



## AC-L1 Controller

The AC-L1 Controller is designed to control AC motors up to 35kW. Based on a high reliable DCB technology and an exceptionally smooth and stable ITC Control Algorithm, AC-L1 Controller is a compact and high quality solution for high power applications.

The AC-L1 can be easily connected to other peripherals to perform a complex network in which all nodes communicate with one another via Can bus.

In pump configuration, it can be connected to AC-M2 controller for counterbalanced applications with twin AC traction motors.

### Typical applications:

Counterbalanced Lift Trucks, Cleaning Machines, Aerial Lifts, Tractors

## Technical Characteristics

### Technology:

- Low Rds(on) MOSFET
- 16 bits DSP controlling 1 AC motor
- High Speed FLASH Memory
- Switching Frequency: 9kHz
- Integrated Hall Effect Current Sensors
- Communication: RS232, Lin and CAN-Bus

### Supply Voltage (V):

24,36,48,72,80

### Maximum Current:

(24V) 750Arms (2')  
(36/48V) 625 - 750 Arms (2')  
(80V) 600 - 750 Arms (2')

### Working temperature range:

-30°C +40°C

### Maximum heat sink temperature:

100°C

### Mechanical Characteristics:

Dimensions: 210x190x91  
Connector: 2x23 Ampseal  
Environmental Protection: IP65  
Available with Al baseplate or finned Heatsink

### I/O

N° 21 Digital Inputs  
N° 8 Analogue Inputs  
N° 5 Outputs

## MODEL CHART

Supply Voltage: 24V

Model Name	AC Inverter 1 Max Arms(2')	AC Inverter 2 Max Arms(2')	Max Power (2')
AC-L1 24V 750A	750 Arms	-	20,8 kVA

Supply Voltage: 36/48V

Model Name	AC Inverter 1 Max Arms(2')	AC Inverter 2 Max Arms(2')	Max Power (2')
AC-L1 36/48V 625A	625 Arms	-	34,6 kVA
AC-L1 36/48V 750A	750 Arms	-	41,5 kVA

Supply Voltage: 72/80V

Model Name	AC Inverter 1 Max Arms(2')	AC Inverter 2 Max Arms(2')	Max Power (2')
AC-L1 72/80V 600A	600 Arms	-	55,4 kVA
AC-L1 72/80V 750A	750 Arms	-	70 kVA

