

Automotive on PLUS+1™

Introduction

For more than 40 years, Sauer-Danfoss has been developing state-of-the-art components and systems for mobile machinery used in off-highway operations around the world.

The new Automotive on PLUS+1 application software is designed for a single path propel system. Through the easy parameter configuration it enables faster time-to-market and improved performance and functionality for both new machine designs and model variants.



PLUS E1™
by SAUER-DANFOSS

Microcontroller 24 pin shown

Features

- **Complete propel drive system functionality**
 - PLUS+1 Service Tool configurable for custom drive behavior
 - Independent pump/motor profiling & ramping
 - Multiple individually configurable propel drive modes:
 - Automotive (command signal to pump engine RPM dependent)
 - Non-Automotive (command signal to pump by pedal or joystick)
 - Creep automotive (combination of both above)
 - Advanced functions, including:
 - Electronic drive and Inch function
 - Engine antistall
 - Constant speed drive control
 - Vehicle speed limiter
 - Engine and motor overspeed protection
 - Engine speed dependent output (Retarder Control)
 - Option: J1939 CAN communication enabling component to component and service tool/laptop communication via gateway
 - 24 pins: (2) individually keyed • Deutsch® DTM 12 pin connectors
 - 12 or 24 Vdc power supply, monitored internally
 - Power supply for external sensors rated at 5 Vdc to 200 mA regulated internally
 - 8 Inputs :
 - 2 analog for drive & Inch Pedal
 - 4 digital for FNR & Mode selection
 - 2 frequency for Pump & Hydromotor speed
 - 8 Outputs :
 - 2 PWM outputs (3A) for Pump displacement control (NFPE & EDC)
 - 1 PWM output (3A) for proportional or pressure controlled Hydromotors.
 - 1 digital output (3A) for Brake Pressure defeat
 - 4 digital outputs for Auxilliary functions like brake light, Retarder etc.
 - See also related documents:
 - 70012797 Automotive on PLUS+1TM User Manual
 - 70012797 PLUS+1TM Controller Family Technical information

Local Address:

Technical Specifications

Electric parameters

Rated supply voltage 12V	9 to 16V
Rated supply voltage 24V	18 to 36V
Digital & PWM Outputs	3000 mA
Operating Temperature (ambient)	-40°C to 70°C
IP rating with attached connectors	IP67
EMI/RFI rating	100V/m
Vibration	IEC 60068-2-64
Shock	IEC 60068-2-27 test Ea

Product part numbers

MC024-21 Automotive on PLUS+1	11106112
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Related Product part numbers

CG150 CAN/USB Gateway	10104136
Deutsch® mating connector assembly bag (16 to 20 AWG)	10102023
Deutsch® mating connector assembly bag (20 to 24 AWG)	10100945

