

HD Series DC-DC Converters

Overview

- **Input voltage:** 16 – 50 V or 180 – 420 V
- **Output voltage/power**
HDC028A280x320L-00: 28 V/320 W
HDC300B120x400L-00: 12 V/400 W
- **100°C baseplate operation**
- **Agency approvals:** cURus, cTUVus, CE Mark

Features

- **High efficiency and power density**
- **Robust packaging for harsh environments**
- **3 temperature grades, including operation to -55°C**
- **Flange or flangeless versions available**
- **Input undervoltage lockout**
- **Output overvoltage protection**
- **Overtemperature protection**

Description

HD Brick Series DC-DC Converters are isolated, regulated, and operate from an unregulated, wide range input to generate an isolated output.

With its high frequency zero voltage switching (ZVS) topology, the HDC consistently delivers high efficiency across the input line range. Modular HDC and downstream DC-DC products support efficient power distribution, providing superior power system performance and connectivity from a variety of unregulated power sources to the point-of-load.

Electrical Characteristics

Parameter	HDC028A280x320L-00			HDC300B120x400L-00			Units	Notes
	Min	Typ	Max	Min	Typ	Max		
Operating input voltage	16	28	50	180	300	420	Vdc	
Undervoltage turn-off		13.5			153		Vdc	<1 ms auto-recovery
Overvoltage turn off/on		53.5			441		Vdc	<1 ms auto-recovery
Output voltage		28			12		Vdc	
Output power		320			400		W	
Efficiency	90	92		90	92		%	Full load, 25°C
Output set point accuracy		+/- 1			+/- 2		%	Trim active; including errors from optimized 0.1% external resistors

Future versions of the HD Series will offer additional input voltage ranges, output voltages, power levels, and package sizes. Contact Vicor for additional details on this product line.



HDC028A280x320L-00

A Series

1.91 x 1.83 x 0.63 in
(48,6 x 46,5 x 16,0 mm)

HDC300B120x400L-00

B Series

2.28 x 1.83 x 0.63 in
(57,8 x 46,5 x 16,0 mm)

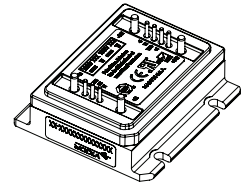
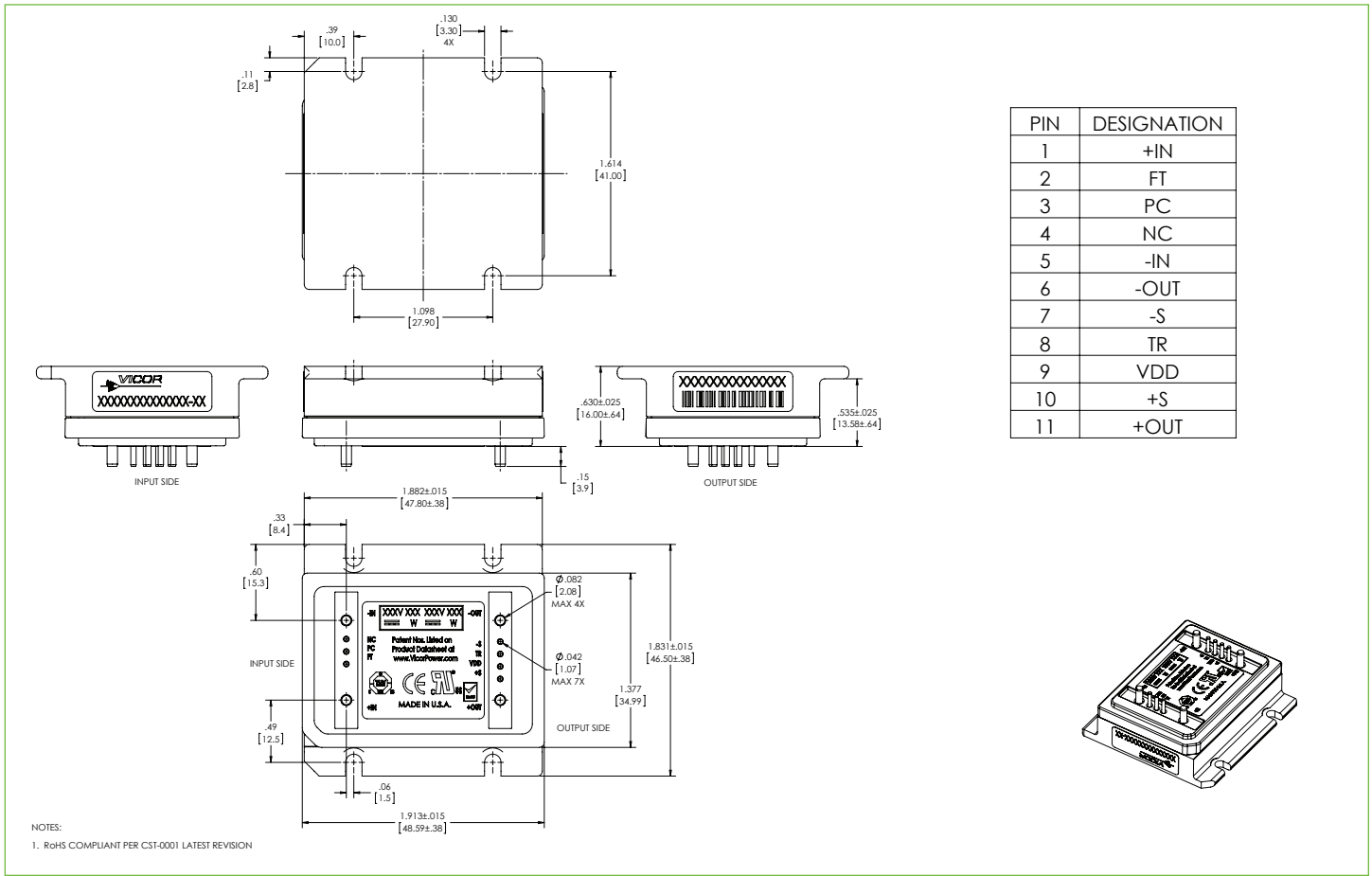
x = temperature grade: C, T or M

Applications

Industrial and process control, distributed power, ATE, communications, defense and aerospace.

PRELIMINARY

Mechanical Drawing HDC028A280x320L-00



Mechanical Drawing HDC300B120x400L-00

