

## Quick Start Guide

### Atlas™

Servotorq™ Integrated Servo Motor  
Part No. OVU00247 and Variants



Thank you for purchasing Overview's Atlas Integrated Servo Motor.

To quickly get up and running with your Atlas motor, please refer to the Technical Manual, I<sup>2</sup>C Protocol Guide and Application Notes located at:

<http://www.overview.co.uk/technical-support/>

Please observe the following precautions when handling and operating the Atlas motor:



- The Atlas motor uses semiconductors which can be damaged by electrostatic discharge (ESD). The motor must be handled and stored in an ESD safe environment.
- The Atlas motor's nominal supply is 48V DC, using up to 1A DC. Do **NOT** hot-plug the power supply.

#### Reference Information:

The Atlas I<sup>2</sup>C control interface uses 12V signalling levels. Please see the Technical Manual for further details and a reference interface circuit.



**Beware!** When the drive is powered, it will rotate. This is part of the initialisation process and is outlined in the Technical Manual. During this process the drive will draw current up to the maximum rated value.

**Warning:** If Battery powered the drive will require Surge, In-Rush Current, Reverse Polarity and Overvoltage Protection.

## Quick Start Guide

### Atlas™

Servotorq™ Integrated Servo Motor  
Part No. OVU00247 and Variants



Thank you for purchasing Overview's Atlas Integrated Servo Motor.

To quickly get up and running with your Atlas motor, please refer to the Technical Manual, I<sup>2</sup>C Protocol Guide and Application Notes located at:

<http://www.overview.co.uk/technical-support/>

Please observe the following precautions when handling and operating the Atlas motor:



- The Atlas motor uses semiconductors which can be damaged by electrostatic discharge (ESD). The motor must be handled and stored in an ESD safe environment.
- The Atlas motor's nominal supply is 48V DC, using up to 1A DC. Do **NOT** hot-plug the power supply.

#### Reference Information:

The Atlas I<sup>2</sup>C control interface uses 12V signalling levels. Please see the Technical Manual for further details and a reference interface circuit.



**Beware!** When the drive is powered, it will rotate. This is part of the initialisation process and is outlined in the Technical Manual. During this process the drive will draw current up to the maximum rated value.

**Warning:** If Battery powered the drive will require Surge, In-Rush Current, Reverse Polarity and Overvoltage Protection.

Overview Limited

Overview House Kingsway Business Park Forsyth Road Woking GU21 5SA United Kingdom

© Overview Ltd 2023

[www.overview.co.uk](http://www.overview.co.uk)

OVZ20020 Rev 5

Overview Limited

Overview House Kingsway Business Park Forsyth Road Woking GU21 5SA United Kingdom

© Overview Ltd 2023

[www.overview.co.uk](http://www.overview.co.uk)

OVZ20020 Rev 5

## Quick Start Guide

### Atlas™

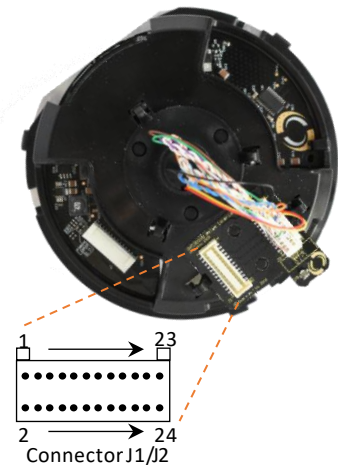
Servotorq™ Integrated Servo Motor  
Part No. OVU00247 and Variants



Atlas motor pinout reference (please see the Technical Manual for further details):

- Connector type: JST ZPD 24-way.
- Mating housing part: ZPDR-24V-S (JST)
- Pre-crimped leads: SZPD-002T-P0.3 (JST)

Connectors J1/J2			
Pin	Signal	Pin	Signal
1	48V <sub>in</sub>	2	GND
3	48V <sub>in</sub>	4	GND
5	48V <sub>in</sub>	6	GND
7	PASS THROUGH PAIR 1+	8	PASS THROUGH PAIR 4+
9	PASS THROUGH PAIR 1-	10	PASS THROUGH PAIR 4-
11	PASS THROUGH PAIR 2+	12	PASS THROUGH PAIR 5+
13	PASS THROUGH PAIR 2-	14	PASS THROUGH PAIR 5-
15	PASS THROUGH PAIR 3+	16	I <sup>2</sup> C SDA
17	PASS THROUGH PAIR 3-	18	I <sup>2</sup> C SCL
19	PASS THROUGH AUX 1	20	I <sup>2</sup> C ADDRESS SELECT (Not available via slip-ring)
21	PASS THROUGH AUX 2	22	NO-CONNECT
23	NO-CONNECT	24	EARTH (SPINDLE CONNECTION)



Note: I<sup>2</sup>C Address Select to be connected to GND for address 0x29, open for 0x28 (7-bit address). This is only available on the connectors on the large circular motor PCBA; this signal is not passed through the slip-ring supplied.

All ZPD connectors have the same pinout (on both PCBAs).

## Quick Start Guide

### Atlas™

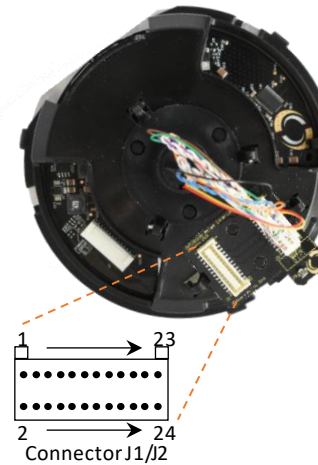
Servotorq™ Integrated Servo Motor  
Part No. OVU00247 and Variants



Atlas motor pinout reference (please see the Technical Manual for further details):

- Connector type: JST ZPD 24-way.
- Mating housing part: ZPDR-24V-S (JST)
- Pre-crimped leads: SZPD-002T-P0.3 (JST)

Connectors J1/J2			
Pin	Signal	Pin	Signal
1	48V <sub>in</sub>	2	GND
3	48V <sub>in</sub>	4	GND
5	48V <sub>in</sub>	6	GND
7	PASS THROUGH PAIR 1+	8	PASS THROUGH PAIR 4+
9	PASS THROUGH PAIR 1-	10	PASS THROUGH PAIR 4-
11	PASS THROUGH PAIR 2+	12	PASS THROUGH PAIR 5+
13	PASS THROUGH PAIR 2-	14	PASS THROUGH PAIR 5-
15	PASS THROUGH PAIR 3+	16	I <sup>2</sup> C SDA
17	PASS THROUGH PAIR 3-	18	I <sup>2</sup> C SCL
19	PASS THROUGH AUX 1	20	I <sup>2</sup> C ADDRESS SELECT (Not available via slip-ring)
21	PASS THROUGH AUX 2	22	NO-CONNECT
23	NO-CONNECT	24	EARTH (SPINDLE CONNECTION)



Note: I<sup>2</sup>C Address Select to be connected to GND for address 0x29, open for 0x28 (7-bit address). This is only available on the connectors on the large circular motor PCBA; this signal is not passed through the slip-ring supplied.

All ZPD connectors have the same pinout (on both PCBAs).

Overview Limited

Overview House Kingsway Business Park Forsyth Road Woking GU21 5SA United Kingdom

© Overview Ltd 2023

[www.overview.co.uk](http://www.overview.co.uk)

OVZ20020 Rev 5

Overview Limited

Overview House Kingsway Business Park Forsyth Road Woking GU21 5SA United Kingdom

© Overview Ltd 2023

[www.overview.co.uk](http://www.overview.co.uk)

OVZ20020 Rev 5