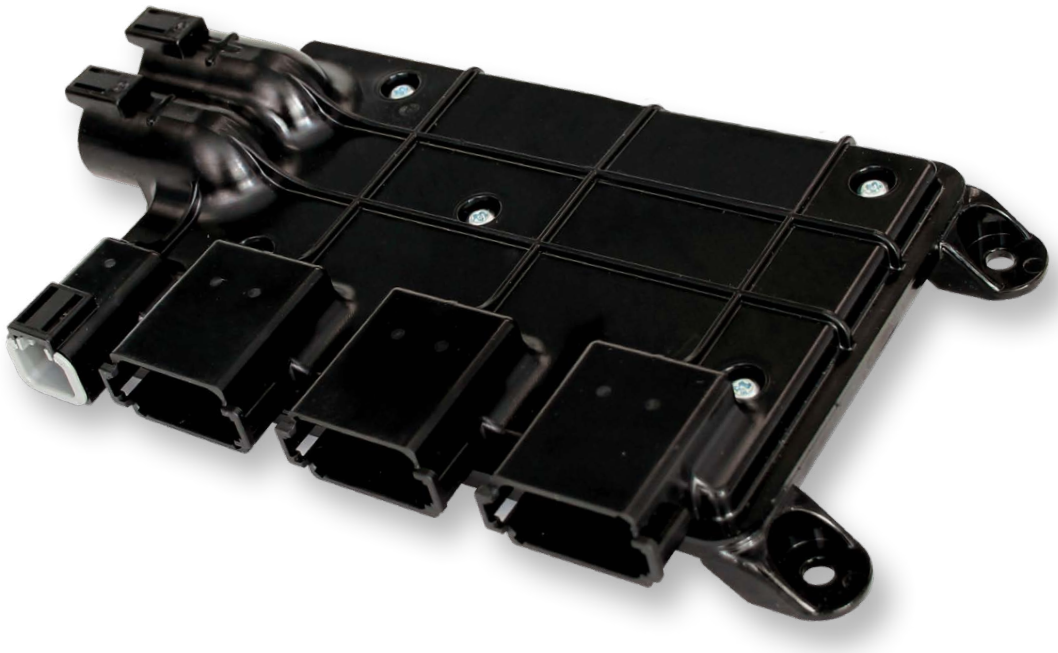
MURPHY®
by ENOVATION CONTROLS

INTELLIGENT XPANSION

IX3212

- More Reliable Than Fuse and Relay Technology
- Compact, Sealed, Robust Enclosure
- Enhanced Diagnostics and Protection
- Cuts Wire Harness Costs



POWER DISTRIBUTION MODULE FOR INTEGRATED MACHINE AND EQUIPMENT CONTROL

Murphy's PowerCore Intelligent Xpansion module expands CAN bus control networks by replacing existing relay and fuse boxes with more reliable, solid-state switches that can directly drive work lights, wiper motors, cooling fans, directional DC motors and other high-current loads.

Each of the 12 PDM outputs can switch or proportionally control up to 15 A loads in 2.5 A increments and feature over-current detection and shut-down capability. Outputs are paired to run up to six electric motors with H-bridge direction control. Twelve digital inputs monitor switched battery, ground and floating inputs. Additionally, eight 0-5V analog inputs are available with a 5V sensor supply.

Wiring length is reduced, and harness costs are cut by remotely locating the IX module near loads and signals. Then the I/O is multiplexed using a CAN bus network, which allows engineers to greatly simplify harness design for ease of installation and improved reliability. For applications not requiring a CAN bus control, the inputs can directly trigger outputs without a need for a separate controller.

Tier 4 Final ready Stage IV

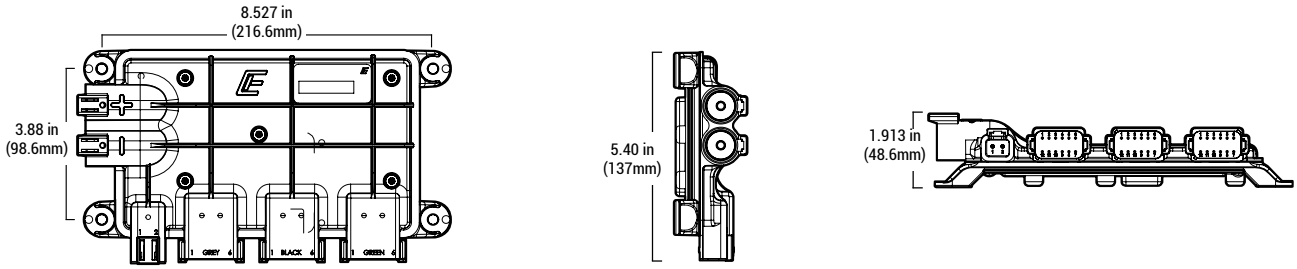
CE

IP 67

ENOVATIONCONTROLS.COM/PDM

INTELLIGENT XPANSION™

PDM DIMENSIONS



PDM SPECIFICATIONS

HARDWARE	
CONNECTORS	Deutsch (3) DT series, DTP series, and DT HD series

COMMUNICATION	
CAN	CAN 2.0B Active, Default protocol SAE J1939, Baud rate 250 Kbit

ELECTRICAL	
OPERATINGVOLTAGE	12V – 24V systems (8-32 V) Reverse Polarity Protection
INPUTS	(12) digital state (high side, low side, open) (6) analog (0 -5 VDC), (2) analog (resistive)
OUTPUTS	(12) Digital High current (15 A each/70 A total configurable as High-side, PWM or up to 6 H-bridge pairs)

ENVIRONMENTAL	
OPERATINGTEMPERATURE	-40° to +185°F (-40° to +85°C)
STORAGE TEMPERATURE	-40° to +275°F (-40° to +135°C)
PROTECTION	IP66 and 67, SAE J1455 4.5.3 (10,300 kPa @ 50° C and 100 mm away for 15 min)
VIBRATION	5-25 g, 50-2000 Hz, 72 hrs per axis
SHOCK	30 g, 3 cycles
HOUSING	Internally potted, combination PBT and E-coated cast aluminum with integrated mounting feet
RADIATED IMMUNITY	Tri-plate test 100 V/M 10 KHz – 1 GHz
DIMENSIONS	Width: 5.40 in. (137 mm) Height: 1.913 in. (48.6 mm) Length: 9.64 in. (245 mm
WEIGHT	2 lb. (90 gram)

⚠ **WARNING**: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov

FOR MODEL & PART INFORMATION — ENOVATIONCONTROLS.COM/PDM

FOR MANUAL & SUPPORT DOCUMENTS — SUPPORT.ENOVATIONCONTROLS.COM

FOR SUPPORT & WARRANTY — ENOVATIONCONTROLS.COM/SUPPORT

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