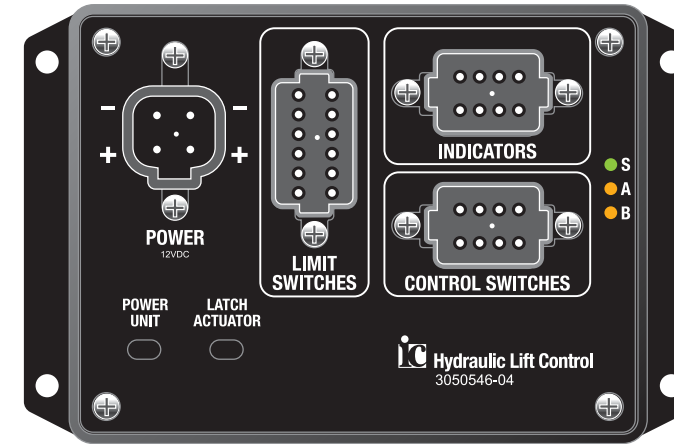


## TECHNICAL SPECIFICATIONS

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 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
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)



## 3050546-04 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 3050546-04 ladder lift control is designed to operate lift systems operated by hydraulic power under electronic control. The 3050546-04 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. 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.

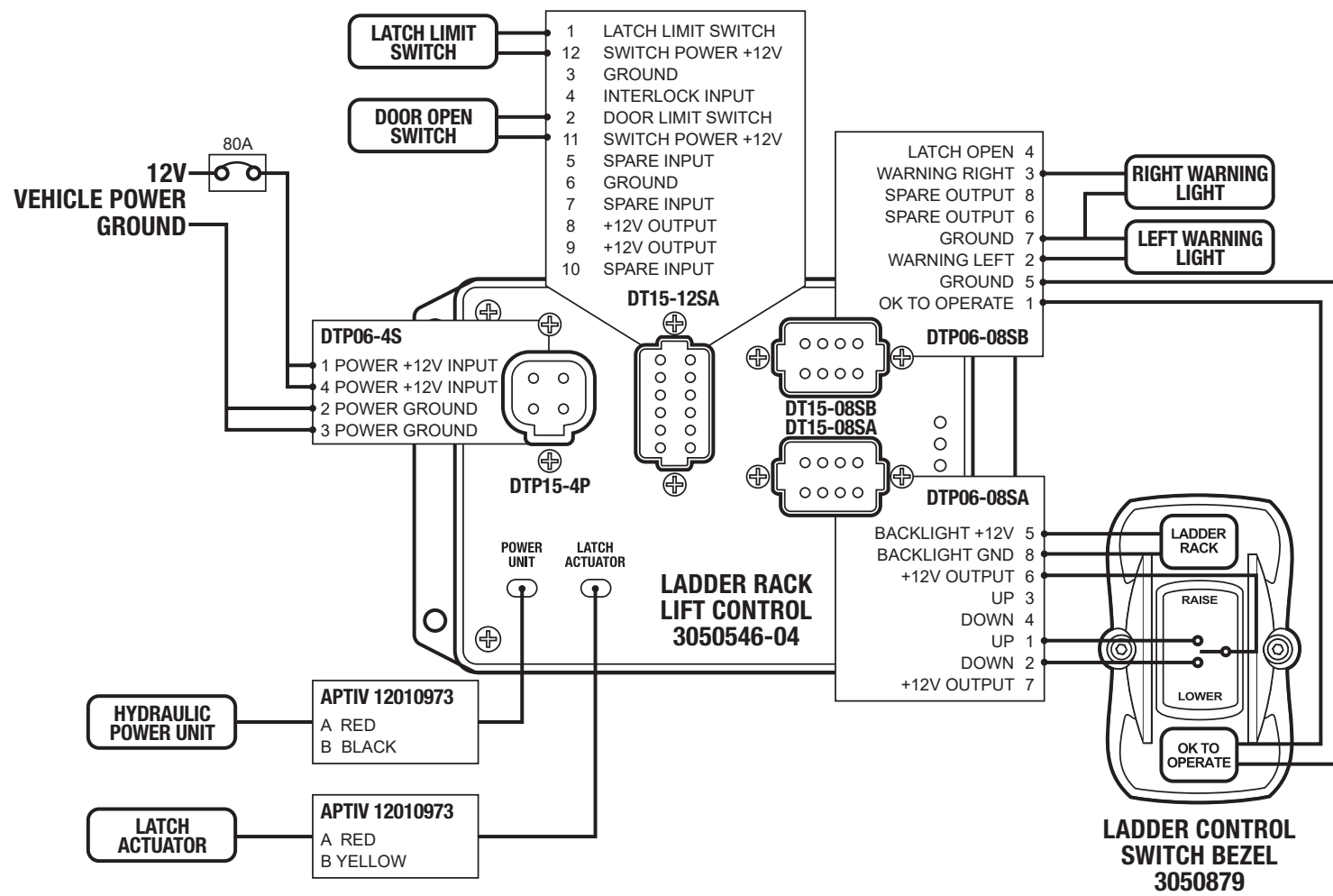
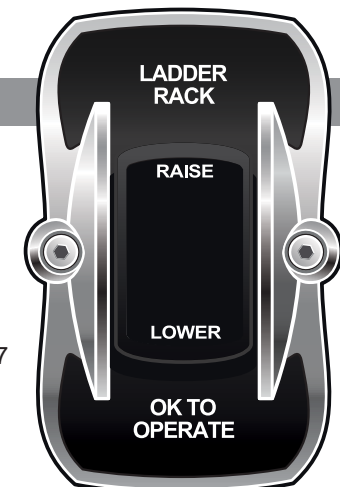
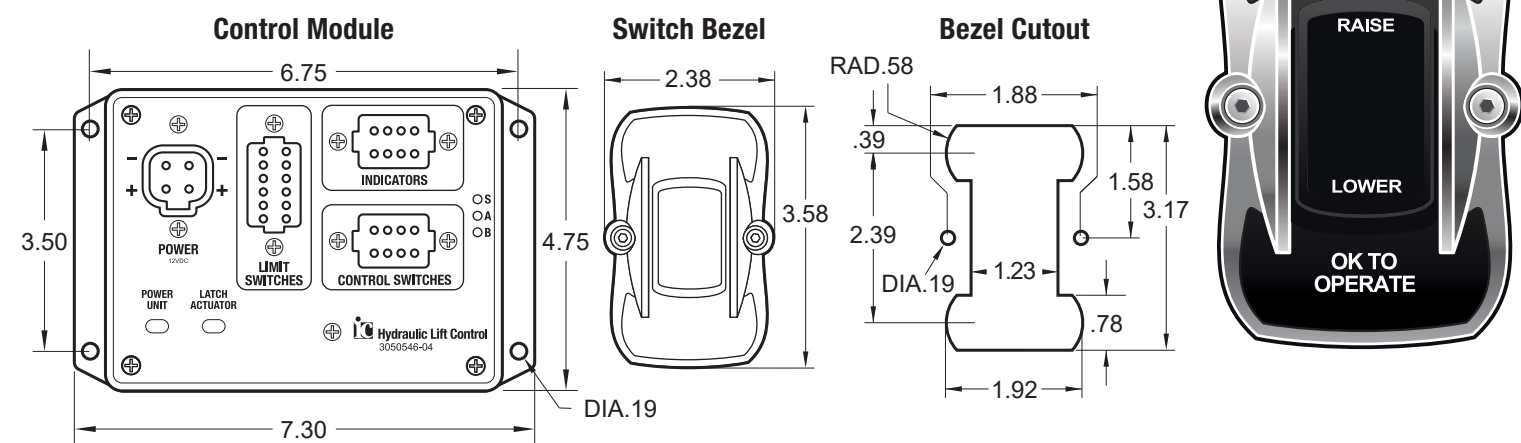
### FEATURES

- 25A Continuous / 50A Surge Motor Current
- Hardwired Control Inputs
- Hardwired Indicator Outputs
- 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

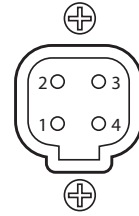
Description	IC Part Number
Ladder Lift Controller	3050546-04
Switch Bezel Assembly	3050879

### DIMENSIONS

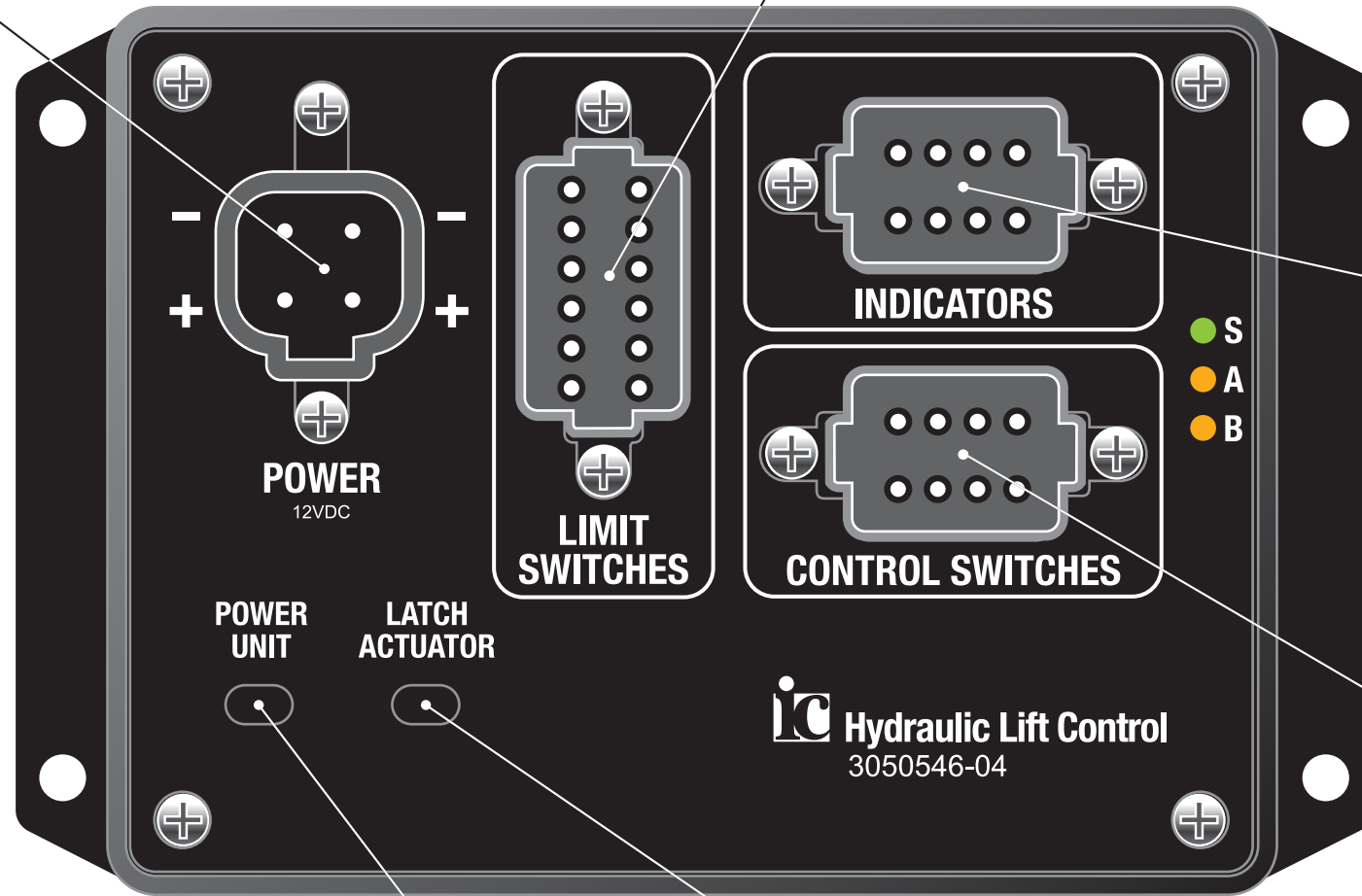


**POWER** Deutsch DTP15-04P Connector

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

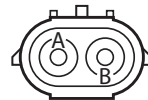


Mating connector is Deutsch DTP06-4S with WP-4S wedgelock and 0462-210-1231 sockets



**POWER UNIT** Aptiv 12010973 Connector

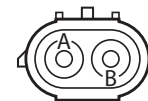
Terminal	Description	Function
A	POWER UNIT +	Lift moves up with +12V applied
B	POWER UNIT -	Lift moves down with +12V applied



Mating connector is Aptiv Plug 12010973

**LATCH ACTUATOR** Aptiv 12010973 Connector

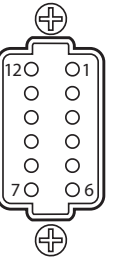
Terminal	Description	Function
A	LATCH ACTUATOR +	Latch locked with +12V applied
B	LATCH ACTUATOR -	Latch unlocked with +12V applied



Mating connector is Aptiv Plug 12010973

**LIMIT SWITCH INPUTS** Deutsch DT15-12PA Connector

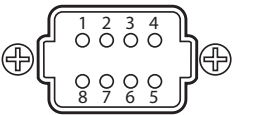
Terminal	Description	Function
1	LATCH LIMIT SWITCH	Boom unlatched limit switch +12V input
2	DOOR OPEN SWITCH	Door open switch +12V input
3	GROUND	Ground
4	INTERLOCK	Ready to operate with +12V applied
5	SPARE INPUT	Unused spare input
6	GROUND	Ground
7	SPARE INPUT	Unused spare input
8	+12V	+12V output
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 DTP06-12SA with W12S wedgelock and 0462-201-16141 sockets

**INDICATOR INPUTS** Deutsch DTP15-08PB Connector

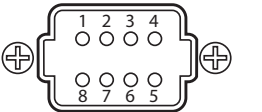
Terminal	Description	Function
1	OK TO OPERATE	+12V when system ok to operate
2	WARNING RIGHT	+12V flashing at 1hz when door open
3	WARNING LEFT	+12V flashing at 1hz when door open
4	LATCH OPEN	+12V when latch switch is open
5	GROUND	Ground connection for indicators
6	SPARE OUTPUT	Unused spare output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



Mating connector is Deutsch DTP06-08SB with W8S wedgelock and 0462-201-16141 sockets

**CONTROL SWITCH INPUTS** Deutsch DTP15-08PA 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 DTP06-08SA with W8S wedgelock and 0462-201-16141 sockets