

BLH Series DC Link Capacitors for Harsh Environments



***THB Tested: 85°C /85% RH, 1500 Hours @ V_{rated}
AEC-Q200 Qualified***



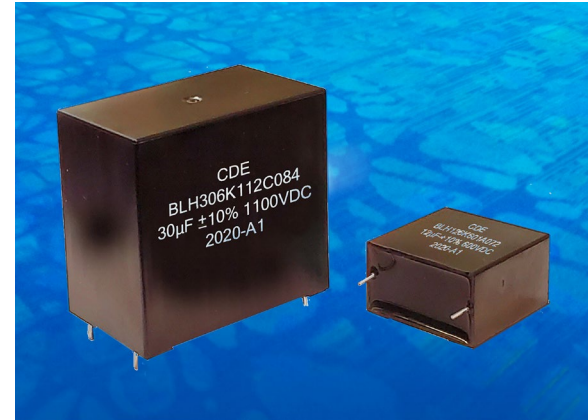
ENERGIZING IDEAS

**CORNELL
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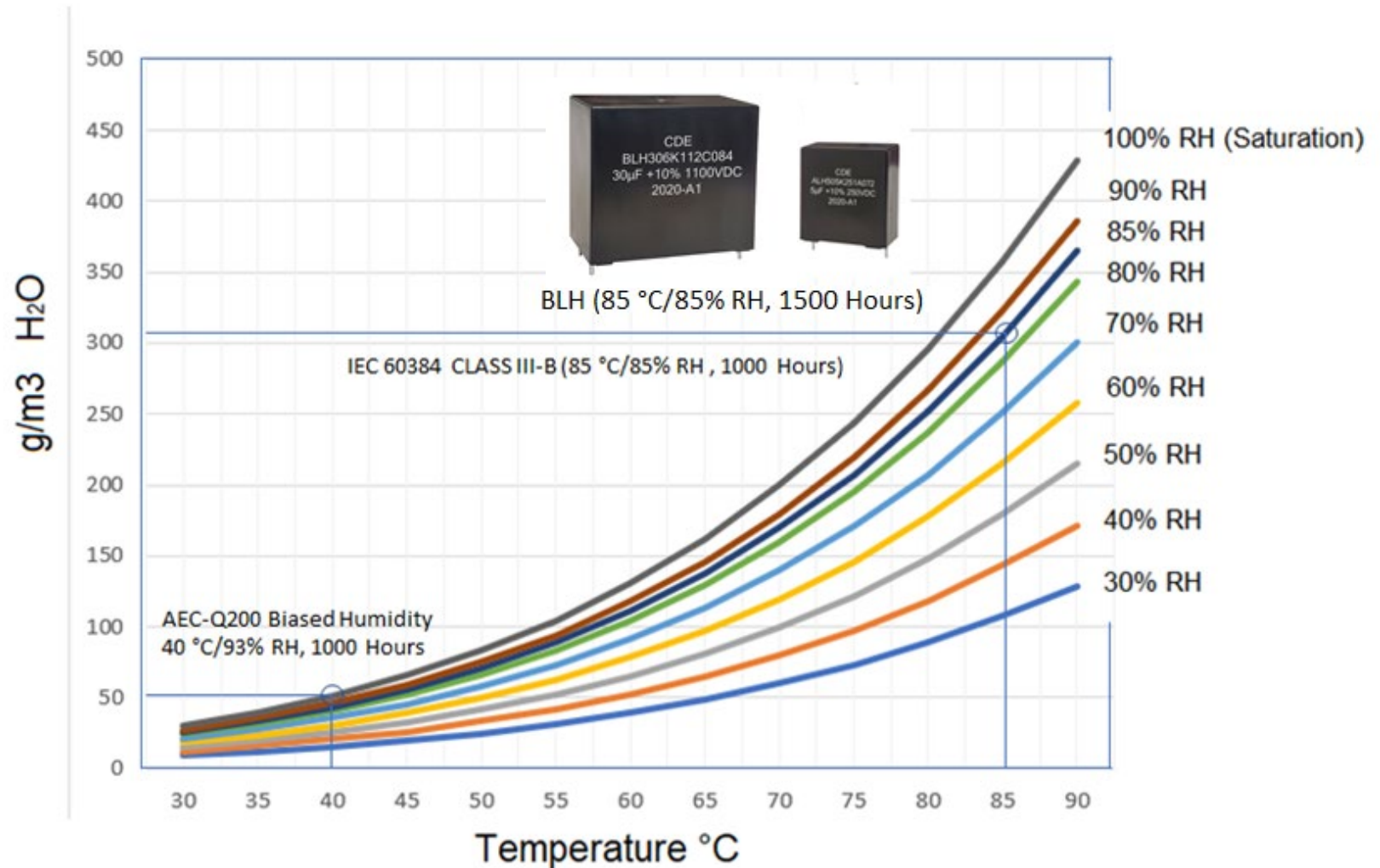
BLH Series THB, DC Link Film Capacitors

BLH Series sets new performance standards for THB-rated, board-mount DC link capacitors:

- Survive 1,500-hours of life test at 85°C with 85% relative humidity and rated voltage applied.
(Competitors' THB capacitors are tested to only 1,000 hours)
- Meets the requirements of AEC-Q200 automotive testing
- High capacitance with high ripple current capability
- Self healing



BLH Series Capacitors Exceed AEC-Q200 and IEC, Class III-B THB Testing



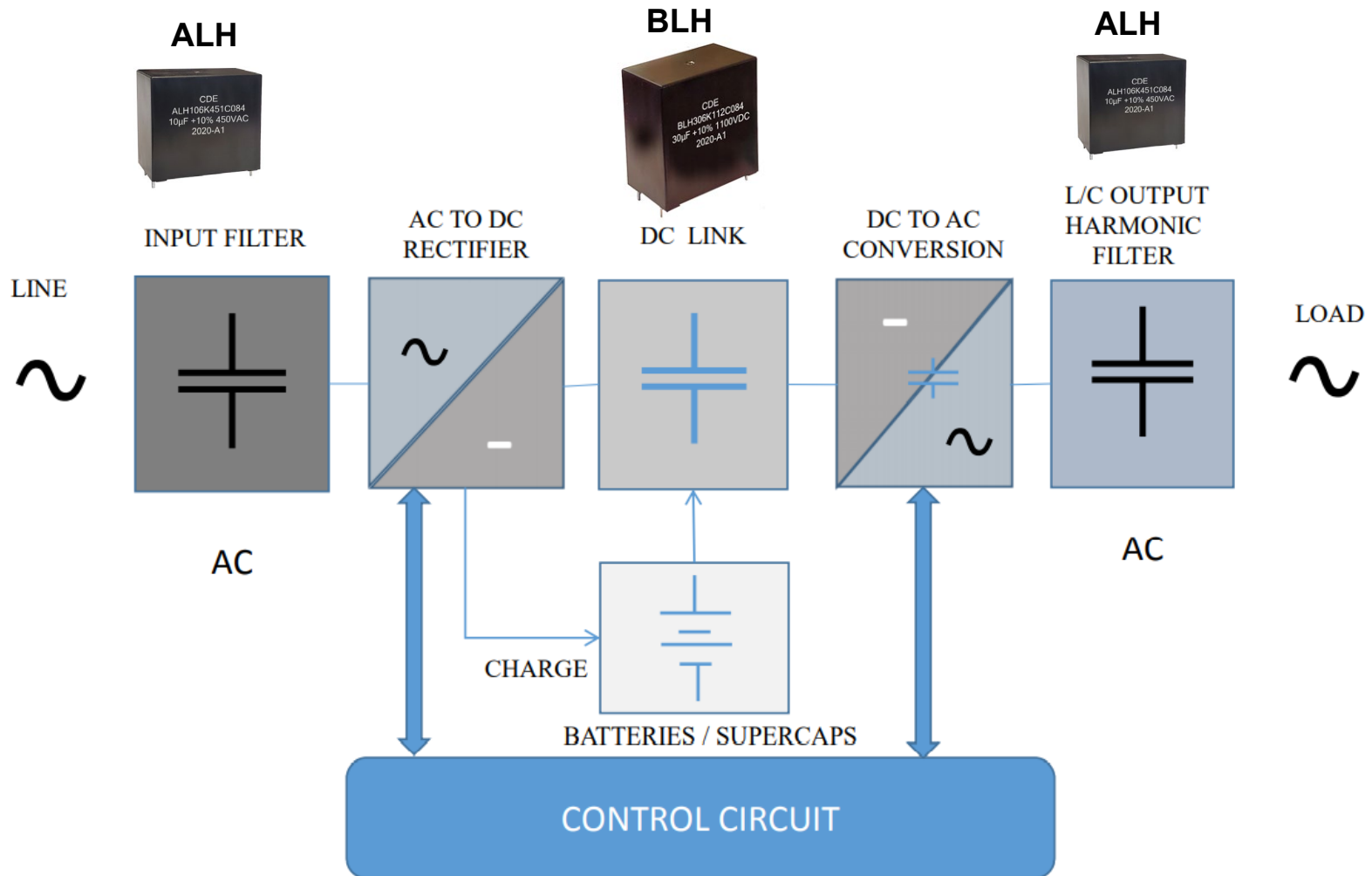
BLH Series

Key Performance Parameters

- Design-optimized for inverter DC Link applications where harsh environments are encountered
- Capacitance ranges from 1.0 to 170 μF at 450-1200 Vdc
- High rms ripple current ratings
- Life expectancy: 100,000 h @ 70 °C hot spot, at rated voltage
- Meets IEC61071, AEC-Q200
- RoHS Compliant



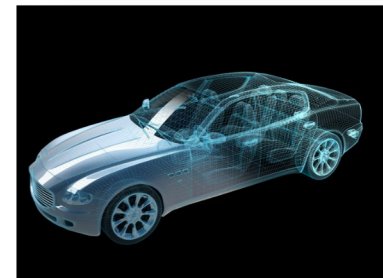
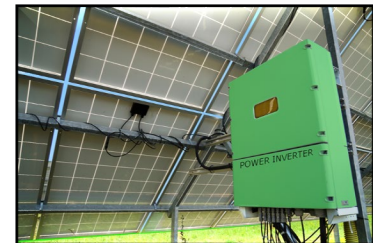
Applications for BLH



High Performance for a Variety of Power Electronics Applications

General applications include:

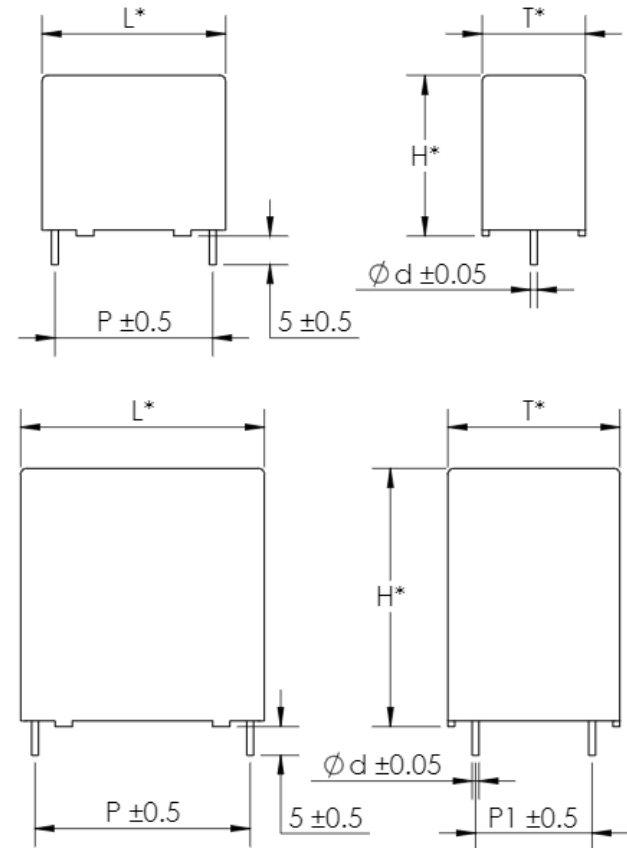
- Inverter DC-link
- Solar, EV charging, and other inverters that are subjected to wide ranging natural environmental conditions
- Power Backup: UPS, flywheel and portable power systems
- Motor drives
- On-road and off-road transportation systems



BLH Series Case Sizes and Lead Configurations

- Case sizes based on values/ratings, ranging from 32 x 18 x 9 mm up-to 57.5 x 80 x 35 mm
- Two or four-pin lead configurations
- Plastic case and epoxy meet UL94V-0
- Tin-plated copper terminals for best solderability

Dimensions



* ± 0.8 for $L \leq 42.5\text{mm}$
* ± 1.0 for $L = 57.5\text{mm}$

BLH Series

Specifications Summary

Capacitance Range	1 to 170 μ F
Capacitance Tolerance	\pm 10% standard , \pm 5% optional
Rated Voltage	450 to 1200 Vdc
Operating Temperature Range	-40 °C to 105 °C (>85 °C derate voltage 1.35% per °C)
Maximum rms Current	see data tables
Maximum rms Voltage	230 Vac
Test Voltage between Terminals @ 25 °C	150% rated DC voltage for 10 s
Test Voltage between Terminals and Case @ 25°C	3 kVac @ 50/60 Hz for 10 s
Insulation Resistance	\geq 30,000 M Ω $\times\mu$ F @ 100 Vdc 25 °C after 1 minute
Life Expectancy	100,000 h @ 70°C hot spot, rated voltage
THB Rating	85 °C / 85% RH - rated voltage - 1500 h
Reference Standards	IEC 61071, AEC- Q200 qualified (as noted)

Construction Details	
Case Material	Plastic UL94V-0
Resin Material	Dry Resin UL94V-0
Terminal Material	Tin Plated Copper



UL Recognized E128034
construction only - unprotected

BLH Series 85/85 THB-Rated Capacitor Summary

- Survive 1,500-hour of life test at 85°C with 85% relative humidity and rated voltage applied
- (Competitors' THB capacitors are tested to only 1,000 hours)
- IEC61071, AEC-Q200 Qualified
- High capacitance with high ripple current
- 100,000 hrs life at V_r , 70°C
- Ideal for inverter, UPS, solar inverters, battery chargers and other DC Link applications subjected to harsh conditions