

Features Technical Specifications Technical Documents Emerson HD4825-3 &HD4830-3

Category

Name

Indicators

HD4825-3

HD4830-3

Environmental conditions

Operating temperature

-5 ~ 40 °C

Storage temperature

-40 ~ 70 °C

Relative Humidity

≤ 90% RH (40 ± 2 °C)

Altitude

≤ 3000m (more than required derating)

Other

No conductive dust and corrosive gases, no risk of explosion

Input parameters

AC Input format

Three-phase five-wire or single-phase three-wire

Input Voltage

Manual input 90 ~ 290Vac, auto-switching input 130 ~ 280Vac

Frequency

45 ~ 65Hz

Maximum input current

Each module AC single phase 13A maximum input

Output parameters

Output rated voltage

-42 ~ -58Vdc

Output rated current

25A

30A

Rectifier current imbalance between the degree of

$\leq \pm 5\%$

$\leq \pm 3\%$

Machine efficiency

$\geq 90\%$

Total Power Factor

≥ 0.99

Regulation accuracy

$\leq 1\%$

MTBF

250,000 hours

200,000 hours

Noise voltage

Scale noise

$\leq 2\text{mV}$

Peak noise

$\leq 200\text{mV}$

Broadband noise

$\leq 100\text{mV}$ (3.3kHz ~ 150kHz)

$\leq 30\text{mV}$ (0.15MHz ~ 30MHz)

$\leq 50\text{mV}$ (3.3kHz ~ 150kHz)

$\leq 20\text{mV}$ (0.15MHz ~ 30MHz)

Discrete noise

$\leq 5\text{mV}$ (3.3kHz ~ 150kHz)

$\leq 3\text{mV}$ (150kHz ~ 200kHz)

$\leq 2\text{mV}$ (200kHz ~ 500kHz)

$\leq 1\text{mV}$ (0.5MHz ~ 30MHz)

Audio noise

$\leq 55\text{dB}$ (A)

AC alarm and protection

AC input over-voltage alarm point

$280 \pm 5\text{Vac}$, monitoring module can be set

AC input over-voltage alarm recovery point

$270 \pm 5\text{Vac}$, lower than the AC input over-voltage alarm point 10Vac

AC input voltage alarm point

$170 \pm 5\text{Vac}$, monitoring module can be set

Recovery point AC input voltage alarm

$180 \pm 5\text{Vac}$, higher than the AC input voltage alarm point 10Vac

DC output warning and protection

DC output voltage protection point

$59.5 \pm 1\text{Vdc}$

DC output over-voltage alarm point

$58.5 \pm 0.2\text{Vdc}$, monitoring module can be set, under-voltage alarm point $\sim 58.5\text{Vdc}$

DC output over-voltage alarm recovery point

$58 \pm 0.2\text{Vdc}$, 0.5Vdc points lower than the over-voltage alarm

DC output voltage alarm point

$45.0 \pm 0.2\text{Vdc}$, monitoring module can be set, $40.0\text{Vdc} \sim$ over-voltage alarm point

DC output voltage alarm recovery point

$45.5 \pm 0.2\text{Vdc}$, 0.5Vdc points higher than the undervoltage alarm

Action point load power

$44.0 \pm 0.2\text{Vdc}$, monitoring module can be installed, the battery voltage protection alarm point action point ~

Battery protection action points

$43.2 \pm 0.2\text{Vdc}$, monitoring module can be set, 40.0Vdc ~ load power action points

Insulation resistance

Test DC voltage 500V, resistance to ground $\geq 10\text{M}\Omega$

Dielectric Strength

Input to ground, output to ground, input to output, 2kVac, leakage current $\leq 30\text{mA}$, time to 1min, no arc

Anti-lightning properties

AC input side of the simulated lightning impulse withstand voltage waveform is 10/700 μs , positive and negative polarity amplitude of the impact of 5kV 5 times; simulated lightning surge current waveform is 8/20 μs , positive and negative polarity amplitude 20kA 5 times the impact of . The impact of each inspection interval is not less than 1min. Can withstand 8 / 20 μs analog Lightning impulse current 40kA, 1 times. DC withstand lightning surge current waveform simulation 8/20 μs , 10kA and 15kA amplitude of the impact of the time, the impact of the interval of not less than 1min

Mechanical parameters

H × W × D

132mm'86mm'330mm

Weight $\leq 3\text{kg}$