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## ADP1400

### 60 kVA AC+DC Electric GPU



ADP1400 series dynamic type ground support devices (GPU) are designed to provide the 115/200V, 400HZ AC and 28.5V DC power needed for the initial start and maintenance of the aircraft's engines inside or outside the hangar, with an electric synchronous motor. It is environmentally friendly with its silent structure and zero exhaust emissions. Thanks to its compact structure and superior maneuverability, it can be used easily with a single operator.

AREL -ADP series GPUs, which can produce AC and DC output at the same time, have been produced with AREL production synchronous electric motors and Arel special alternators with more than 30 years of experience. With a wide range of products from 15 kVA to 90 kVA, 115/200V, 400HZ AC and 400A to 4,000A DC, AREL manufactures products to meet the needs of all aircraft and helicopters in the civil and military aviation industry.

#### ENGINE

- Arel production
- 70kW
- 1,500 rpm
- 4 poles
- Star delta operation + Soft-start feature (low current starting)
- 380V, 50Hz, 105A
- Brushless
- Synchronicity
- IP23
- H class insulation

#### ALTERNATOR

- Arel production
- 32 poles
- 1,500 rpm
- 115/200V, 400Hz, 170Amp.
- Brushless
- 3 phase
- Synchronicity
- IP23
- H class insulation

#### PERFORMANCE

- 60kVA
- 115/200V, 400Hz AC, 170 Amp
- 28.5V DC - 1,600 A starting current
- 28.5V DC - 1,200 A continuous current
- +/- 1% electronic voltage regulation (separately for AC and DC)
- +/- 10% manual voltage adjustment (inside the cabinet) (separate for AC and DC)
- Less than 3% Total Harmonic Distortion (THD)

## **PANEL**

- AC-DC selector switch
- Fault warning lamps
- Reset button - illuminated
- working time clock
- AC Digital Ammeter (motor)
- AC Digital Voltmeter (mains)
- Engine start - stop button - illuminated
- Emergency stop button

## **AC Output**

- Start-stop button
- AC Digital voltmeter
- AC Digital ammeter
- digital frequencymeter
- eye lamps

## **DC Output**

- start-stop button
- DC Digital voltmeter
- DC Digital ammeter
- eye lamps

## **CABIN**

- Robust construction made of steel sheet
- Electrostatic powder oven paint
- Removable side covers for ease of maintenance
- Recessed control panel protected from external influences
- Reflectors for being noticed in the dark

## **TRAILER**

- Robust structure made of U Profile steel sheet
- double axle
- Rotatable front axle
- Drawbar driven brake system that mechanically locks the front wheels when parked
- Spring-loaded drawbar that can rotate around its own axis
- 4,80x4 pneumatic rubber wheels

## **CABLES**

### Input Cable

- 20mt - 5x16mm<sup>2</sup>

### Output Cable

- 10mt - 2x120mm<sup>2</sup> DC output cable and NATO standard DC output connector (MS 25488-27)
- 15mt - 4x35mm<sup>2</sup> + 2x4 mm<sup>2</sup> AC output cable and NATO standard AC output connector (MS 25486-31)
- Cable wrap hooks on cabinet

## **PROTECTIONS**

- GCU (Ground power Control Unit)  
Specially designed by our company for ground support devices, GCU keeps the AC Voltage, DC Voltage, AC frequencies of the system under constant control, and if the limits determined according to IATA criteria are exceeded, it closes the output of the system within the programmed time and protects it. and gives an audible and light alarm.
- AC and DC high current protection (in case of overcurrent, it cuts the output after the specified limit and time and gives an audible and light alarm)

## DIMENSIONS

Width - Length - Load: 126 cm - 210 cm - 126 cm

Weight: 1,180 kg

## STANDARDS

- ISO 9001:2015
- CE
- IATA Norms
- MS 704F
- ISO 6858-2017
- SAE ARP 5015B

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