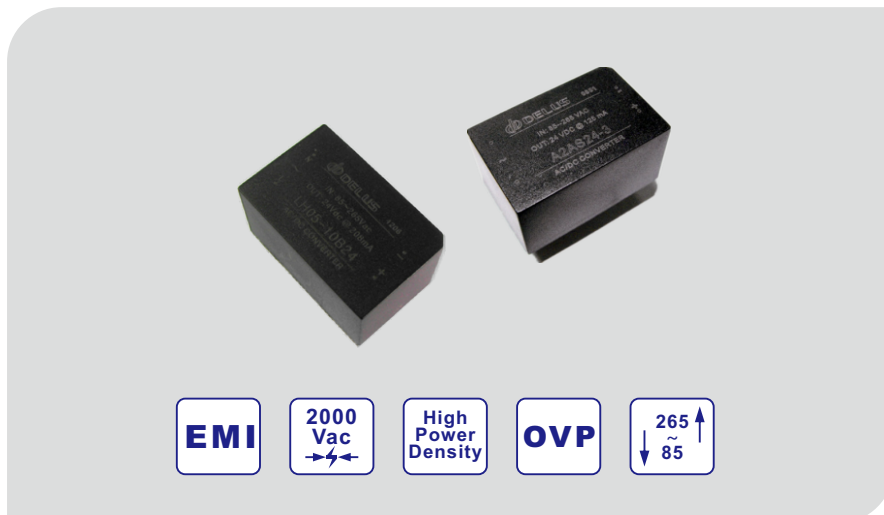


Features

- ◆ Operating temperature: -10 to +70°C
- ◆ 85-265Vac input
- ◆ 5V/12V/15V/24V/48V/±5V/±12V/±15V/±24V output
- ◆ Low ripple & noise
- ◆ Efficiency up to 86%
- ◆ 100% burn-in
- ◆ Continuous short circuit protection
- ◆ Technical design to meet the requirent of industrial products
- ◆ With 3 years warranty

General Description

LH05 series AC/DC converter with wide input voltage range, high efficiency, high reliability, security, isolation and other characteristics, widely used in industrial and civilian facilities.



Input Specifications

Item	Test Conditions	Min	Typ	Max	Units
Input Frequency			47~63Hz		
Input Voltage Range			85~265Vac		

Output Specifications

Item	Test Conditions		Min	Typ	Max	Units
Output Power	Ta=-10-+55°C				5	W
Input Variation				±0.1	±0.5	%
Load Variation	10%- 100% load			±1	±5	
Output Voltage Accuracy	100% load	Master		±1	±3	
		Slave		±3	±5	
Ripple & Noise	DC-20MHz bandwidth				1%Vout	mVp-p
Start Delay Time	100% load			1		S
Transient Recovery Time	25% load step change				200	uS
The Overshoot Rate			≤±5%(ΔVo1/Vo1)			
Short Circuit Protection			Continuous, Automatic Recovery			

Isolation Specifications

Item	Test Conditions	Min	Typ	Max	Units
Isolation Resistance	Test at 500Vac	100			MΩ
Isolation Voltage I/O	Tested for 1S and 1 mA max	2000			Vac
Isolation Voltage out1/out2	Tested for 1S and 1 mA max	500			Vac

Common Specification

Item	Test Conditions	Min	Typ	Max	Units
Operating Temperature	Ta>55°C derating	-10		+70	°C
Maximum Case Temp			50		
Storage Temperature		-40		+105	
Lead Temperature	1.5mm from case for 10 seconds			+300	
Storage Humidity				85	%
Case Material		Black plastic (UL94V-0)			
Install		PCB			

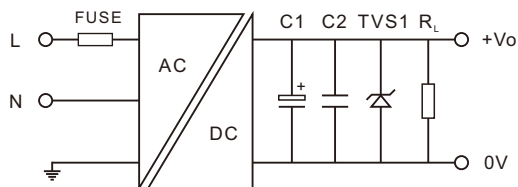
LH05-10Axx & LH05-10Bxx & LH05-10Dxx Series

5w, 220Vac input, isolated & regulated single/dual/twin output ac-dc converter



Typical Applications

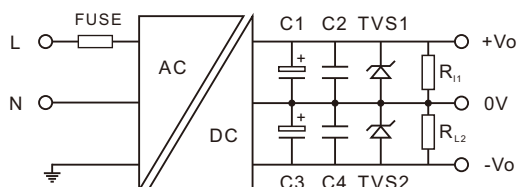
LHxx-xxBxx (single output)



External Components Typical Value

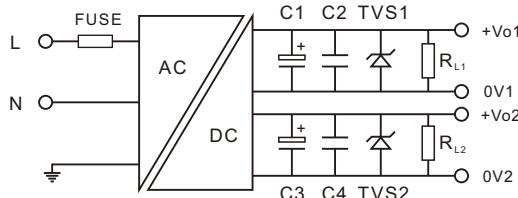
Single Models				
Model	C1	C2	FUSE	TVS1
LH05-10B05	330uF	0.1uF	1A/250V	P6KE6.8A
LH05-10B12	120uF			P6KE16A
LH05-10B15	68uF			P6KE20A
LH05-10B24	68uF			P6KE33A
LH05-10B48	47uF			P6KE62A

LHxx-xxAxx (dual output)



Dual Models				
Vout	C1, C3	C2, C4	FUSE	TVS1, TVS2
LH05-10A05	120uF	0.1uF	1A/250V	P6KE6.8A
LH05-10A12	68uF			P6KE16A
LH05-10A15	47uF			P6KE20A
LH05-10A24	10uF			P6KE33A

LHxx-xxDxx (twin output)

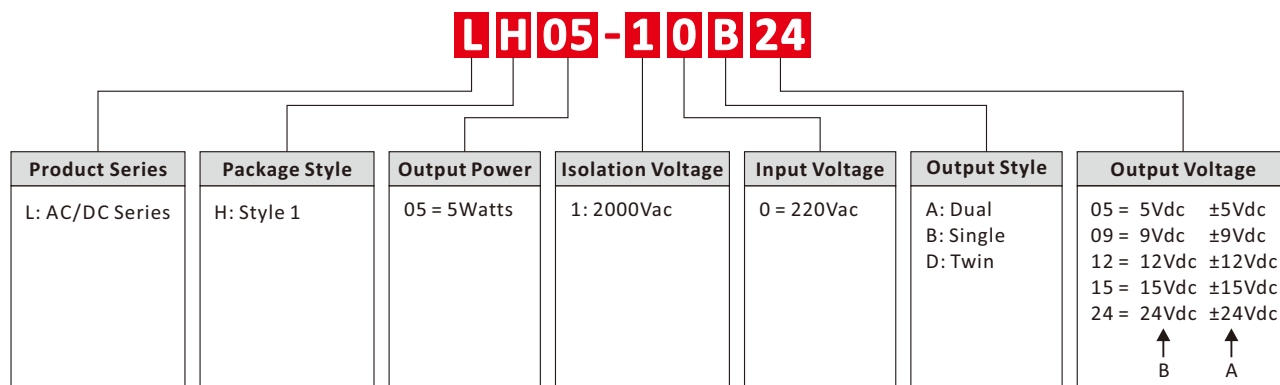


Twin Models				
Vout	C1, C3	C2, C4	FUSE	TVS1, TVS2
LH05-10D05	120uF	0.1uF	1A/250V	P6KE6.8A
LH05-10D12	68uF			P6KE16A
LH05-10D15	47uF			P6KE20A
LH05-10D24	10uF			P6KE33A

Remark:

Output filtering capacitors C1, C3 are electrolytic capacitors, it is recommended to use high frequency and low impedance electrolytic capacitors. For capacitance and current of capacitor please refer to manufacture's datasheet, voltage derating of capacitor should be 80% or above. C2,C4 are use to filter high frequency noise, suggest choose 0.1μF. TVS is recommended to protect post-circuits (when the circuit is abnormal).

Selection Guide



LH05-10Axx & LH05-10Bxx & LH05-10Dxx Series

5w, 220Vac input, isolated & regulated single/dual/twin output ac-dc converter



Product Program

Model	Input		Output				Eff (%)	Certificate	Pin-Out Config.	Order Status
	Voltage(Vac)		Voltage(Vdc)	Current(mA)		Ripple (mVp-p)				
	Nominal	Range	Nominal	Max	Min					
LH05-10B05	220	85-265	5	1000			75		Fig.1	ok
LH05-10B12			12	417			79		Fig.1	ok
LH05-10B15			15	333			80		Fig.1	ok
LH05-10B24			24	208			84		Fig.1	ok
LH05-10B48			48	104			86		Fig.1	ok
LH05-10A05	220	85-265	±5	±500			75		Fig.1	ok
LH05-10A12			±12	±208			79		Fig.1	ok
LH05-10A15			±15	±167			80		Fig.1	ok
LH05-10A24			±24	±104			85		Fig.1	ok
LH05-10D05	220	85-265	5/5	500/500			75		Fig.1	ok
LH05-10D12			12/12	208/208			79		Fig.1	ok
LH05-10D15			15/15	167/167			80		Fig.1	ok
LH05-10D24			24/24	104/104			85		Fig.1	ok

Outline Dimensions

First Angle Proj

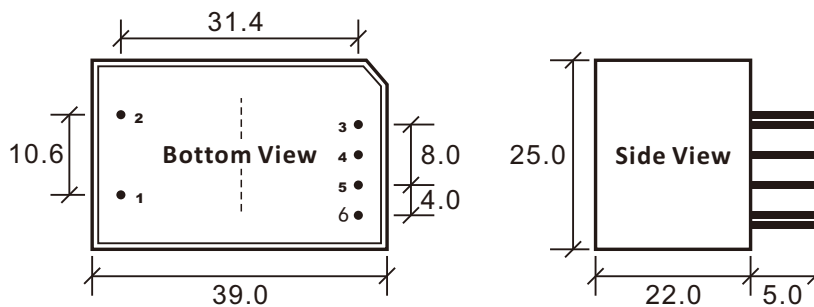
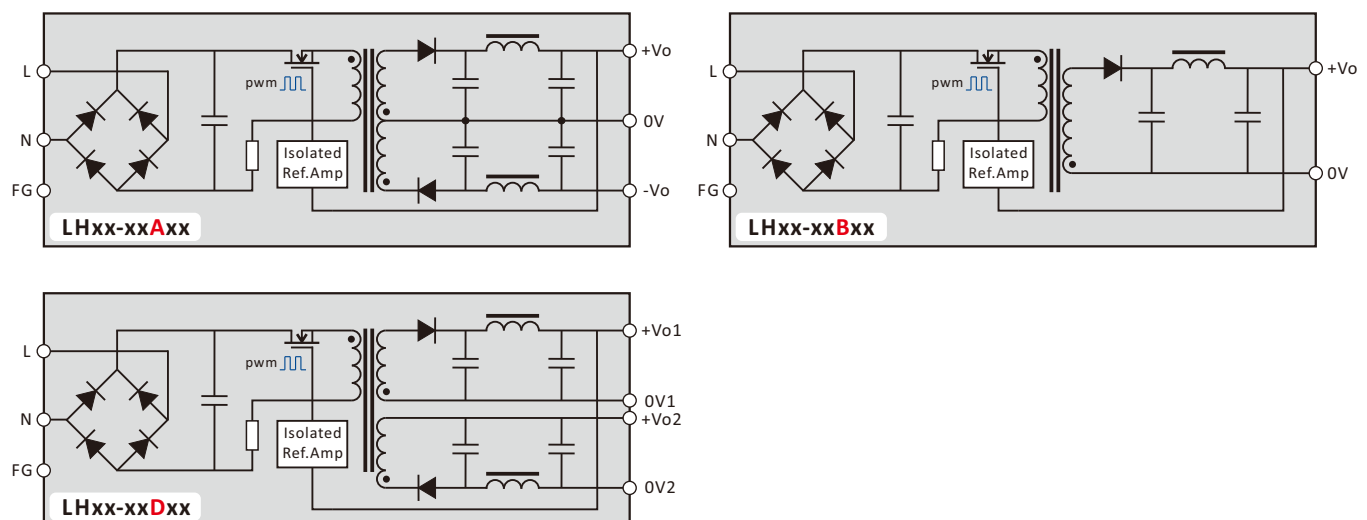


Fig.1

Pin	Single	Dual	Twin
1	N(AC)	N(AC)	N(AC)
2	L(AC)	L(AC)	L(AC)
3	+Vo	+Vo	+Vo1
4	no pin	0V	0V1
5	0V	-Vo	0V2
6	no pin	no pin	+Vo2

Note: all size units mm
diameter of all terminal 1 mm

Functional Diagram



File Release Notes

DBN-501 Technical Data Sheet Version



No.	Version	Data	Description
1	V0	2011/11/01	First release
2	V1	2012/07/13	Increase in the twin series model
3	A/0	2016/07/01	Fixed an wrong
4	A/1	2018/09/14	Fixed an wrong in P3
5			

1. All data in addition to particular things, are Ta = 25°C, humidity<75%, nominal input voltage and output measured at rated load;
2. Non-standard models with some of the following indicators may be different from the specific circumstances of the Secretary to direct contact with me;
3. In the use of this manual, if some of them do not quite understand terms please refer to our <<DC/DC Converter Application Guide>>;
4. The Company focused on technological improvements, product specifications and parameter updates without notice, to pay attention to the latest information on website.

All Delus Corporation's products are manufactured, assembled and tested utilizing ISO9001 quality systems.
For information regarding Delus Corporation and its products please see website: www.delus-power.com

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