



1353 eXm

CAN I/O Expansion Module



Model 1353 eXM

The Parker Curtis Model 1353 CANbus I/O expansion module provides accurate control of up to 9 proportional hydraulic valves, or can be used to add other digital and analog I/O to any CANopen based control system.

The 1353 expands I/O capabilities on any CANopen vehicle control system. Typically used on materials handling trucks, aerial lift platforms, airport ground support equipment, compact construction equipment and sweeper-scrubber floor care machines.

Features

- Configurable CANbus connection allows communication with other CANbus enabled devices.
- Multi-purpose I/O pins in a compact, low-cost, rugged module.
- Short circuit protection on all output drivers.
- Analog inputs can also be used as virtual digital inputs with programmable On/Off thresholds and variable filters.
- Built-in programmable dither amount and frequency allow precise hydraulic proportional valve positioning.
- All outputs can also be used as 'active high' digital inputs.
- Constant current or constant voltage output modes provide accurate control.
- Built-in coil flyback diodes reduce voltage spikes when driving inductive loads/coils.
- Externally viewable status LEDs.
- Support of 12-48V or 48-96V nominal supply voltages.
- IP65 sealing, positively latched I/O connectors (AMPSeal: 23-pin).
- 12-48V models are suitable for use on internal combustion engine applications.
- Nine high frequency driver outputs, total current is limited to 9A.
- Driver outputs 1-4 rated to 1 amp each, Driver outputs 5-8 rated to 2 amps each, Driver output 9 rated to 3 amps.
- Closed loop constant current, constant voltage, or direct PWM control on each output.
- Built-in programmable dither control for hydraulic valve.
- Min/Max current and Ramp up/down time setting for driver outputs.
- Nine analog inputs.
- Two quadrature encoder inputs.
- Conform to CCIS 2.0 protocol and programmable over CIT (Curtis Integrated Tool).
- +12V and +5V external power supply with short protection.



Specifications

Meets or complies with relevant International Regulations:

Designed to the requirements of EN12895:2015+A1:2019

IP65 Rated per IEC 60529

UL583 recognized component

RoHS directive 2015/863/EU (RoHS 3)

Regulatory compliance of the complete vehicle system with the controller installed is the responsibility of the vehicle OEM.

Model Chart

Model	I/O Pins	Voltage	Digital Inputs*	PWM Outputs*	Analog Inputs*	Encoder Inputs*	5V & 12V External Power Supply
1353-5001	13	12-48	9	9	7	2	Yes
1353-7001	13	48-96	9	9	7	2	Yes

*Max available, final count depends on configuration.

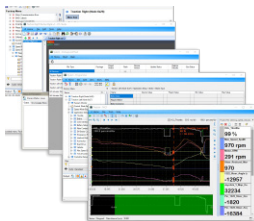
System Accessories



Parker Curtis Models AC F4-A and AC F10-A provide advanced control of AC induction motors performing on-vehicle traction drive or hydraulic pump duties.



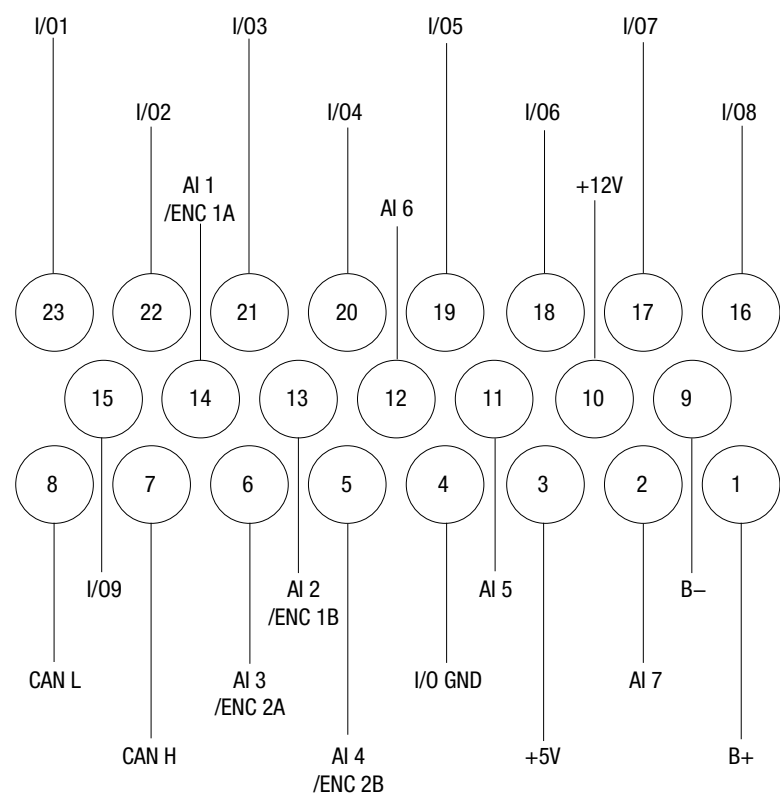
Parker Curtis Model 1222 is an AC induction motor controller for 'steer by wire' electric power steering systems.



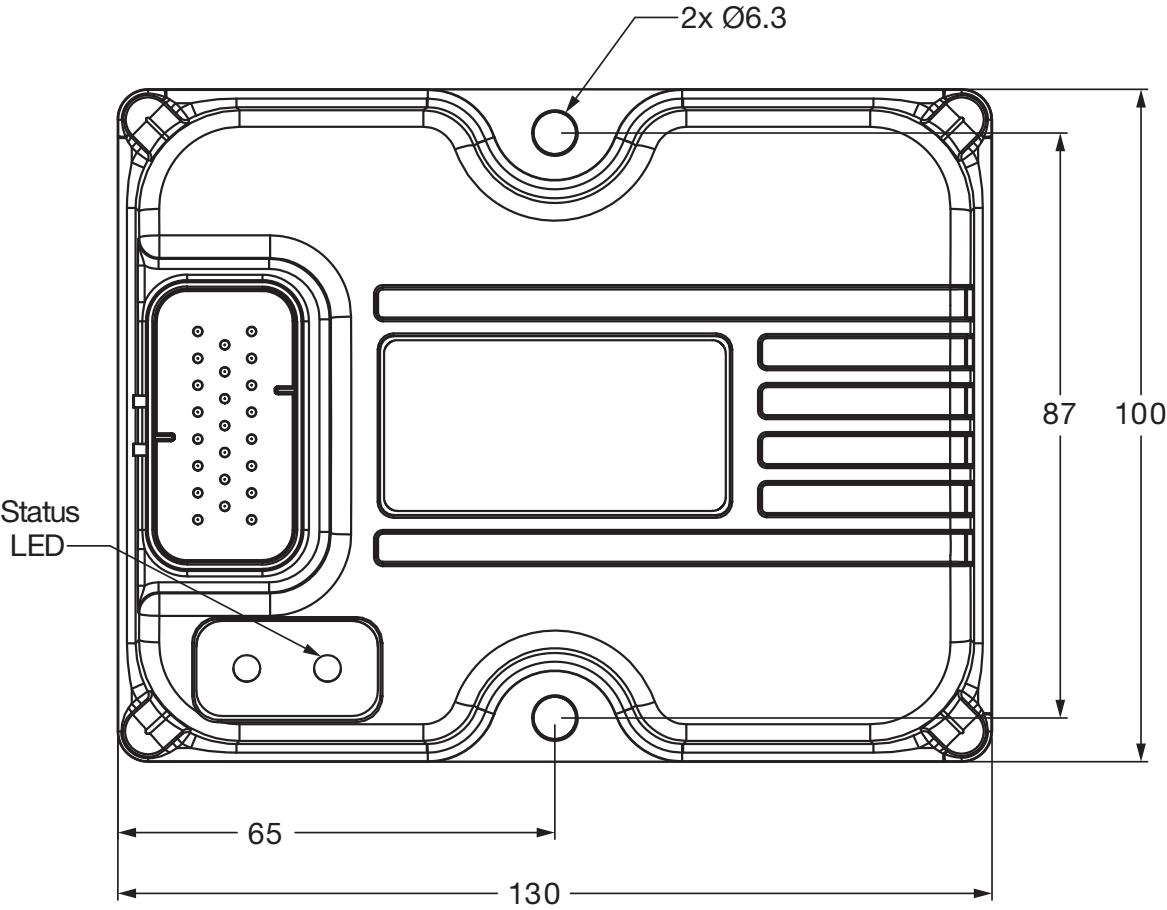
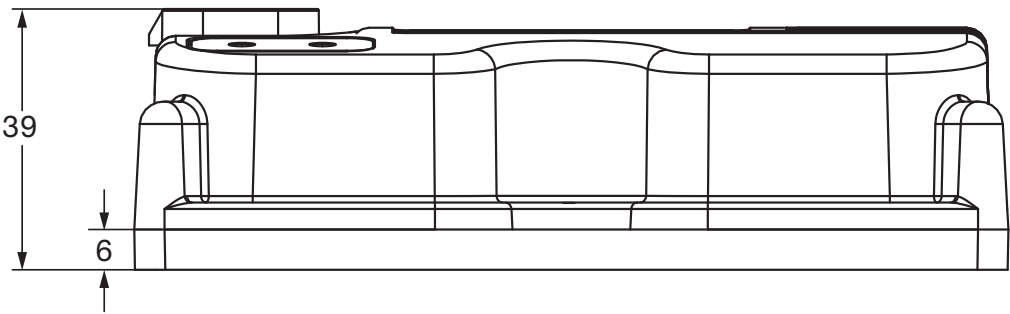
Parker Curtis CIT is a Windows Software Suite for the Design, Configuration, and Diagnostics of CAN Control Systems.

Contact a Parker Curtis sales location to obtain the Vehicle Control Language (VCL) compiler and development tools.

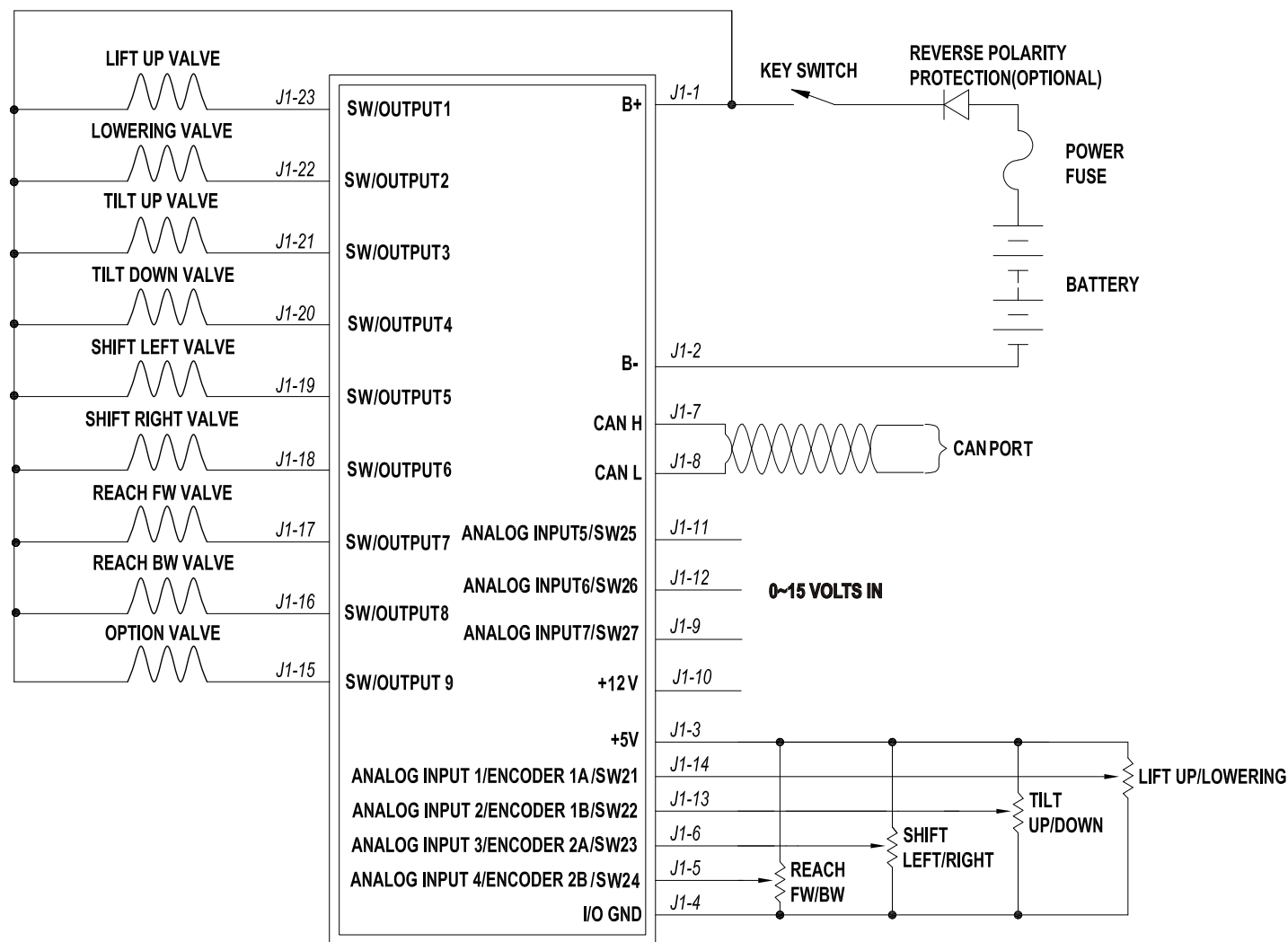
Connector Wiring Diagram



Dimensions (mm)



Typical Wiring Diagram



Warranty

Two year limited warranty from time of delivery.

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