Sheet

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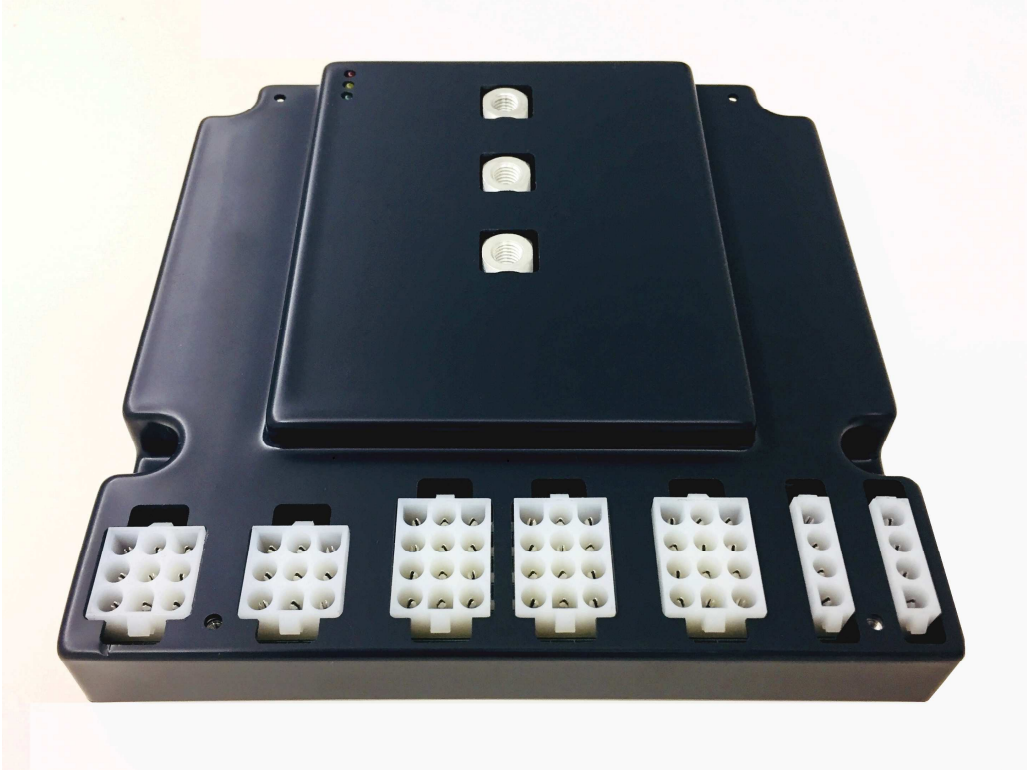
# Scissor

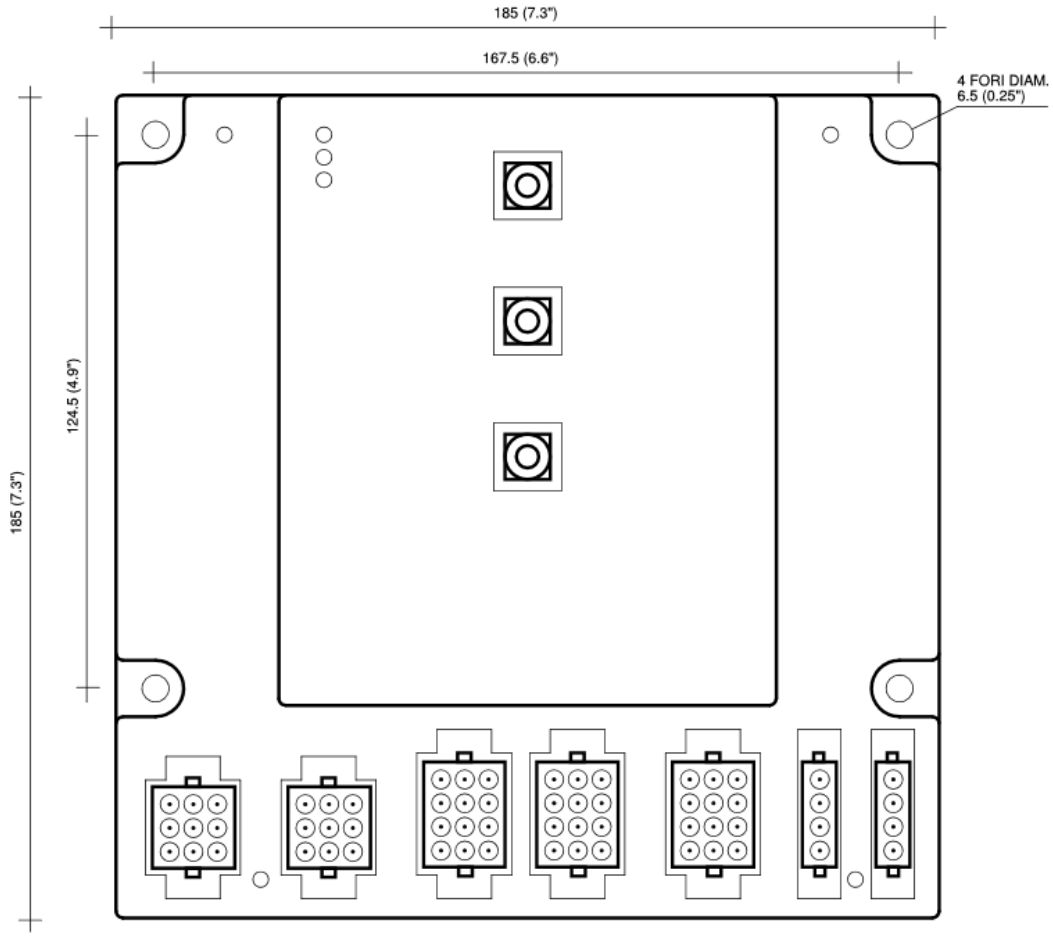
## On-board control unit for scissor-lifters

Scissor is an on-board control unit for the whole management an automation of electric scissor-lifters. It integrates the power driver for a hydraulic pump with electric motor up to 6 kW. It is available in various sizes, depending on the power of the lifter electric motor. It manages all of the inputs (drives and sensors) and outputs (valves and signals), in order to allow the whole management of the machine through a sole device. It has been designed to use the best available power components so as to optimize the performance of the electric motor and minimize the losses, by providing a smooth and precise handling.
The control is performed through a double microprocessor and a dual accelerometric sensor, to obtain a complete safety function in compliance with the most recent regulations.



Scissor

- Complete operating program customizable for users and machine models.
- Double microprocessor control to assure a redundant security system.
- Dual accelerometric sensor to limit or prevent aggravating movements in slope situations.
- Inputs and outputs interfacing with the machine wirings and sensors.
- Protection against short circuit and thermal overload for all of the outputs.
- CAN-Bus interface programmable for the management of remote sensors and units, as well as joysticks.
- Serial interface for parametrization and calibration by Pc and programming unit.




Electronic control board dimensions

## Working conditions

| | |
|---|---|
| Operational supply voltage: | **24 V** |
| Working temperature: | **-20°C/+50°C** |

## Inputs and outputs

| | |
|---|---|
| Digital inputs on/off: | **24** |
| Analogical inputs 10 bit resolution: | **6** |
| Power digital outputs 6A max : | **11** |
| Digital outputs for signal lamps 1A: | **6** |

## Motor power driver

| | |
|---|---|
| Operational direct current: | **250 A** |
| Peak current: | **500 A** |
| PWM* frequency: | **15 Khz** |

*Pulse Width Modulation

## CAN-Bus and communication door

| | |
|---|---|
| CAN-Bus channel: | **FULL CAN 2.0 A e B** |
| Protocol standard: | **SAE J1939** |
| Maximum speed: | **500 Kbit/sec.** |
| Communication door: | **RS232** |

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