Micropak[™]

DC Motor Controllers

For Separately Excited (SEM) Motors 24 to 48 V, 2.6 to 3.5 kW

This low-cost solution to traction applications occupies a footprint of only $153 \times 153 \times 56$ mm making it ideal for smaller applications.

Utilizing the same innovative design techniques as the PowerpakTM, the MicropakTM range offers an ultra-compact solution specifically for use on low voltage/low power applications. The MicropakTM has a similar footprint to Sevcon's PowerpakTM, but the reduced profile is ideally suited for smaller applications where space is at a premium.

Feature Overview

- High frequency silent operation
- Choice of displays: standard, full-feature or SmartView™
- CAN communications
- PC Configuration
- · Integrated logic unit





Micropak

Separately Excited Motors (SEM)

SEM offers a contactor-free solution to regenerative braking and field weakening, with improved efficiency. The Micropak™ offers improved speed control without added sensors. Micropak™ can either be used in single or twin motor systems, where it can be configured as master or slave.

Enhanced Reliability and Performance

Sevcon's patented MOSFET switching design delivers peak dependability and performance, as well as silent operation utilizing a 16kHz high switching frequency.

Flash Memory for Increased Flexibility

Because application programs are stored in Flash Memory, the controller can be reprogrammed in-situ, increasing flexibility and commonality of system design.

Inputs and Outputs

Standard configurations of digital and analog inputs and outputs (I/O) are especially suitable for twin motor applications. Functions include throttle inputs, limit switch inputs, contactor drives, hour counters, and instrumentation. This allows use as a standalone unit or to be integrated into a vehicle system.

Rugged Endurance

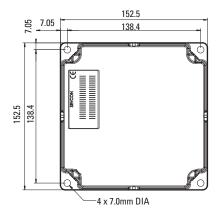
Rigorous testing that includes the harshest temperature, vibration, and humidity trials, ensure that Micropak $^{\text{TM}}$ controllers deliver unparalleled reliability.

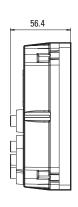
CAN Communications

The Micropak™ controllers use the Sevcon Controller Area Network (CAN) serial communications bus. This allows multiple controllers to effectively communicate within the vehicle system to increase safety and reliability with the minimum of wiring.

Simple Configuration and Service

A PC with the Sevcon PCpak[™] configuration system or a hand-held calibrator can be used to adjust parameters and reprogram the controller via the calibrator port. The prominent diagnostic LED provides "no tools" fault finding assistance.





Specifications

| Battery Voltage | Armature Current 1 Min (A) | Armature Current 1 Hour (A) | Field Current (A) |
|--------------------|----------------------------------|-----------------------------------|-------------------------|
| 24/36 | 180 | 75 | 30 |
| 24/36 | 270 | 100 | 30 |
| 48 | 270 | 100 | 30 |

• Ingress: Enclosure protected to IP66

• Vibration: NAVMAT P9492 Random Vibration Test Profile

• Operating Temperature: -30°C +40°C • Storage Temperature: -40°C to +70°C

• Frequency: 16KHz

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