

# KAL Series Bidirectional AC Electronic Load



- . Wide input range (voltage & frequency)
- . Energy recovery
- . Versatile operation modes: CC/CR/CP

## Summary

KAL Series Bidirectional AC Electronic Load is a power converter device based on power frequency isolation, and IGBT two-stage conversion architecture, featuring high reliability, high precision, and programmable. Ideal for the R&D process and production testing of generators, AC power supplies, UPS, transformers, and inverters

# Functions

- Wide input range (voltage & frequency)
- Energy recovery
- Versatile operation modes: CC/CR/CP
- Power Factor: 0.3~1 (editable)
  - Simulate various kinds of loads: R/RC/RL

# Advantages

- Fast response time;
- High voltage/current precision;
- Complete safety protection: OCP/OTP/OPP
- $PF \geq 0.99$ ; Low THD;
- Standard communication interfaces: LAN/RS485.

## Models & Specifications

Models	Power Capacity [kVA]	Rated Current* [A]	Rated Voltage [V]	Frequency* [Hz]	Phase	Voltage Range* [V]
KAL-75-33	75	113	220	5-200	3φ4W	50-400
KAL-150-33	150	227	220	5-200	3φ4W	50-400
KAL-300-33	300	454	220	5-200	3φ4W	50-400
KAL-500-33	500	757	220	5-200	3φ4W	50-400

NOTE: Rated Current\*/Voltage\*/Frequency\* can be customized.

Input Requirements	
Phase	3φ3W + PE
Voltage	380V±15%
Frequency	50Hz±5Hz
Feedback Characteristics	
Energy Recovery	Energy recovery is available in full power range.
iTHD	≤3%
Power Factor	≥0.99
Functions & Input Characteristics	
Work Modes	CR/CC/CP
Current Precision	±(2%FS+5dgt)
Voltage Precision	±(1%FS+5dgt)
Power Factor	0.3-1 (adjustable) 0.2%-FS

Communication Interfaces	
Local/Remote Interfaces	LCD/Upper computer software
Remote Comms	RS485/LAN
Safety & Ambient Conditions	
Insulation Resistance	≥20MΩ (500Vdc)
Withstand Voltage	2000Vdc (60s, no arcing/breakdown)
Protection Level	IP21 (indoor)
Cooling	Fan cooling
Ambient Temperature	-10~40°C
Relative Humidity	0-90%RH (Non-condensing at 25°C)
Altitude	≤2000m