

Data Sheet

PLUS+1[®] Expansion Module

IOX018-130 High Current



Mobile machine management

IOX018-130 High Current Expansion Module is an element of the flexible, powerful and expandable PLUS+1[®] family of mobile machine management products. Expansion modules provide cost-effective additional I/O to mobile machine control systems.

Product highlights

The PLUS+1[®] High Current expansion module employs a 32 bit Cortex-M3 Processor, providing the controller with extremely fast single cycle processing speed. It features high current capabilities for your machine control.

PLUS+1[®] compliance eliminates need for the system designer to write CAN transmit and receive messages in both the controller and associated expansion modules.

Application development

Users configure expansion modules using PLUS+1[®] GUIDE. This Microsoft[®] Windows[®]-based development environment features a user-friendly, field proven, icon-based graphical programming tool, application downloader, and service/ diagnostic tool.

Features

- User-programmable with PLUS+1[®] GUIDE (Graphical User Integrated Development Environment)
- 18 pins: (2) DEUTSCH connectors (DT and DTP), (2) 6 mm studs
- 12 bit analog-to-digital converter
- ARM 32 bit Cortex-M3 running at 120 MHz



Comprehensive technical literature is
online at www.danfoss.com

4 inputs

- (2) Universal (DIN/AIN/FreqIN/Rheo)
Digital: Pull up (5 VDC), pull down (0 VDC) or pull to center (2.5 VDC)
Analog: 0 to 0.375 VDC, 0 to 5.25 VDC, or 0 to 36 VDC
Frequency (timing): 1 Hz to 10 kHz
Resistance: 0 to 10,000 ohm
- (1) Digital/Analog (DIN/AIN) that is user-defined as either:
Digital: Pull up (5 VDC), pull down (0 VDC) or pull to center (2.5 VDC)
Analog: 0 to 5.25 VDC or 0 to 36 VDC
- (1) Digital/Analog/CAN shield (DIN/AIN/CAN shield) that is user-defined as either:
Digital: Pull up (5 VDC), pull down (0 VDC) or pull to center (2.5 VDC)
Analog: 0 to 5.25 VDC or 0 to 36 VDC
CAN shield

8 outputs

- (4) Universal (PWMOUT/DOUT/PVGOUT) that are user-defined as either:
Digital: 15 A, configurable as source or sink
PWM: 15 A (33 to 4000 Hz or 20 kHz), configurable as open or closed loop with current control
- (4) Universal (PWMOUT/DOUT/PVGOUT) that are user-defined as either:
Digital: 25 A, configurable as source or sink
PWM: 25 A (33 to 4000 Hz or 20 kHz), configurable as open or closed loop with current control

Characteristics

Supply voltage	9 to 36 VDC
Operating temperature (ambient)	- 40°C to 70°C [- 40°F to 158°F]
Storage temperature	- 40°C to 85°C [- 40°F to 185°F]
Programming temperature	- 40°C to 70°C [- 40°F to 158°F]
IP rating (with mating connector attached)	IP 67
EMI/RFI rating	100 V/M
Weight	1.29 kg [2.85 lb]
Vibration	IEC 60068-2-64
Shock	IEC 60068-2-27 test Ea
Maximum current, sourcing	120 A
Maximum current, sinking	120 A



Ordering information

Product part number

IOX018-130	11227542
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Related products part numbers

CG150-2 CAN/USB Gateway	11153051
PLUS+1[®] GUIDE Professional	11179523

Danfoss mating connectors bag assemblies and fuse part numbers

4 pin DEUTSCH mating connector bag assembly (10 to 14 AWG)	11188220
12 pin DEUTSCH mating connector bag assembly (14 to 20 AWG)	11188221
4 and 12 pin DEUTSCH mating connector bag assembly	11188232
125 Amp fuse	11188233