

# DC Power Supply ENEREX A4xxxH

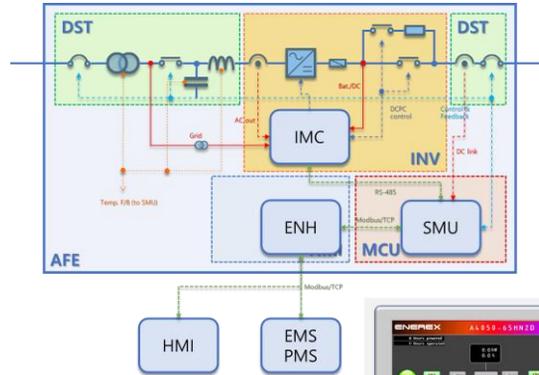
**ENEREX DC power supply is stable and accurate constant voltage source.**

**ENEREX DC power supply can supply stable DC power regardless grid voltage fluctuation.**

## Features

- Optimized industrial DC power supply solution for production and test facilities contains everything for user operation in one device.
- IP54 Outdoor installation type does not require installation room.
- Small installation space - 3.3m<sup>2</sup>.
- Modbus/TCP communication protocol and Interface for connection to EMS or PMS.
- Minimum system downtime (<30 min.) by block system structure.
- No risk of damage to the load equipment by the stability of 1% of the output voltage FSD.

## Stable/Accurate DC Power Supply System



## Target market & application

- Industrial DC Power
- Power converter test facility
- Test equipment for driving devices such as motor drives and engines

## Features

- AC 380V input, DC 580-795V output (adjustable)
- High voltage stability within 1% with 3-phase interleaved conversion
- All time stable operation by regenerative energy absorption from the load side

## Key specifications

- Input voltage: 3ph 3-wire AC 380V/76A 60Hz with type 1 protective ground
- Output voltage: DC 580 ~ 795V, 87A
- Rated power: 50kW/55kVA
- Communication: Modbus/TCP
- Ambient condition: -20 ~ +45°C, 95% RH or below (non-condensing)
- Cooling: Forced air-cooled (Fan installed in PEBB module)
- Acoustic noise: < 70db
- Protection: IP54 (Outdoor) / IP21 (Indoor)

# DC Power Supply

# ENEREX A4xxxH

## ■ EneRex A40xxH

- Exterior (IP54)



## • Production specification

Compact outdoor DC power supply/simulator Specifications		50kW	100kW
Product	Model code	A4050-65/62/55/52HN2D	A4100-65/62/55/52HN2D
Functionality	Applications	DC power supply, DC power simulator	
	Comm Protocols	Modbus TCP/IP	
Electric Chrs (AC/Input side)	Rated continuous AC power	50 kW/ 55kVA	100 kW/ 110kVA
	Short time continuous AC Power	150% for 30 sec, 125% for 10 Min (% of rated power)	
	AC Voltage / connection	380 ~460 Vrms, 50/60Hz, 3-phase, 3-wire	
	Over Voltage Category	Cat. III (Rated impulse voltage 4kV)	
	Rated AC current	76 Arms @380Vrms	152 Arms @380Vrms
	Grid frequency	50/60 Hz	
	Power factor (@ rated)	0 - 1.0 leading and lagging	
	Current harmonic levels (@ rated)	< 3% at rated AC power	
	Grid Interface/isolation	No Built-in Transformer	
Electric Chrs (DC/Output side)	Maximum DC power	55 kW	110 kW
	DC voltage range	580 ~ 795 Vdc	
	Maximum DC current	87 Adc	164 Adc
	Control mode	Constant Voltage (CV)	
Control Chrs	Control system philosophy	Multi-layer control structure (HMI – SMU – IMC)	
	Voltage accuracy	±1%	
	Response time for load step changes	20ms from issuing a signal	
Protection	H/W Protective Functions	Grid over/under voltage, over/under frequency, DC over/under voltage, Grid/DC over current, overheat	
	Fault current contribution	200%	
Performance	Max. conversion efficiency	> 95% at rated AC power (one-way)	
Mechanic Chrs	Dimension (W xH xD, IP54)	624 x 1650 x 1240 mm <sup>3</sup>	624 x 1850 x 1240 mm <sup>3</sup>
	Dimension (W xH xD, IP21)	600 x 1500 x 900 mm <sup>3</sup>	600 x 1500 x 900 mm <sup>3</sup>
	Weight (Approx.)	270kg	350kg
	Max. audible noise	< 75dB with cooling system, < 60dB as fan-less operation	
Environment	Enclosure protection rating	IP54 / IP21	
	Operating ambient temperatures	-20 ~ +45 deg C	
	Storage ambient temperatures	-20 ~ +70 deg C	
	Humidity	0 ~ 95% RH (Non-condensing)	
	Vibration	< 2.0 m/s <sup>2</sup>	
	Shock	Not acceptable	
	Pollution degree	PD II (Normally only nonconductive pollution occurs)	
	Max. installation altitude (from sea-level)	1000 m	
Compatible Standards	EMC	IEC 61000-6-2, IEC 61000-6-4	
	Safety	IEC 62040-1	

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