

# NESPACE-48V HE RECTIFIER

## (3KW Rectifier Module)

the  
**POWER**  
you need

High Efficiency Rectifier Module

## NESPACE-48/3K

Rectifier Module  
54VDC / 3000W

### Product Features:

- Modular Design
- 1U Rack Mountable
- World Wide Safety Approval
- DSP Controller
- LED alarm indicated
- Hot pluggable
- Energy saving operation
- Constant electric power control



### Input Specifications:

VOLTAGE	1Ø230VAC (85VAC ~ 296VAC) (Nominal 176~275Vac)
FREQUENCY	45-66Hz
INRUSH CURRENT	25A @ 230AVC
PROTECTION	Mains fuse in both lines
LEAKAGE	3.5mA Max @ 230VAC
EFFICIENCY	96% Typical (40~60% Load)
POWER FACTOR	> 0.99 at 50% load or more
PROTECTION	Input Under voltage, Overvoltage

### General Specifications:

OPERATING TEMP	-40°C to +75°C, (Derating above +45°C)
STORAGE TEMP	-40°C to +85°C
OPERATING HUMIDITY	0% to 95% (Non-Condensing)
STORAGE HUMIDITY	5% to 95% (Non-Condensing)
COOLING	Controlled Fan in a module
ACOUSTIC NOISE	< 60dBA(Nominal input , full load , Ta > 40°C)
VIBRATION	10-55Hz, 2G, 3min period/60 min each(3 axes)
SHOCK	20G Peak Acceleration
RELIABILITY	>350,000 Hrs MTBF (Ambient : 25°C)
SIZE(W×D×H)	108mm × 319.9mm × 41.0mm
WEIGHT	2.30kg(5.07lbs)

### Output Specifications:

OUTPUT VOLTAGE	54.0VDC
OUTPUT CURRENT	55.5A (Max 3KW)
ADJUSTMENT RANGE	42.0~58.0VDC
LINE REGULATION	±0.5% Max over entire input range
LOAD REGULATION	±0.5% Maximum
TEMP REGULATION	±0.5% Maximum
Overall REGULATION	±5.0% Maximum
RIPPLE & NOISE	≤ 300mVp-p, ≤ 2mVrms
SETPOINT ACCURACY	±0.5%
OVER VOLTAGE PROTECTION	59VDC(recycle input to reset) Power derated, Thermal Shutdown

### Electromagnetic Compatibility:

EMISSIONS	EN55022 Level A (Conducted)
ELECTROSTATIC DISCHARGE	EN61000-4-2, 4KV Contact / 8KV Air
RADIATED SUSCEPTIBILITY	EN61000-4-3, 26-1000MHz, 10V/M, 80%AM
EFT/BURSTS	EN61000-4-4, 2KV
SURGE	EN61000-4-5
CONDUCTED IMMUNITY	EN61000-4-6, 0.15-800MHz, 10V 80%
VOLTAGE DIPS	EN61000-4-10, 95% Dip&10ms, 30% Dip&500ms
VOLTAGE INTERRUPTIONS	EN61000-4-11, 95% reduction, 5ms
FLUCTUATIONS & FLICKER	EN61000-3-3

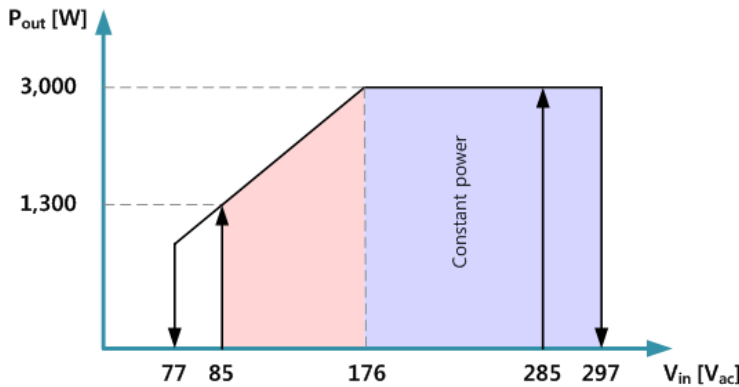
### Status & Control signals:

COMMUNICATION	CAN
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### Standards & Approvals:

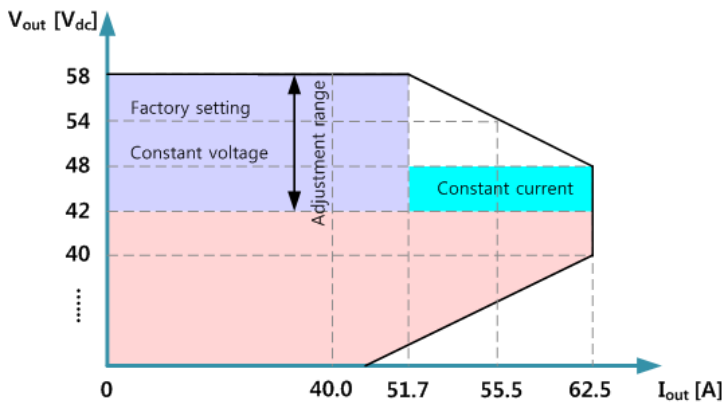
UL, CE, CB

### AC Input:



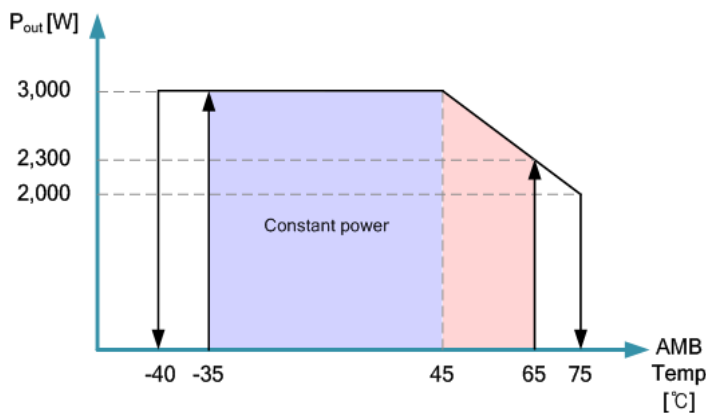
- Voltage range : 85Vac ~ 296Vac
- Constant power range (Max 3KW) : 176Vac~ 296Vac
- Shut-down. Voltage
  - OVP : 297Vac (recovery 285Vac)
  - UVP : 77Vac (recovery 85Vac)

### DC Output:



- Voltage range : -42.0Vdc ~ -58.0Vdc
- Constant power range (Max 3KW) : -48.0Vdc ~ -54.0Vdc

### Temperature:



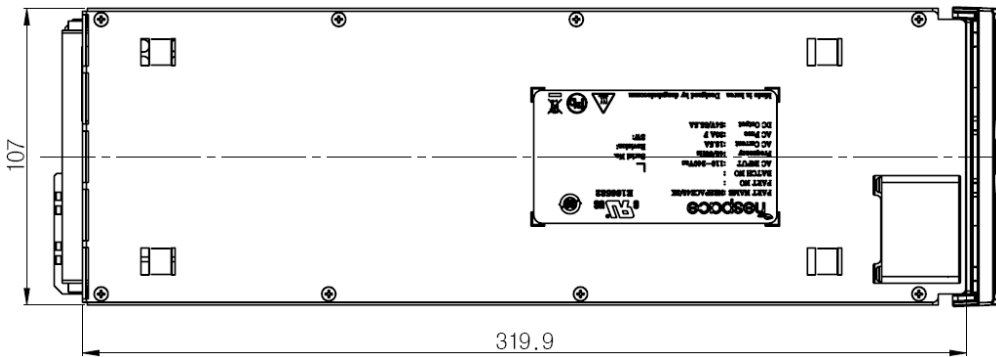
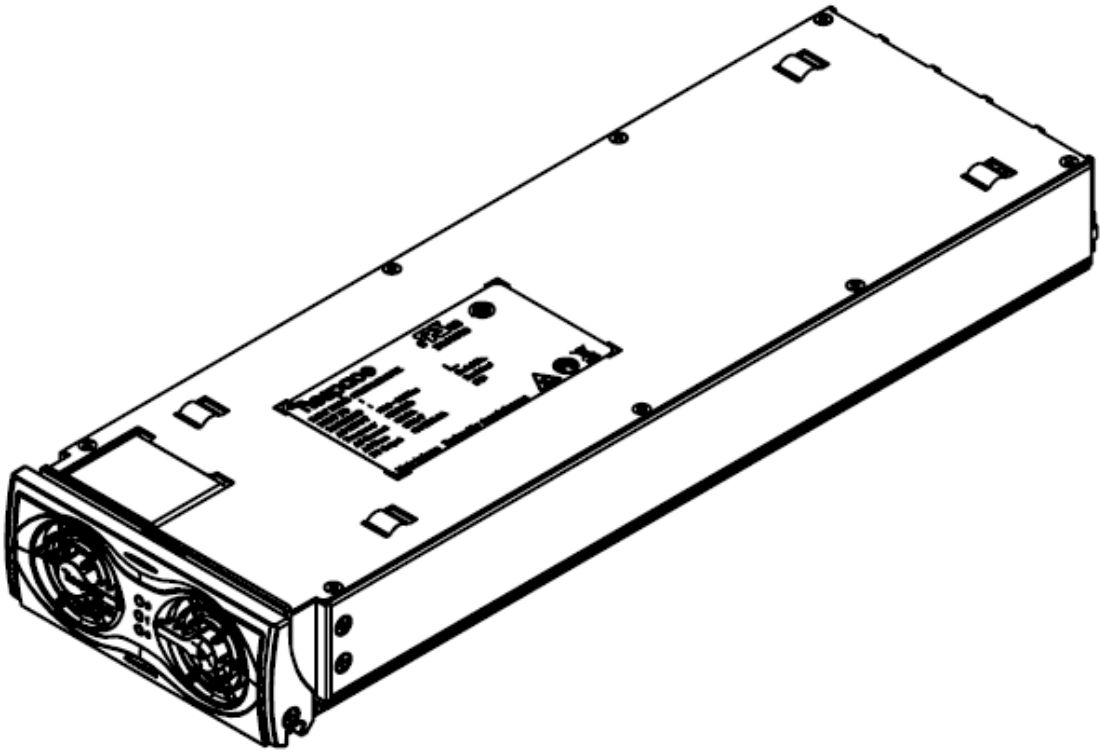
- Operating temperature : -40°C ~ 75°C
- Constant power range (Max 3KW) : -40°C ~ 45°C
- Shut-down. Temperature (Tolerance: ±5°C)
  - : 75°C (recovery 65°C)
  - : -40°C (recovery -35°C)

# NESPACE-48/3K

## (3KW Rectifier Module)

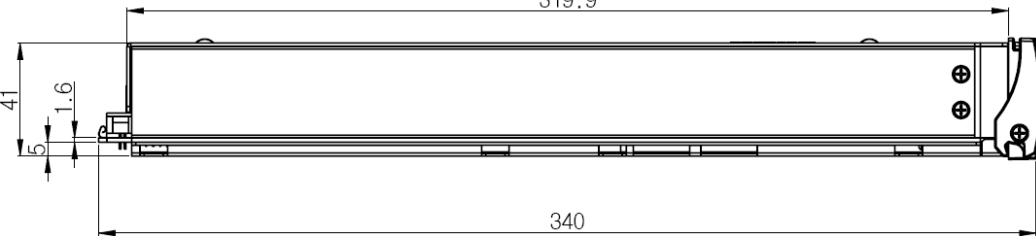
the **POWER**  
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OUTLINE DRAWING

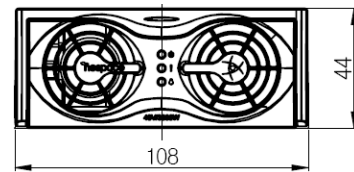


319.9

319.9



340



108

44



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