

2.2 General technical specifications

AC-L1 has the following remarkable features:

- ✓ Low $R_{DS,on}$ MOSFET
- ✓ 16 bits DSP controlling 1 AC motor
- ✓ High Speed FLASH Memory
- ✓ Integrated Hall Effect Current Sensors
- ✓ **Available Supply Voltages:** 36V, 48V, 72V, 80V
- ✓ **PWM Operating Frequency:** 9kHz
- ✓ **Communication:** Serial RS-232, LIN bus and CANOpen protocol
- ✓ **Maximum Current** (measured in a two-minute time interval):
 - **36/48V version:** 625A_{rms} / 750A_{rms}
 - **72/80V version:** 600A_{rms} / 750A_{rms}
- ✓ **Storage ambient temperature range:** -40°C ÷ +95°C
- ✓ **Operating ambient temperature range:** -40°C ÷ +55°C
- ✓ **Heatsink operating temperature range:** -40°C ÷ +95°C
 - **With linear derating:** +80°C ÷ +95°C
- ✓ **Mechanical Characteristics:**
 - **Mechanical size:** 210 x 190 x 91 [mm]
 - **Weight:** 3,8 kg
 - **Connectors:** 2x23 Ampseal terminals
 - **Protection Level:** IP65
 - Available with aluminium baseplate or finned heatsink
- ✓ **Vibration:** 5g, 10÷500Hz, 3 axes
- ✓ **I/O specifications:**
 - N° 19 + 2 Digital Inputs
 - N° 6 + 2 Analog Inputs
 - N° 2 Digital Outputs