



| K100

Platform Control System for rough terrain scissor lift

Introduction

The K100 Platform Control System provides the reliability required in demanding applications such as Mobile Elevating Work Platforms; K100 is committed to the full control of rough terrain self-propelled scissor lift. The key parts of the K100 Kit are the PCU100 (Platform Control Unit) and the GCU100 (Ground Control Unit). The 2 units have been conceived as building block elements able to connect a variety of digital and analog machine interfaces such as joysticks, sensors, limit switches, LEDs, motor controller, pushbuttons, e-stop, alarms and control them through a CAN-bus system.



PCU100
Platform Control Unit



GCU100
Ground Control Unit

Main Features

- Direction control switches integrated in the joystick grip
- LCD Display for an easy setting and control
- Emergency Stop Pushbutton
- Automotive grade MCU
- Support CAN bus
- Support Analog current & Analog voltage multiplex Input

Custom modifications

- Custom overlay graphics
- Custom grip
- 58 functionally configurable Input/Output signals



SPECIFICATIONS

Electrical

	PCU100	GCU100
Supply Ratings	System Voltage: 12V or 24V DC Voltage Range: 10V~30V	
	Max. output voltage: V supply DC	N/A
Other Electrical Characteristics	N/A	Certified to CE regulations ESD: +/- 6KV Contact, +/-8KV Air Discharge per IEC 61000-4-2 Functional safety: Design for PL-d (loading function), refer to BS EN ISO13849

Mechanical

	PCU100	GCU100
Operating temperature	-20 °C to 70 °C	
Protection Level	IP65 (after installed)	IP25
Life	Joystick > 5 million cycles Pushbuttons > 1million cycles	N/A

PCU100 Platform Control Unit

Connector: 6 Pin, DEUTSCH DTM04-6P;
Pin Current Rating 10Amps

Pin 1	Ground
Pin 2	Serial Data High
Pin 3	E-Stop Out (+24V out)
Pin 4	+24V in
Pin 5	Serial Data Low
Pin 6	Unused

GCU100 Ground Control Unit

Connectors: J1 & J2 = 36 Pin, AMP 344108-1; Pin Current Rating 10Amps; gold plating on mating area of pins

J1 Connector

Pin	Description	Pin	Description
J1-1A	2.5A/12V Digital Output	J1-7A	2.5A/12V Digital Output
J1-1B	2.5A/12V Digital Output	J1-7B	2.5A/12V Digital Output
J1-1C	0-12V Digital Input	J1-7C	PWM Input
J1-2A	2.5A/12V Digital Output	J1-8A	2.5A/12V Digital Output
J1-2B	2.5A/12V PWM Output	J1-8B	2.5A/12V Digital Output
J1-2C	0-12V Digital Input	J1-8C	0-12V Digital Input
J1-3A	2.5A/12V Digital Output	J1-9A	2.5A/12V Digital Output
J1-3B	2.5A/12V PWM Output	J1-9B	2.5A/12V Digital Output
J1-3C	0-12V Digital Input	J1-9C	0-12V Digital Input
J1-4A	2.5A/12V Digital Output	J1-10A	2.5A/12V Digital Output
J1-4B	2.5A/12V PWM Output	J1-10B	2.5A/12V Digital Output
J1-4C	0-12V Digital Input	J1-10C	0-12V Digital Input
J1-5A	2.5A/12V Digital Output	J1-11A	2.5A/12V Digital Output
J1-5B	2.5A/12V Digital Output	J1-11B	2.5A/12V Digital Output
J1-5C	0-12V Digital Input	J1-11C	2.5A/12V Digital Output
J1-6A	2.5A/12V Digital Output	J1-12A	2.5A/12V Digital Output
J1-6B	2.5A/12V Digital Output	J1-12B	2.5A/12V Digital Output
J1-6C	0-12V Digital Input	J1-12C	5V Power Output

J2 Connector

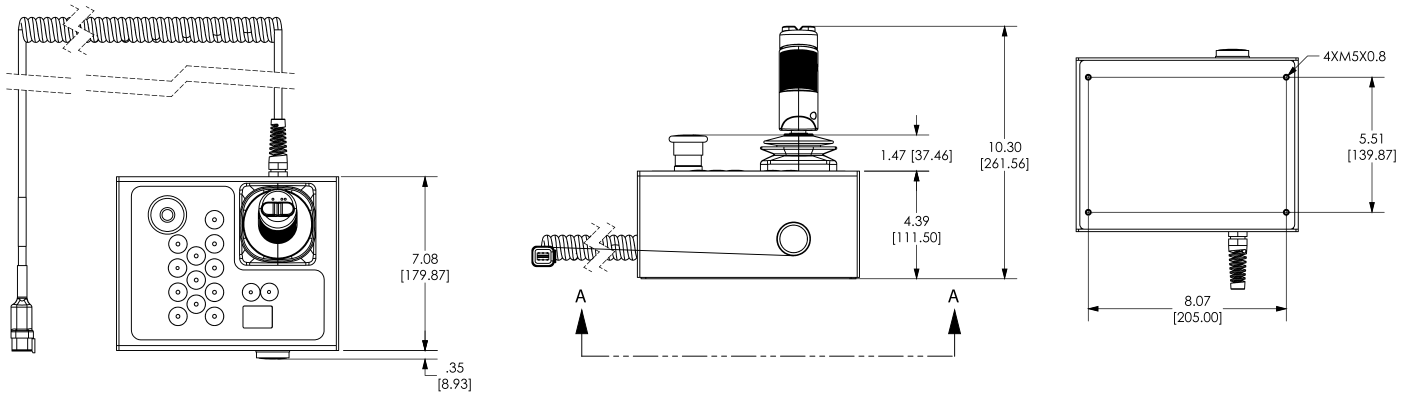
Pin	Description	Pin	Description
J2-1A	0-12V Digital Input	J2-7A	0-12V Digital Input
J2-1B	Analog Voltage Input	J2-7B	200mA/12V Digital Output
J2-1C	12V Power Input	J2-7C	GND
J2-2A	0-12V Digital Input	J2-8A	0-12V Digital Input
J2-2B	GND	J2-8B	2.5A/12V Digital Output
J2-2C	12V Power Input	J2-8C	2.5A/12V Digital Output
J2-3A	0-12V Digital Input	J2-9A	200mA/12V Digital Output
J2-3B	Analog Multiplex Input	J2-9B	CAN_H
J2-3C	12V Power Input	J2-9C	2.5A/12V Digital Output
J2-4A	0-12V Digital Output	J2-10A	GND
J2-4B	GND	J2-10B	200mA/12V Digital Output
J2-4C	2.5A/12V Digital Output	J2-10C	2.5A/12V Digital Output
J2-5A	0-12V Digital Input	J2-11A	Data_Linkplus
J2-5B	Analog Multiplex Input	J2-11B	200mA/12V Digital Output
J2-5C	CAN_L	J2-11C	2.5A/12V Digital Output
J2-6A	0-12V Digital Input	J2-12A	Data_Linkminus
J2-6B	Analog Voltage Input	J2-12B	200mA/12V Digital Output
J2-6C	Analog Voltage Input	J2-12C	12V Power Input



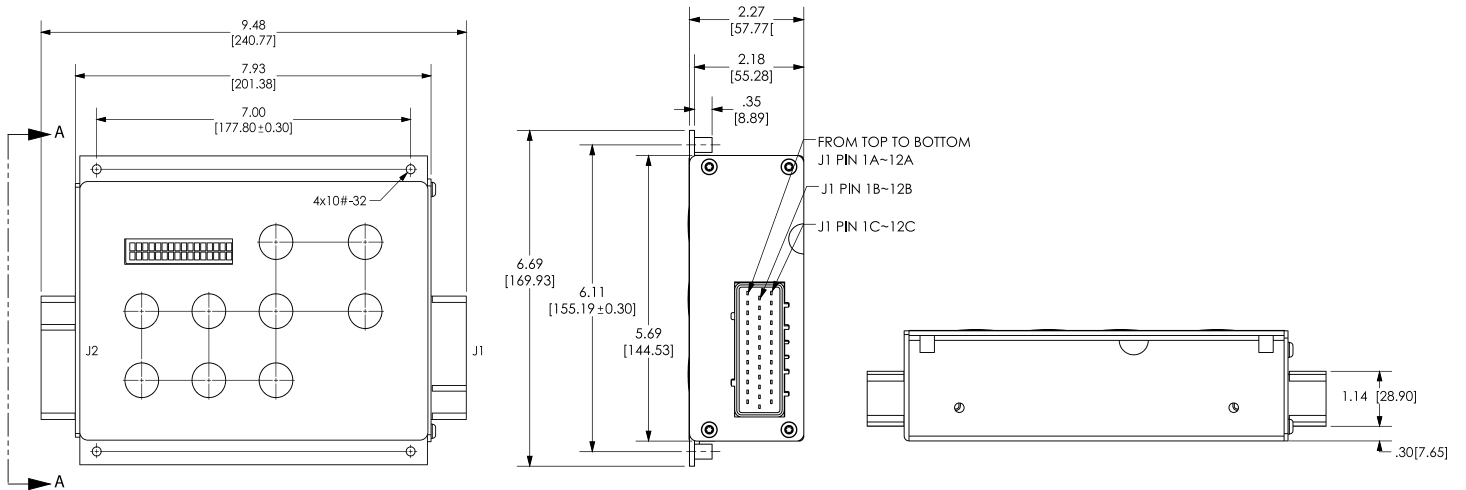
DIMENSIONS

All dimensions are in inches [millimeters]

PCU100 Platform Control Unit



GCU100 Ground Control Unit





Part Number	Product	Description
8C40009CC0003-01 ^(A)	K100	Platform Control Kit for DC vehicle

^(A) **K100 Kit includes:**

Part Number	Product	Description
8C40009CC0005-01	PCU100	Platform Control Unit
8C40009CC0004-01	GCU100	Ground Control Unit

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