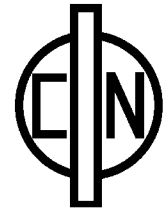


3W DC-DC Converter P3C-Series



PHI-CON

- Wide 4:1 input range
- Up to 3500 V_{DC} isolation
- Continuous short circuit protection
- Low profile metal package available
- Mobile / battery driven applications
- Distributed power networks
- Data communications equipments
- Telecommunication instruments
- Process / machine control equipments
- MTBF >1.03 MHours



Model selection guide

Typ	Input nominal voltage [V _{DC}]	Output voltage [V _{DC}]	Output current [mA]	Efficiency typ. [%]
Single output				
P3C243R3S3	9...36	3.3	900	75
P3C2405S3	9...36	5.0	600	78
P3C2409S3	9...36	9.0	334	79
P3C2412S3	9...36	12.0	250	81
P3C2415S3	9...36	15.0	200	81
P3C2418S3	9...36	18.0	167	81
P3C2424S3	9...36	24.0	125	81
P3C483R3S3	18...72	3.3	900	76
P3C4805S3	18...72	5.0	600	79
P3C4809S3	18...72	9.0	334	79
P3C4812S3	18...72	12.0	250	80
P3C4815S3	18...72	15.0	200	80
P3C4818S3	18...72	18.0	167	81
P3C4824S3	18...72	24.0	125	80
Dual output				
P3C243R3D3	9...36	±3.3	±450	76
P3C2405D3	9...36	±5.0	±300	79
P3C2409D3	9...36	±9.0	±167	79
P3C2412D3	9...36	±12.0	±125	80
P3C2415D3	9...36	±15.0	±100	80
P3C2418D3	9...36	±18.0	±84	81
P3C2424D3	9...36	±24.0	±63	80
P3C483R3D3	18...72	±3.3	±450	76
P3C4805D3	18...72	±5.0	±300	81
P3C4809D3	18...72	±9.0	±167	82
P3C4812D3	18...72	±12.0	±125	81
P3C4815D3	18...72	±15.0	±100	82
P3C4818D3	18...72	±18.0	±84	81
P3C4824D3	18...72	±24.0	±63	81

Notes: Suffix "H" 3500 V_{DC} instead of 1500 V_{DC} isolation.

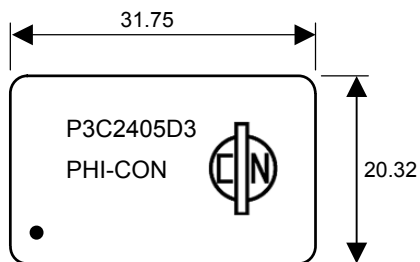
3W DC-DC Converter P3C-Series

Specifications

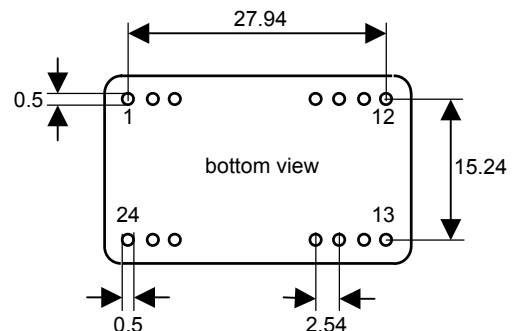
Input	
Voltage range	24 V _{DC} , 9..36 V _{DC} 48 V _{DC} , 18..72 V _{DC}
Filter	Pi Network
Isolation:	
Rated voltage	1500 V _{DC} , Standard 3500 V _{DC} , Suffix "H"
Resistance	10 ⁹ Ω
Capacitance	390 pF, typ.
Output	
Voltage accuracy	± 1%, max.
Voltage balance (dual outputs)	± 1%
Ripple and noise (at 20 MHz BW)	60 mVp-p, max.
Short circuit protection	Continuous
Short circuit restart	Automatic
Line voltage regulation	± 0.5%, max.
Load voltage regulation	± 0.5%, max.
Temperature coefficient	± 0.02% / °C

General	
Efficiency	72% to 78%
Switching frequency	260 kHz, typ.
Environmental	
Operating temperature (ambient)	-25 °C to +85 °C
Case temperature	100 °C, max.
Storage temperature	-40 °C to +125 °C
Derating	None required
Humidity	Up to 90%, non-condensing
Cooling	Free-air convection
Physical	
Dimensions	31.75x20.32x10.16 mm
Weight	16.3 g metal, standard, 14.5 g plastic suffix "P"
Case material	Standard, nickel-coated copper metal

Dimensions

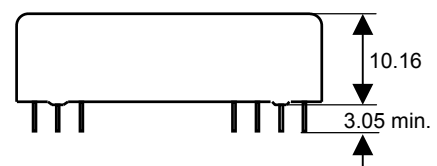


All dimensions in mm
Tolerance ±0.25 mm



Pin connections

Pin	Standard		3.5 kV _{DC}	
	Single	Dual	Single	Dual
1	+V Input	+V Input	Omitted	Omitted
2	N.C.	-V Output	-V Input	-V Input
3	N.C.	Common	-V Input	-V Input
9	Omitted	Omitted	Omitted	Common
10	-V Output	Common	Omitted	Omitted
11	+V Output	+V Output	N.C.	-V Output
12	-V Input	-V Input	Omitted	Omitted
13	-V Input	-V Input	Omitted	Omitted
14	+V Output	+V Output	+V Output	+V Output
15	-V Output	Common	Omitted	Omitted
16	Omitted	Omitted	-V Output	Common
22	N.C.	Common	+V Input	+V Input
23	N.C.	-V Output	+V Input	+V Input
24	+V Input	+V Input	Omitted	Omitted



Life Support Policy: HY-LINE does not authorize the use of any of its products for use in life support devices or systems without the express written approval of an officer of the Company. Life support systems are devices which support or sustain life, and whose failure to perform, when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in significant injury to the user. Rev: 5.05 f