

# EPC9164 Test setup and Efficiency measurements



# Specifications

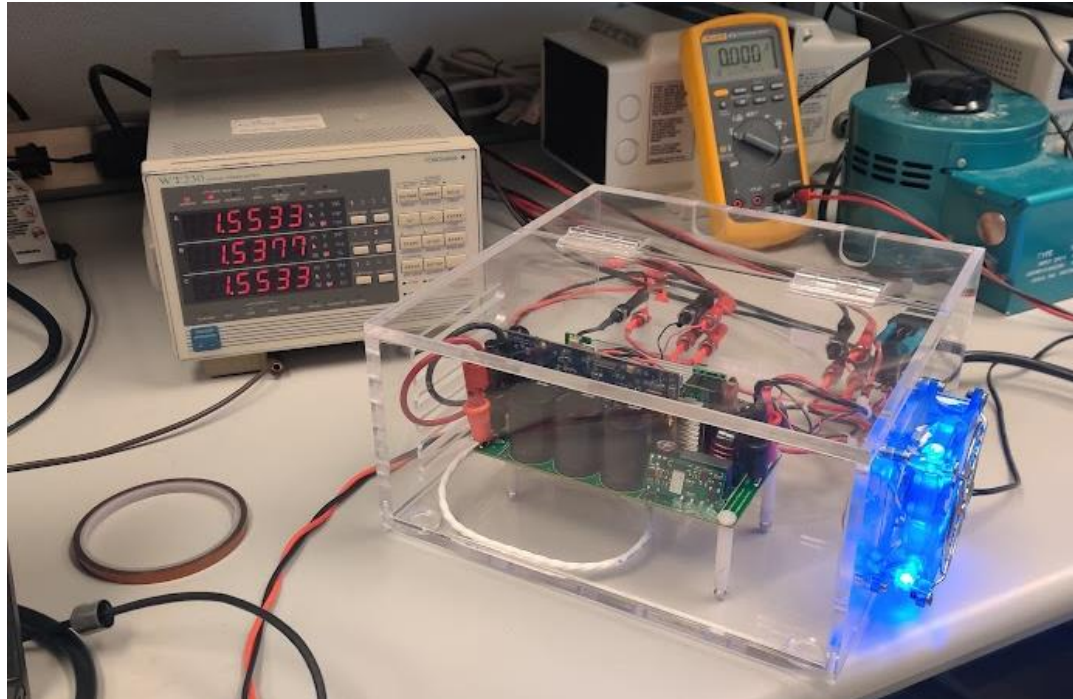
EPC9164 Demo Board Specifications	
Specification	Limits
Input Voltage	90VAC - 240VAC
Output Voltage	400VDC
Maximum Output Power (See Note 1)	3000W with $V_{in}=240V$
Maximum Input Current	12.5A

Note 1: With input voltages less than 230V, the output power must be derated such that the Input current does not exceed the maximum specified current of 12.5A

# Test setup

Meter measuring:

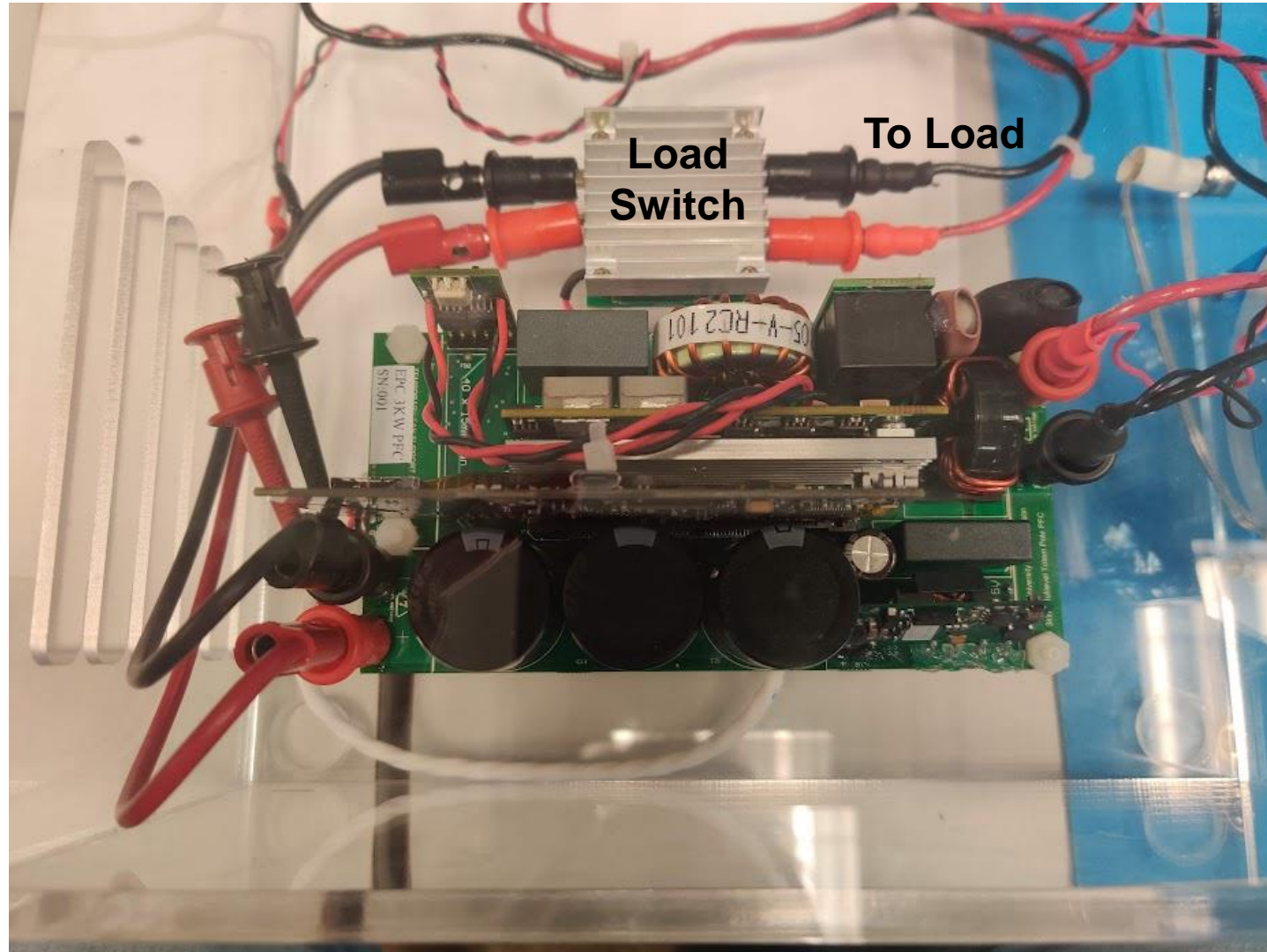
- Input P (kW)
- Output P (kW)
- Efficiency (%)



PFC board enclosure:

- AC input connection
- DC output connection
- Voltage and current sense ports
- Forced air cooling

# Board Setup



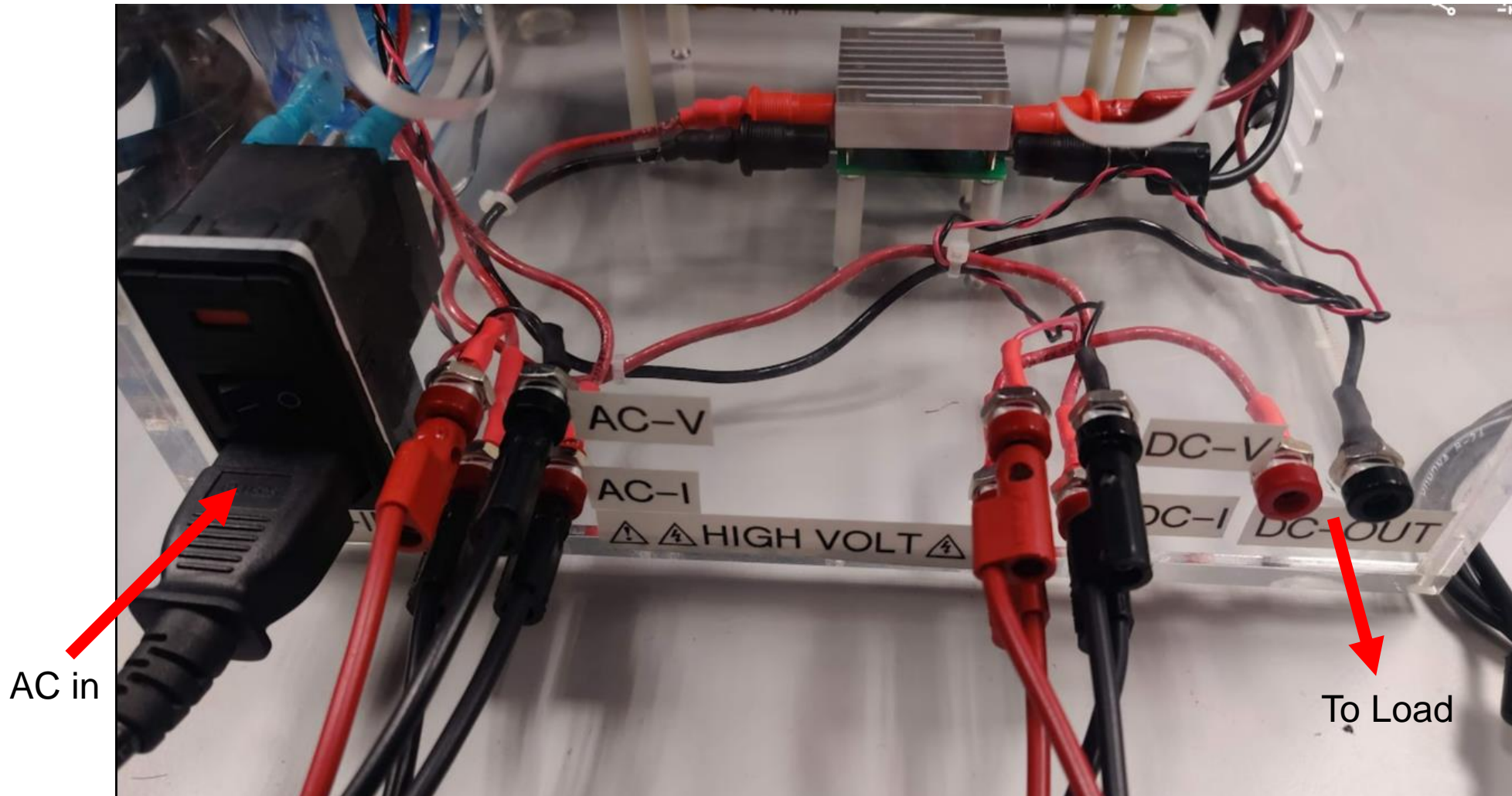
DC output +  $V_{sense}$

To Load

Load  
Switch

AC input voltage  
+  $V_{sense}$

# Rear panel connections to meter

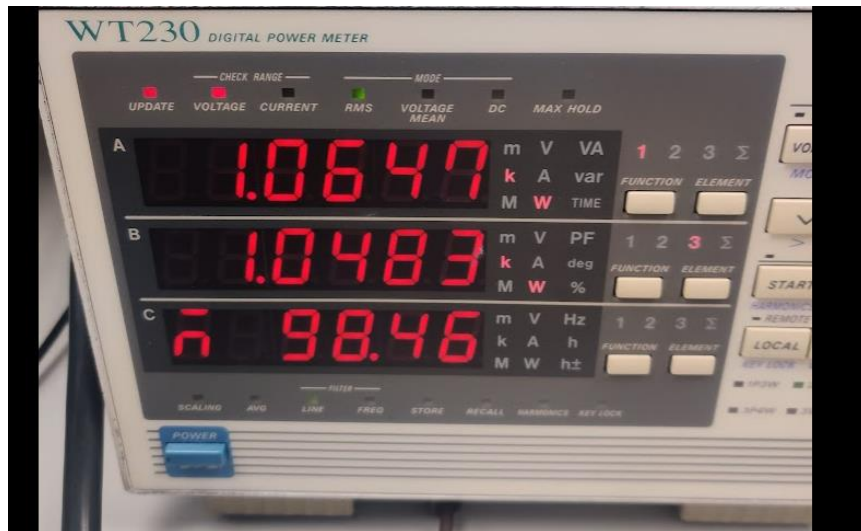


# Load Bank

- Load Bank from Power House Manufacturing Inc.
- Model# 3k-.1-400VDC
- 3kW, 7.5 Amps, @ 400VDC
- Load steps 0.1, 0.2, 0.4, 0.8 and 1.5kW each at 400V DC (3kW total)



# Meter readings (1 and 1.5kW)



# Efficiency Chart

EPC9164 Efficiency

