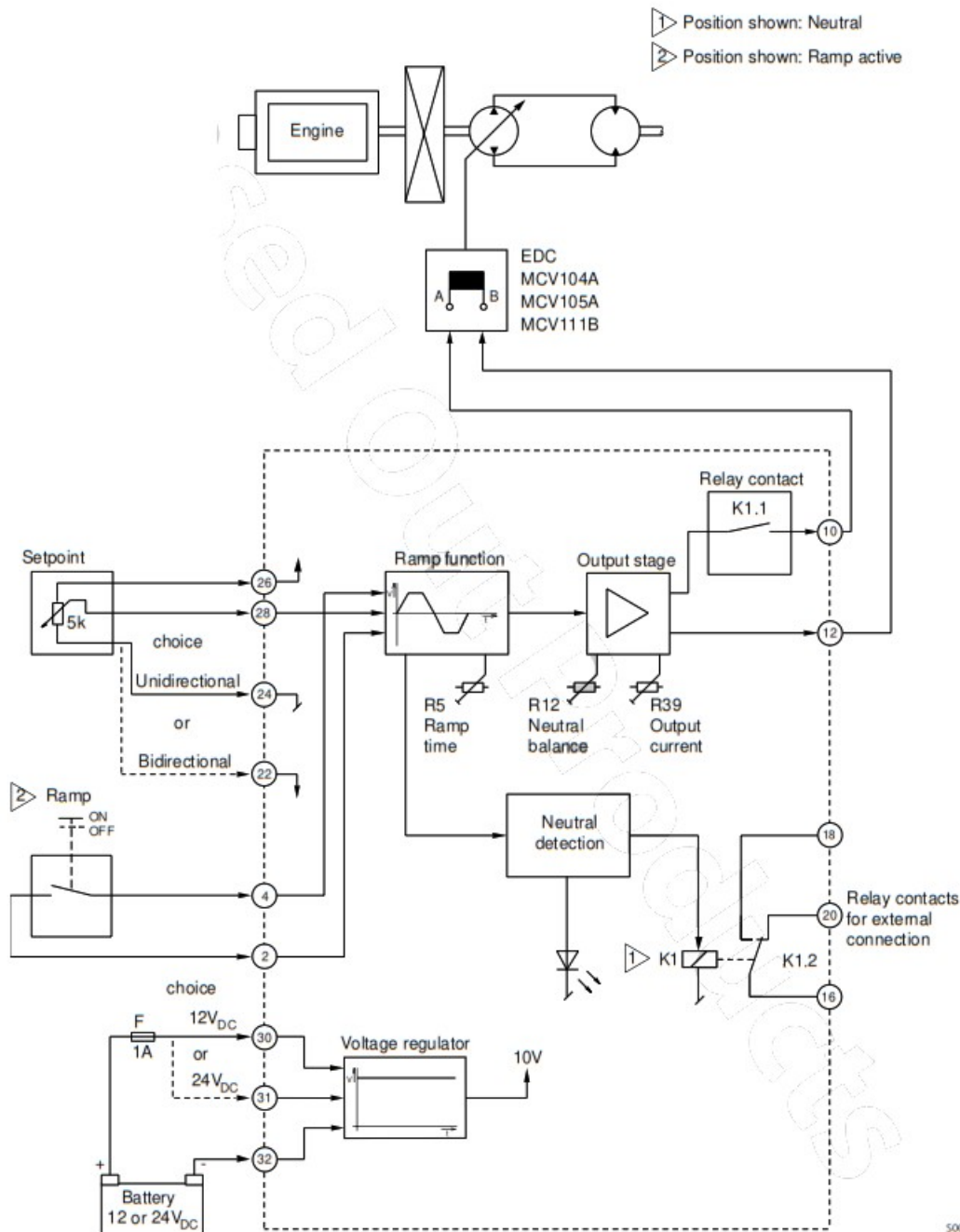
© 2001, Sauer-Danfoss

Sauer-Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Sauer -Danfoss reserves the right to alter its products without prior notice. This also applies to products already ordered provided that such alterations can be made without subsequent changes being necessary in specifications already agreed. All trademarks in this material are properties of the respective companies.

Sauer-Danfoss and the Sauer-Danfoss logotype are trademarks of the Sauer-Danfoss Group. All rights reserved.

Block Diagram

BLOCK DIAGRAM



Theory of Operation

THEORY OF OPERATION

General

The MCE125A Ramp Card Amplifier can be powered with 12 V DC (PIN 30) or 24 V DC (PIN 31). Both inputs are protected by 680 mA fuses.

The external fuse should be 480 mA.

The external setpoint potentiometer should be $5\text{ k}\Omega \pm 10\%$, $\geq 1\text{W}$. The potentiometer will be supplied by an internally generated stabilized voltage. As shown in the connection diagram, it is possible to work with the ramp card in uni- or bidirectional mode.

Two way contacts, open or closed depending on neutral position, are available for such things as neutral start. The ramp time is adjustable with the potentiometer R5 over 0 –

8 seconds. The neutral adjustment of the output current is adjustable with R12 and the maximum output current with R39.

Unidirectional Operation

The setpoint potentiometer is connected to pins 24, 26 and 28 (see figures 1 and 2).

Bidirectional Operation

The setpoint potentiometer is connected to pins 22, 26 and 28 (see figures 3 and 4). In the center position of the potentiometer (neutral position) the value of the output current is $\leq \pm 5$ mA. In this range a neutral position sensor switches off to the EDC and defines a true neutral position.

OPERATION DIAGRAMS

Figure 1: unidirectional

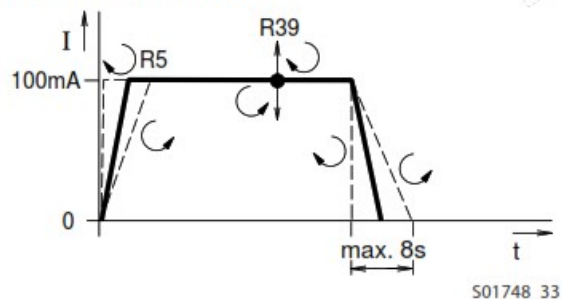


Figure 2: unidirectional

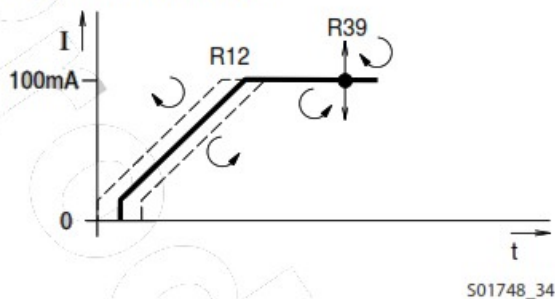


Figure 3: bidirectional

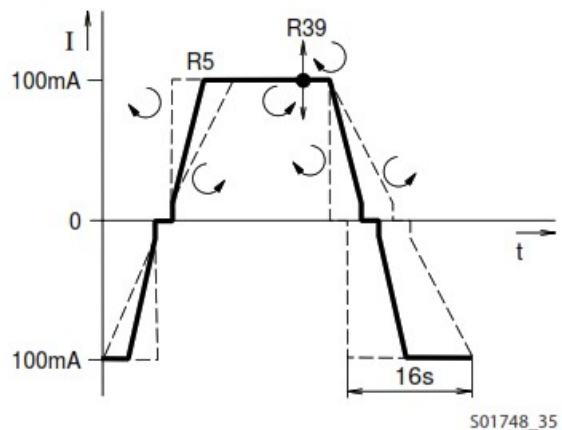
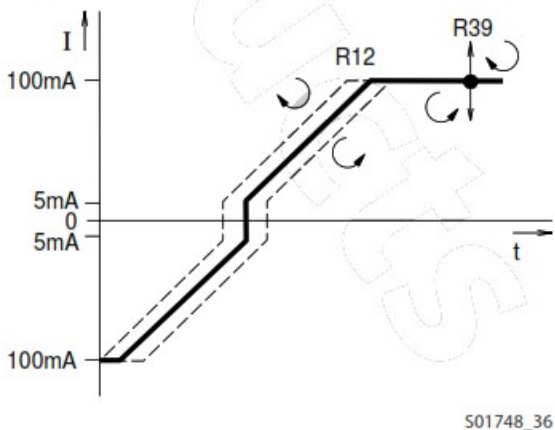
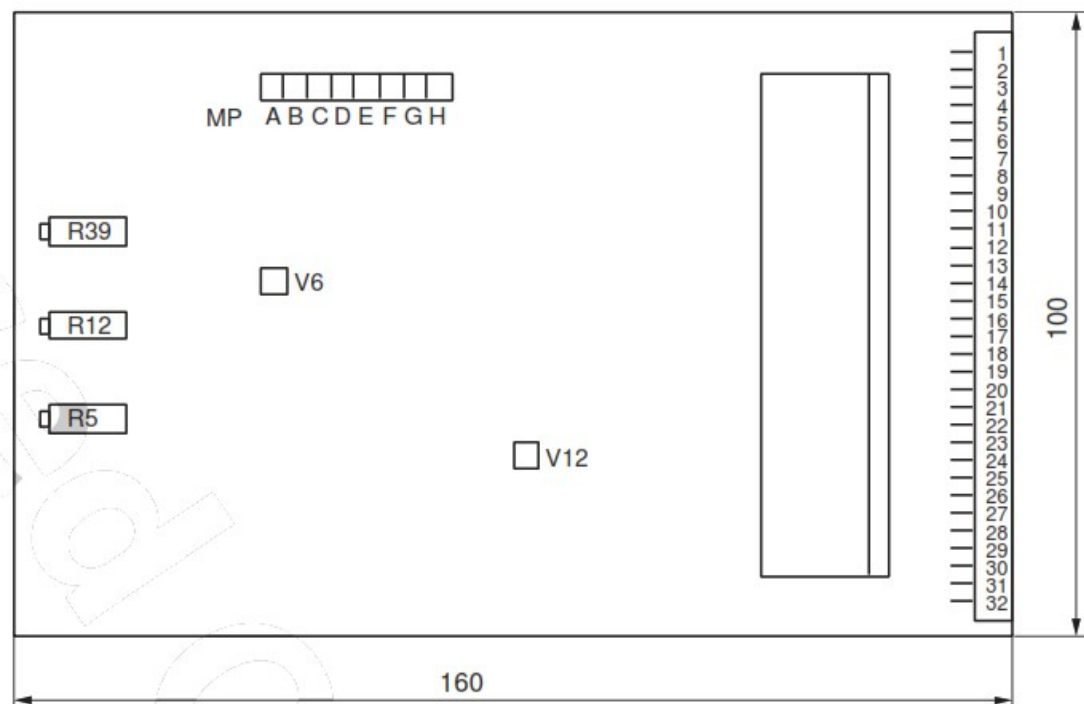


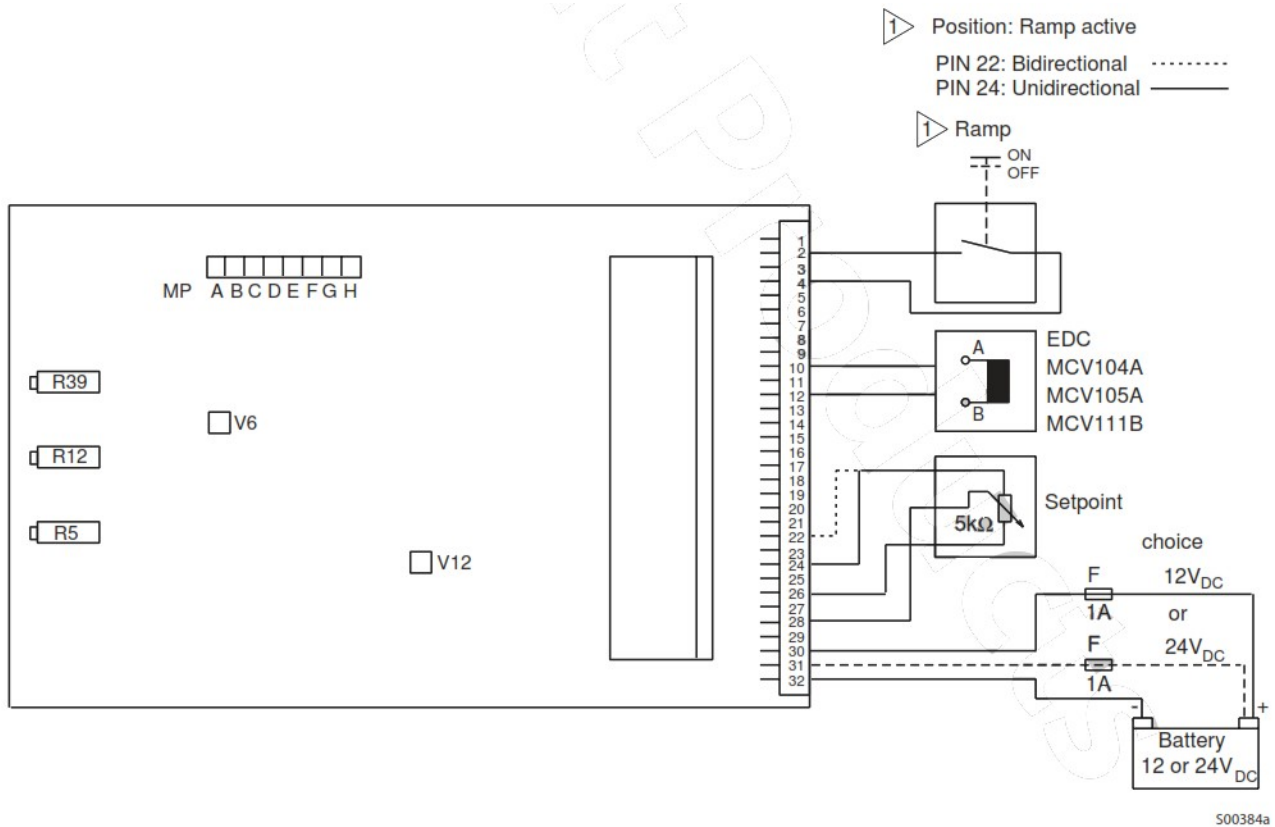
Figure 4: bidirectional



Dimensions and Connection Diagram



CONNECTION DIAGRAM



OUR PRODUCTS

Hydrostatic transmissions
Hydraulic power steering
Electric power steering
Closed and open circuit axial piston pumps and motors
Gear pumps and motors
Bent axis motors
Radial piston motors
Orbital motors
Transit mixer drives
Planetary compact gears
Proportional valves
Directional spool valves
Cartridge valves
Hydraulic integrated circuits
Hydrostatic transaxles
Integrated systems
Fan drive systems
Electrohydraulic controls
Digital electronics and software
Battery powered inverter
Sensors

Sauer-Danfoss Hydraulic Power Systems – Market Leaders Worldwide

Sauer-Danfoss is a comprehensive supplier providing complete systems to the global mobile market.

Sauer-Danfoss serves markets such as agriculture, construction, road building, material handling, municipal, forestry, turf care, and many others.

We offer our customers optimum solutions for their needs and develop new products and systems in close cooperation and partner ship with them.

Sauer-Danfoss specializes in integrating a full range of system components to provide vehicle designers with the most advanced total system design.

Sauer-Danfoss provides comprehensive worldwide service for its products through an extensive network of Authorized Service Centers strategically located in all parts of the world.

Sauer-Danfoss (US) Company
2800 East 13th Street
Ames, IA 50010, USA
Phone: +1 515 239-6000, Fax: +1 515 239-6618

Sauer-Danfoss (Neumünster) GmbH & Co. OHG
Postfach 2460, D-24531 Neumünster
Krokamp 35, D-24539 Neumünster, Germany
Phone: +49 4321 871-0, Fax: +49 4321 871-284

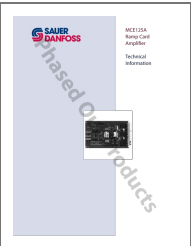
Sauer-Danfoss (Nordborg) A/S
DK-6430 Nordborg, Denmark
Phone: +45 7488-4444, Fax: +45 7488-4400

Sauer-Danfoss (US) Company
3500 Annapolis Lane North
Minneapolis, MN 55447, USA
Phone: +1 763 509-2084, Fax: +1 763 559-0108

www.sauer-danfoss.com

BLN-96-9211-E • Rev. C • 08/2001

Documents / Resources

	<p>SAUER-DANFOSS MCE125A Ramp Card Amplifier [pdf] User Guide MCE125A Ramp Card Amplifier, MCE125A, Ramp Card Amplifier, Card Amplifier, Amplifier</p>
---	--

References

- [Danfoss Power Solutions – Explore our power solutions | Danfoss](#)
- [User Manual](#)

[Manuals+](#), [Privacy Policy](#)

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.