

AC+DC COMBINED UNIT EACR SERIES

The combined power supply units EACR series are intended for power supply of the on-board electrical equipment of aircrafts and helicopters during pre-flight preparation at airports, the shop floors of aircraft industry enterprises and complex training simulators in aviation training centers.

These power supply units have two types of independent outputs: one with direct current of 28.5 V and second one with alternating current of 400 Hz. All channels can be independently regulated and used simultaneously. The voltage compensation system is made separately for each output.

DC outputs can be operated both as two-channel with 28/56 VDC function.



MAIN TECHNICAL PARAMETERS

EACR AC+DC Combined unit

Performance

- ✦ Climatic execution: -40 to +55°C
- ✦ Humidity: 10 - 100%
- ✦ Noise level: < 65dB(A)@ 1m
- ✦ Warranty: 24 months
- ✦ Execution: solid state/mobile
- ✦ Protection class: IP 54/55

Input Parameter

- ✦ Input voltages, V: $3 \times 400 \pm 10\%$ N, PE
- ✦ Input frequency, Hz: 50/60 $\pm 5\%$
- ✦ Inrush current: Soft start

Output parameters

- ✦ Number of outputs: 1 to 5
- ✦ Power factor: > 0.8 at 100% load
- ✦ Coefficient of efficiency, %: 97
- ✦ Line drop compensation: automatic

AC Output parameters

- ✦ Rated summary output power, kVA:
2, 30, 45, 60, 90, 120, 140, 180, 250
- ✦ Rated output voltage, VAC: $115/200 \pm 2$
- ✦ Range of load changes, %: 0 - 100
- ✦ Total harmonic distortion, not worse, %: 3
- ✦ Output frequency, Hz: 400 ± 0.001
- ✦ Coefficient of amplitude modulation of the output voltage, %, not more: 1.5
- ✦ Overload rating:
 - 60 min - 110%
 - 10 min - 125%
 - 2 min - 150%
 - 20 sec - 200%
 - 2 sec - 300%

DC Output parameters

- ✦ Current (continuous) of each output, A Rated:
100, 400, 600, 800.
- ✦ Rated output voltage, VDC: 28.5
- ✦ Output voltage stabilization accuracy, VDC: 0.5
- ✦ Output voltage ripple factor, %: maximum 2
- ✦ Overload rating:
 - 2 Inom - 30 sec
 - 3 Inom - 10 sec
 - 4 Inom - 2 sec

Protection

- ✦ Over / under voltage at output
- ✦ Overload
- ✦ Over temperature
- ✦ Short circuit at output
- ✦ Control voltage error
- ✦ Leakage current supervision
- ✦ No break power transfer
- ✦ Over/under frequency

Control panel

Luminescent display, main lamp, emergency stop.

Documentation

- ✦ User + service manual
- ✦ Passport
- ✦ Warranty certificate

Optional

- ✦ Range of voltage regulation, V: $\pm 10\%$
- ✦ Range of frequency regulation, Hz: 360 - 440
- ✦ Anti - condensation heating: +
- ✦ Interlock: + bypass, civil/military
- ✦ Remote control: control panel, main lamp, emergency stop
- ✦ Additional output: 220V, 16A (1Ph+N+PE) + residual - current device
- ✦ User interfaces: RS485 / 232 ; TCP/IP; Modbus
- ✦ Measuring devices type: analog or digital
- ✦ Monitoring of energy consumption
- ✦ Beacon light
- ✦ Voice signalization
- ✦ Control panel backlight
- ✦ CE Certificate
- ✦ EUR 1 Certificate
- ✦ RFID access system
- ✦ Storing of fault history: up to 100 events

Norms, standards and directives that we follow:

ISO6858, ISO1540, BS 2G 219, MIL-STD-704F, EN 62040-1, EN 61000-6-4, EN 61000-6-25, EN61558-2-6, EN 2282, EN 1915-1, SAEARP 50 15, IEC 60721, IEC 60529, DFS400, GOST 54073-2010, ISO 9001:2008, ISO 14001:2004, OHSAS 18001, 2014/35/EU, 2004/108/EC