

### HC Series Features

- Wide input range.
- Continuous current ratings.
- Fully isolated, input-to-output and to chassis.
- Resin filled (except HC350/24/12, which is fan-cooled)
- Supports battery supply variations,
- Extremely rugged and well suited for marine and other demanding environments.
- High tolerance for shock and vibration.
- Remote low power switch—can also be wired for direct connection.
- Fully protected.

### Common specifications and characteristics for HC Series Converters

**Operating Temperature Range:** HC100 and HC250: -25 to +55°C; HC350: -10 to +55°C.

**Efficiency:** HC100, HC250; >80%; HC350; >85%.

**Switching Frequency:** 45 KHz.

**All units are CE Marked.**

**Conformance to:** EMC EN 55022, EN50081-1, EN50082-1, FCC Class B, UL 1950.

**Input Protection:** Reverse polarity (HC100 and HC250), fused\*

\*User provided for HC350 inputs.

Fuse ratings to select: HC350/12/24: 60A.

HC350/24/24: 30A.

HC350/48/24: 20A.

**Output Protection:** Foldback current limit circuit at approximately 120% of output current, overvoltage crowbar.

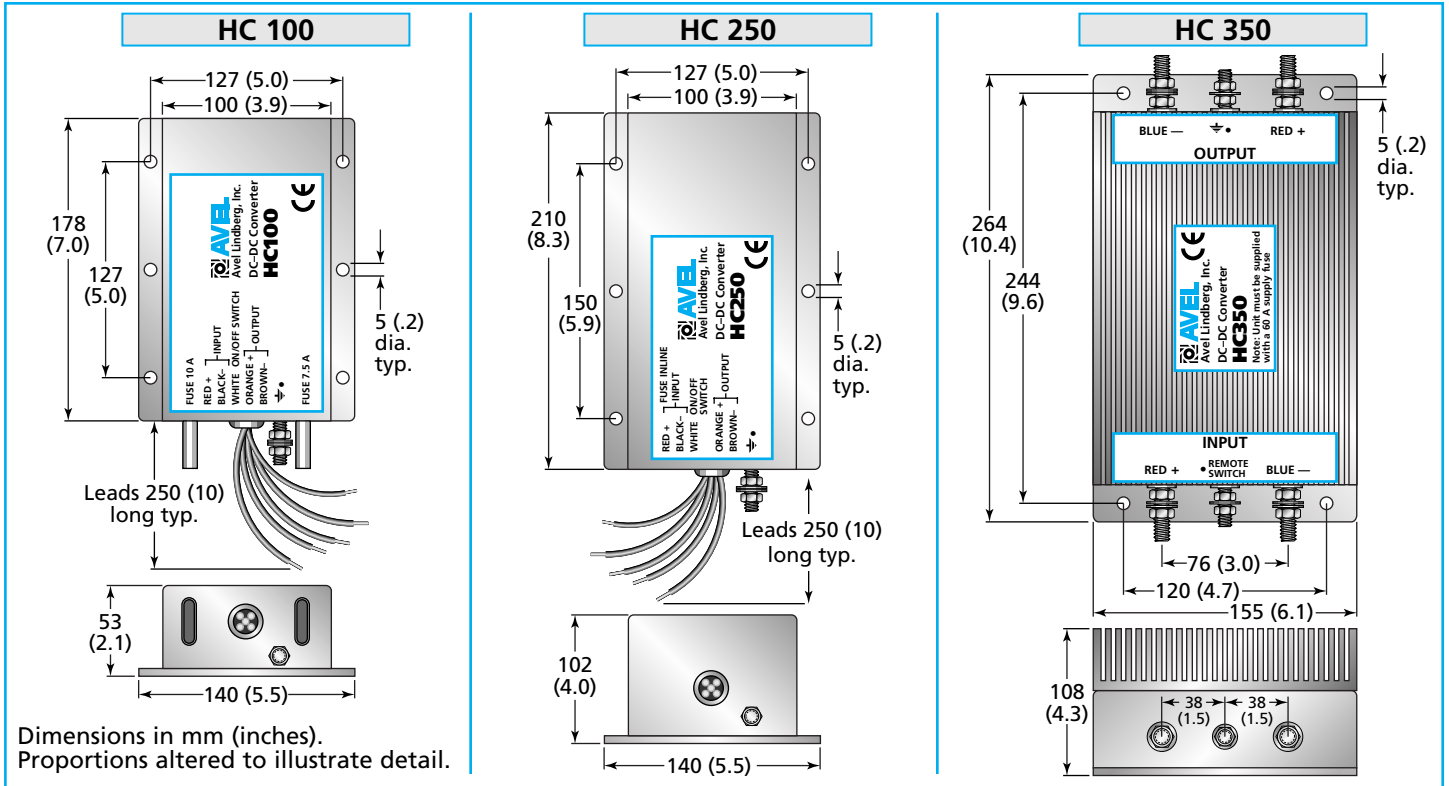
**Mounting:** All mounting holes .2" / 5mm diameter.

**Stud size (HC350):** Input: 8 mm; output: 6 mm; remote on / off switch: 5 mm.

**Weight:** HC100: 1.6 Kg / 3.5 lbs; HC250: 5.5 Kg / 9.9 lbs; HC350: 5.7 Kg / 12.6 lbs.

**Switch connection:** To use remote switch, connect the remote input to one side of switch, and the + input to the other side. If switch is not required, the switch input must be connected to + input.

Nominal input voltage must be applied to remote switch line to turn unit on.



**Converter Specifications—HC Series**

Input Voltage, DC		Output Voltage, Nom.	Output Current		Output Regulation		Output Ripple (mV)	No-Load Input (mA)	AVEL P/N
Nominal	Range		Continuous	Max. <sup>(1)</sup>	0-10% <sup>(2)</sup>	0-100% <sup>(2)</sup>			
12	11–16	24.0 ± .5V	15A	20A	.2V	.3V	<250	<300	HC350/12/24
12	11–16	48.0 ± 1V	7.5A	10A	.6V	.4V	<600	<500	HC350/12/48
24	16–50	13.8 ± .2V	10A	—	.4V	.2V	<100	<100	HC100/24/12
24	16–50	13.8 ± .2V	20A	—	.4V	.2V	<100	<200	HC250/24/12
24	20–30	13.8 ± .2V	25A	30A	.2V	.1V	<200	<300	HC350/24/12
24	16–50	24.0 ± .5V	5A	—	.4V	.6V	<100	<100	HC100/24/24
24	16–50	24.0 ± .5V	10A	—	.4V	.6V	<100	<200	HC250/24/24
24	20–30	24.0 ± .5V	15A	20A	.3V	.2V	<250	<200	HC350/24/24
24	16–50	48.0 ± .5V	2.5A	—	.6V	.4V	<250	<100	HC100/24/48
24	16–50	48.0 ± .5V	5A	—	.6V	.4V	<350	<200	HC250/24/48
24	20–30	48.0 ± 1V	7.5A	10A	.6V	.4V	<400	<200	HC350/24/48
48	30–70	13.8 ± .2V	10A	—	.4V	.2V	<100	<80	HC100/48/12
48	30–70	13.8 ± .2V	20A	—	.4V	.2V	<100	<160	HC250/48/12
48	30–70	24.0 ± .5V	5A	—	.4V	.6V	<100	<80	HC100/48/24
48	30–70	24.0 ± .5V	10A	—	.4V	.6V	<100	<160	HC250/48/24
48	40–63	24.0 ± .5V	15A	20A	.3V	.2V	<250	<200	HC350/48/24
110	70–140	13.8 ± .2V	10A	—	.4V	.2V	<100	<40	HC100/110/12
110	70–140	13.8 ± .2V	20A	—	.4V	.2V	<100	<80	HC250/110/12
110	70–140	24.0 ± .5V	5A	—	.4V	.6V	<100	<40	HC100/110/24
110	70–140	24.0 ± .5V	10A	—	.4V	.6V	<100	<80	HC250/110/24
110	70–140	48.0 ± .5V	2.5A	—	.6V	.4V	<350	<40	HC100/110/48
110	70–140	48.0 ± .5V	5A	—	.6V	.4V	<350	<80	HC250/110/48
110	70–140	110.0 ± 1V	1.4A	—	.6V	.4V	<350	<40	HC100/110/110
110	70–140	110.0 ± 1V	2.8A	—	.6V	.4V	<350	<80	HC250/110/110

<sup>(1)</sup> 50% duty cycle, 30 minutes. <sup>(2)</sup> Percentage of load.

**Note:** HC100 and HC250 units should be used on a *continuous* basis only within these input ranges: 24V input: 20–30V range; 48V input: 40–60V range; 110V input: 90–138V range.