

Data Sheet

Automotive on PLUS+1



For more than 40 years, 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.



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

- 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

Inputs

- 2 analog for drive & Inch Pedal
- 4 digital for FNR & Mode selection
- 2 frequency for Pump & Hydromotor speed

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.

Related documents

- L1120636 Automotive on PLUS+1[®] Technical Information
- 520L0719 PLUS+1[®] Controller Family Technical Information

Comprehensive technical literature online at powersolutions.danfoss.com

Technical specifications

Electric parameters

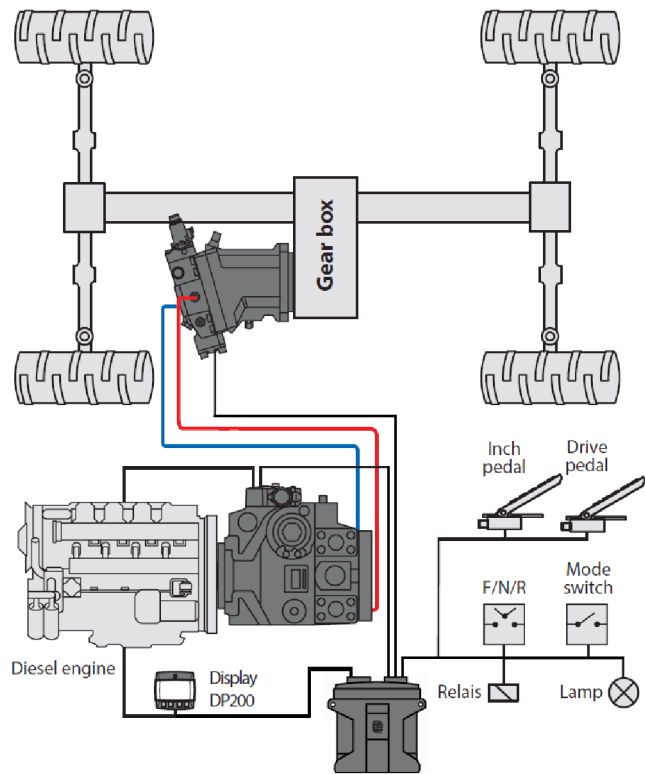
Rated supply voltage 12V	9 to 16V
Rated supply voltage 24V	18 to 36V
Digital & PWM Outputs	3000 mA
Operating Temperature (ambient)	-40°C to 70°C
IP rating with attached connectors	IP67
EMI/RFI rating	100V/m
Vibration	IEC 60068-2-64
Shock	IEC 60068-2-27 test Ea

Product part numbers

MC024-21 Automotive on PLUS +1[®]	11177284
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Related product part numbers

CG150 CAN/USB Gateway	11153051
DEUTSCH mating connector assembly bag (16 to 20 AWG)	10102023
DEUTSCH mating connector assembly bag (20 to 24 AWG)	10100945



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