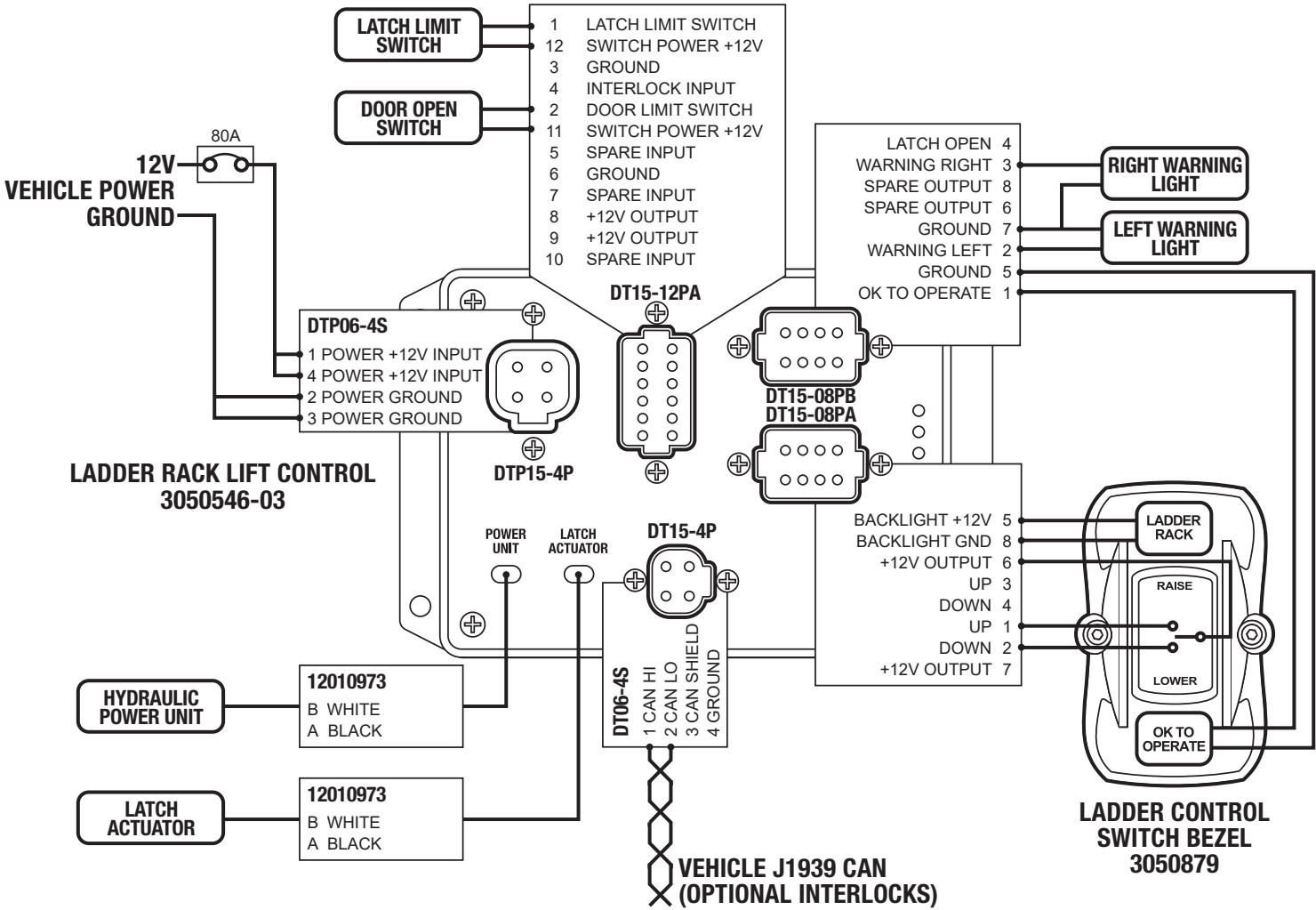


TECHNICAL SPECIFICATIONS

Operating Voltage	7 to 32 VDC
Power Consumption with no loads at 13.8 VDC	45 mA
Motor Current	25A continuous, 35A for 2 minutes, 50A for 20 seconds
Operating Temperature Range	-40°C to +105°C (-40°F to +220°F)
Storage Temperature Range	-40°C to +105°C (-40°F to +220°F)
Ingress Protection	IP67
Electrical Protection	Reverse voltage polarity protection on all connections Internal thermal fuses CAN Bus protected to 24V ESD protected to J1113-13 specifications Transient voltage protected to J1113-11 and J1113-42 Indicator outputs are protected from reverse polarity, over-current, over-voltage, and voltage transients Input circuits are protected from reverse polarity, over-current, over-voltage, and voltage transients Watchdog timer supervises proper execution of software
SAE J1939 Protocol	CAN 2.0B port operating at 250kbps,J1939-11 or J1939-15 physical layer
Indicator Output Current Max	High side polarity 1A
Dimensions	6.13" wide x 4.62" high x 1.25" deep
Weight	771 grams (1.7 pounds)



3050546-03 Ladder Lift Control System

LADDER RACK CONTROL IN A SMART DESIGN

The Innovative Controls Inc. Ladder Lift Control Systems are used to operate 12VDC electric and hydraulic actuators used in ladder rack storage lift systems. The Ladder Lift Controls can be operated and interlocked using hardwired inputs or an optional J1939 CAN Bus interface.

The 3050546-03 ladder lift control is designed to operate lift systems operated by hydraulic power under electronic control. The 3050546-03 ladder lift control module contains two DC motor controls used to operate a hydraulic power unit and a boom latch actuator. The boom lift direction can be controlled by +12V hardwired inputs or a J1939 CAN data link. The control module has inputs for a master interlock from the vehicle chassis, lift door open, and boom latched. Indicator outputs are provided to drive the left and right warning lights, control switch ok to operate lamp, and a boom unlatched warning signal.

The 3050494 control bezel contains an operator interface switch and backlit LADDER RACK and OK TO OPERATE indicators. The OK TO OPERATE backlight is used to indicate when the interlocks are properly engaged. The control bezel features a waterproof switch and side guards.

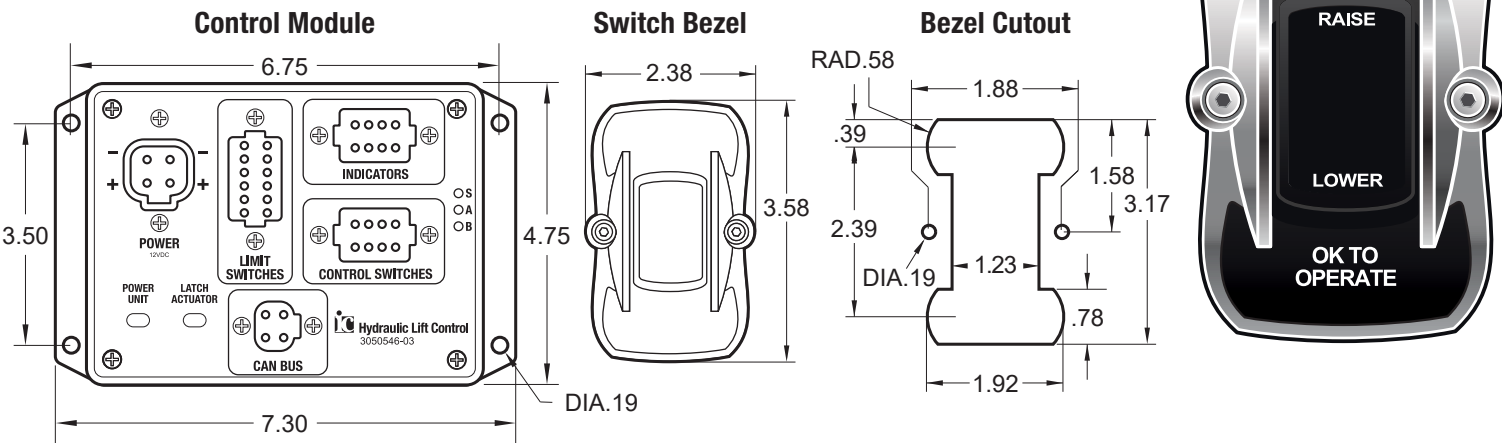
FEATURES

- 25A Continuous / 50A Surge Motor Current
- Hardwired Control Inputs
- Hardwired Indicator Outputs
- J1939 CAN Bus Operation
- Lock Inputs to Prevent Operation in either Direction
- Electronic Overcurrent Sensing and Protection
- Front Panel Status LEDs
- -40C to +105C (-40F to +220F) AEC-Q100 Level 2 Operating Temp.
- No Configuration Jumpers
- Potted Module for Dust and Water Ingress Protection

PART NUMBERS

Description	IC Part Number
Ladder Lift Controller	3050546-03
Switch Bezel Assembly	3050879

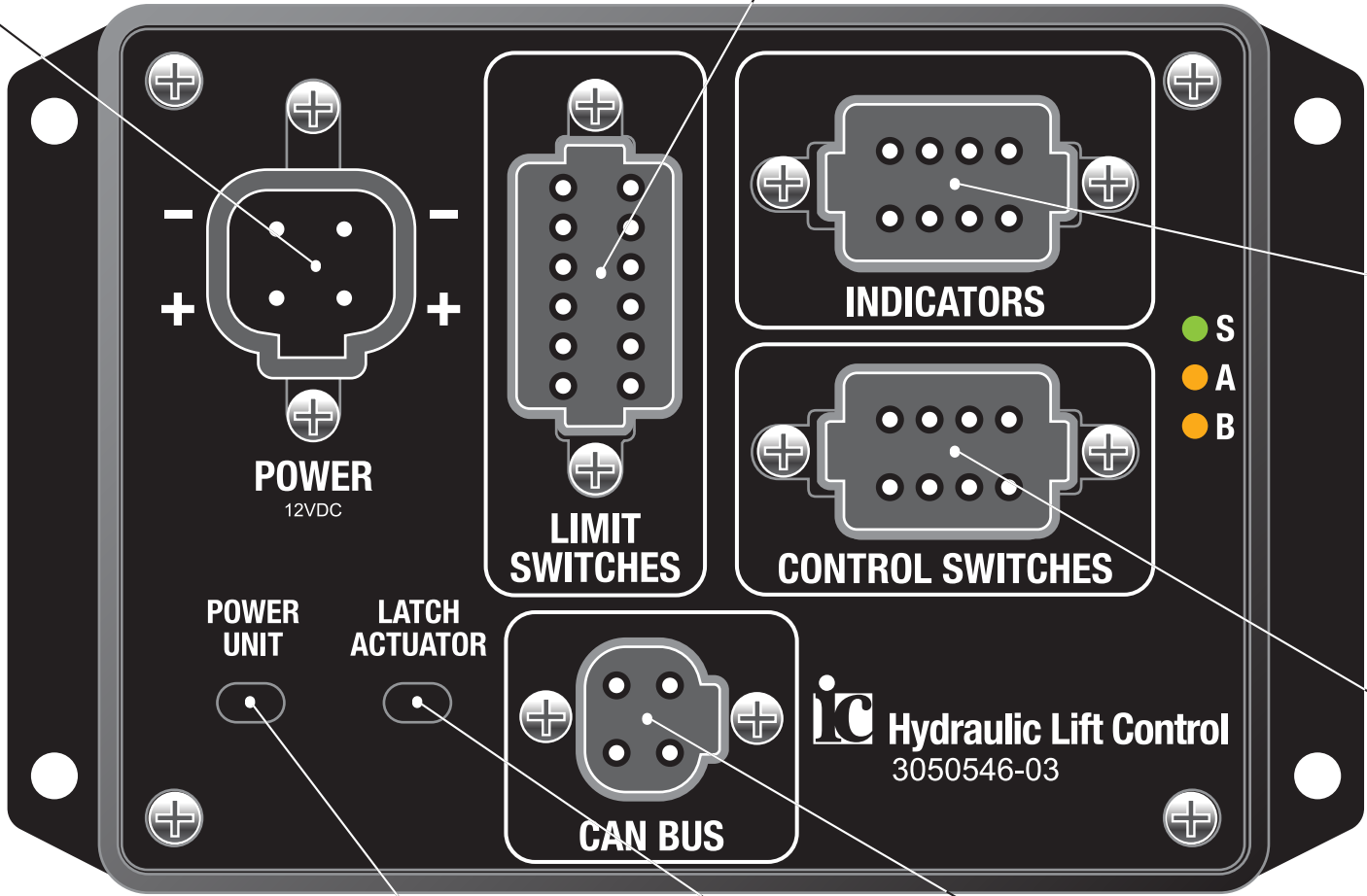
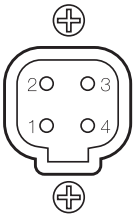
DIMENSIONS



POWER Deutsch DTP15-04P Connector

Terminal	Description	Function
1	POWER +12V INPUT	Battery positive
2	POWER GROUND	Battery negative
3	POWER GROUND	Battery negative
4	POWER +12V INPUT	Battery positive

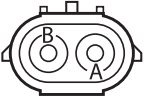
Mating connector is Deutsch DTP06-4S with WP-4S wedgelock and 0462-210-1231 sockets



POWER UNIT Aptiv 12010973 Connector

Terminal	Description	Function
B	POWER UNIT +	Lift moves up with +12V applied
A	POWER UNIT -	Lift moves down with +12V applied

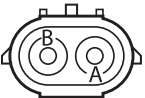
Mating connector is plug 12010973



LATCH ACTUATOR Aptiv 12010973 Connector

Terminal	Description	Function
B	LATCH ACTUATOR +	Latch locked with +12V applied
A	LATCH ACTUATOR -	Latch unlocked with +12V applied

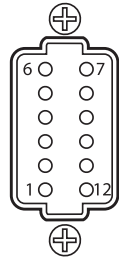
Mating connector is plug 12010973



LIMIT SWITCH INPUTS Deutsch DT15-12PA Connector

Terminal	Description	Function
1	LATCH LIMIT SWITCH	Boom unlatched limit switch +12V input
2	DOOR OPEN SWITCH	Door open switch +12V input
3	GROUND	Ground
4	INTERLOCK	Ready to operate with +12V applied
5	SPARE INPUT	Unused spare input
6	GROUND	Ground
7	SPARE INPUT	Unused spare input
8	+12V	+12V output
9	+12V	+12V output
10	SPARE INPUT	Unused spare input
11	SWITCH POWER +12V	+12V to Door Open Switch
12	SWITCH POWER +12V	+12V to Latch Limit Switch

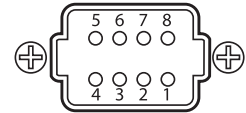
Mating connector is Deutsch DT06-12SA with W12S wedgelock and 0462-201-16141 sockets



INDICATOR OUTPUTS Deutsch DT15-08PB Connector

Terminal	Description	Function
1	OK TO OPERATE	+12V when system ok to operate
2	WARNING RIGHT	+12V flashing at 1hz when door open
3	WARNING LEFT	+12V flashing at 1hz when door open
4	LATCH OPEN	+12V when latch switch is open
5	GROUND	Ground connection for indicators
6	SPARE OUTPUT	Unused spare output
7	GROUND	Ground connection for indicators
8	SPARE OUTPUT	Unused spare output

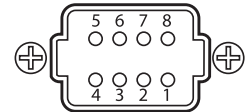
Mating connector is Deutsch DT06-08SB with W8S wedgelock and 0462-201-16141 sockets



CONTROL SWITCH INPUTS Deutsch DT15-08PA Connector

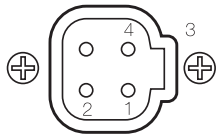
Terminal	Description	Function
1	UP CONTROL INPUT	Lift moves up with +12V applied
2	DOWN CONTROL INPUT	Lift moves down with +12V applied
3	UP CONTROL INPUT	Lift moves up with +12V applied
4	DOWN CONTROL INPUT	Lift moves down with +12V applied
5	BACKLIGHT +12V	+12V power to switch bezel backlight
6	SWITCH POWER +12V	+12V system power to control switch
7	SWITCH POWER +12V	+12V system power to control switch
8	BACKLIGHT GROUND	Ground to switch bezel backlight

Mating connector is Deutsch DT06-08SA with W8S wedgelock and 0462-201-16141 sockets



CAN BUS Deutsch DTP15-04P Connector

Terminal	Description
1	J1939 CAN HI
2	J1939 CAN LO
3	CAN Shield
4	GROUND



Mating connector is Deutsch DTP06-4S with WP-4S wedgelock and 0462-210-1231 sockets