

# Continental Stair (E)

## Electric Passenger Stair Technical Specification



The Mallaghan Continental (E) self-propelled passenger stair offers its users economical and efficient performance as well as reliability for passengers at the aircraft. It is a highly sophisticated piece of equipment, engineered to the utmost quality and safety standards.

Note: All images in this document are included for reference purposes only.



### Chassis and Technical Data

<b>Chassis:</b>	Self-propelled, Mallaghan manufactured welded chassis
<b>Battery Pack:</b>	Hawker Perfect Plus 4 PZS 500 Ah - 40 X 2V lead acid battery cells
<b>Drive system:</b>	AC rear wheel motors - with gearbox and integrated hydraulic park brake
<b>Transmission:</b>	Hydrostatic
<b>Motor Controllers:</b>	Curtis Instruments
<b>Maximum travel speed:</b>	Up to 25 km/h
<b>Maximum wind speed:</b>	75 km/h - 40 knots
<b>Payload:</b>	Maximum 40 passengers
<b>Loading capacity:</b>	Stair section = 488 kg/m <sup>2</sup> Platform = 317 kg/m <sup>2</sup>
<b>Front Sill Height:</b>	From approx. 2200mm to 5800mm

### Driver Cab and Controls

- Rear view wing mirror both sides
- Adjustable driver seat with lap belt
- Aluminium chequered plate floor surface
- Dash control station
- Hour meter
- Battery discharge indicator
- Keyless power on/off switch



### Staircase

- Automatic mechanical stair locking system (PAWL-locks)
- Upper and lower stairway frame external skinning
- Handrails with black PVC coating
- Aluminium chequered plate steps and midlanding section surface
- Height marker for various aircraft door sill heights



### Platform

- Platform width approx. 2250mm
- Self-aligning, spring loaded front platform nosepiece
- Extendable sliding handrails each side with foot pedal locks
- Non-marking rubber bumpers fitted to all leading edges for aircraft protection
- Aluminium chequered plate floor surface
- Control panel for final height adjustment of stair







### Hydraulic System

- Hydraulic integrated park brake system on rear wheel gearbox
- Hydraulic power assisted steering
- Hydraulic oil tank with sight level gauge, shut off valve and magnetic drain valve
- Control valves with manual overrides for emergency procedure
- High pressure filter and suction strainers
- Steel reinforced hydraulic hosing
- Stabilisers (x4) with dual pilot operated check valves
- Stair tilt cylinder (x2) with dual pilot operated check valves
- Stair extend cylinder (x1) with flow control valve
- Emergency hand pump

### Safety Interlocks

- Cannot drive stair until stabilisers are fully retracted
- Cannot drive with battery charger connected
- Speed restriction (creep speed) when stair is raised
- Option associated interlocks

### **Electric System**

- 80V DC Hawker Perfect Plus 4 PZS 500 Ah battery pack with auto-refill system
- 80V DC Electric motor/hydraulic pump set
- AC Traction motor controllers
- AC rear wheel motors
- 80V/24V DC/DC converters
- 24V DC control system
- Reversing buzzer
- Stabiliser up/down warning buzzer
- Emergency stops on dash and platform control panel
- Deadman (master) controls for all moving functions
- LED stair and platform lights (total of x14 each side)
- LED work light (x1) under platform
- Flashing amber beacon

### **Manuals, Painting and Decals**

- Operating/maintenance manual in English language as soft copy and hard copy
- Electric and hydraulic schematics provided
- Label kit in chosen language
- Machine colour plain white
- All fabricated parts are shot blasted and treated against rust with two coats each of long life primer and topcoat paint



## Options and Accessories

### Chassis and General Assembly

- AHM 913 Controlled Approach System (CAS)
- Spare wheel (without mounting)
- Fire extinguisher supplied and mounted in prominent position
- Rubber wheel chocks with or without storage holder
- Battery charger (AC)
- Front and/or rear view camera system with monitor in drivers cab
- Reversing distance sensor system with audible alarm in drivers cab
- Supply and fitting of customer logos
- Documentation in chosen language

### Drivers Cab

- Fully enclosed cab with windows front, rear, roof and windscreen wiper
- Enclosed driver cab without doors
- Drive assembly for right hand drive
- Single passenger seat or passenger bench seat
- Roof and/or rear window wipers
- Heating, including window demisters
- Heated rear view wing mirrors



### Staircase and Platform

- Safety gates system according to EN standard
- Fully covered canopy with wide platform, top house and extendable bellows
- Fully covered rear bellow system
- Sun canopy
- Upper and lower staircase internal skinning
- Alusingen or Graepel profile step and platform surface
- Aluminium, stainless steel or wooden handrails
- 3000mm wide platform
- Powered swivel nose
- Safety shoe system for 3000mm wide platform
- Automatic platform height levelling system
- White platform rubber bumper
- Hydraulic front platform extension (400mm)
- Platform extend inhibit sensor
- Stair light motion sensor and timer
- Tensa barrier with or without drive interlock

