

unregulated

INDUSTRIAL DC/DC Converters

**6 Watt
Series: LHVI**

Applications:

- IGBT auxiliary supply
- medical application

**High reinforced
and partial discharge free insulation**

EN50178 / EN50124-182 / EN61800-5

Electrical specifications:

Output voltage accuracy:	unregulated	Efficiency:	up to 84%
Short circuit protection:	continuous	primary / secondary	
	@ 24Vin: short-time	Insulation test voltage:	insulation test voltage 10 kV
Operating temperature:	-40°C up to +95°C		du/dt...>100kV/μs
Ambient temperature:	-40°C to +71°C	Capacitance Prim/Sec:	typ. <15pF
Optional:		Part-No.: /2	partial-discharge 2,3kV AC free (TE-frei)
Part-No.: /8	-55°C to +85°C	Part-No.: /5	5kV AC discharge free available
	ambient temperature		

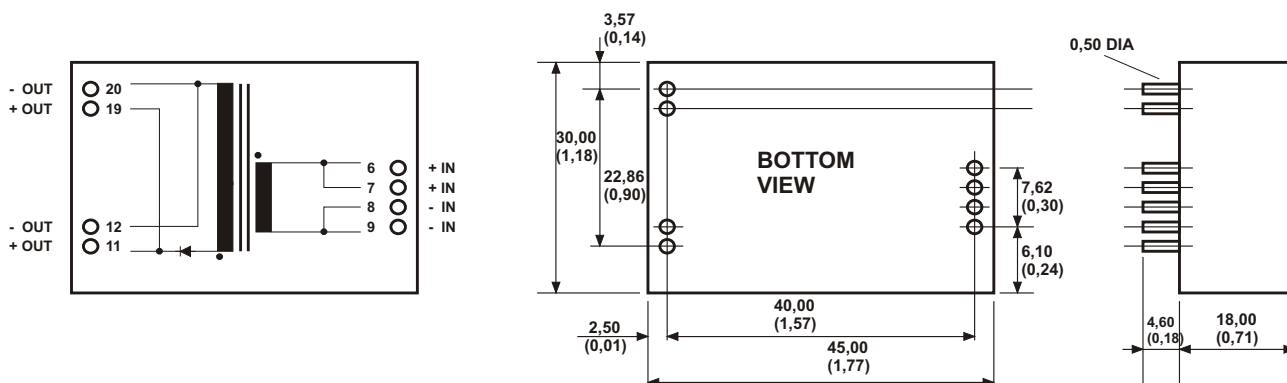
add insulation quality specifier to Part-No. e.g. /2

CAUTION: NO INPUT POLARITY CHANGE ALLOWED!

Part-No.	Input Voltage DC	Output Voltage DC	Output current mA
LHVI-05yy	4,75V - 5,5V	3,3 V	1800mA
LHVI-12yy	10,8V - 13,2V	5 V	1100mA
LHVI-15yy	13,5V - 16,5V	12 V	500mA
LHVI-24yy	21,6V - 26,4V	15 V	400mA

The input voltage can be increased by the value of the selected output voltage in boost operation (see Application Note C43, page 149).

Any other IN & OUTPUT voltage available !!



additional 220μF input & output capacitors recommended
ripple & noise depend on load & external capacitors

All specifications typical @ Ta +25°C
Nom. Vin & full load, unless otherwise specified!

ALL DIMENSIONS IN MM (INCHES)
MILLIMETERS +/- 0,5mm
(INCHES +/- 0,02")
All pins on a 2,54mm pitch.

Specification may be changed without notice
please contact office for verification

We can offer EMC - Filter
according to EN55011/22 Class B.

unregulated

INDUSTRIAL DC/DC Converters

2x3 Watt = 6 Watt
Series: LHVI

Applications:

- IGBT auxiliary supply
- medical application

High reinforced
and partial discharge free insulation

EN50178 / EN50124-182 / EN61800-5

Electrical specifications:

Output voltage accuracy: unregulated
Short circuit protection: continuous
@ 24Vin: short-time
Operating temperature: -40°C up to +95°C
Ambient temperature: -40°C to +71°C
Optional:
Part-No.: /8 -55°C to +85°C
ambient temperature

Efficiency:
Primary / Secondary:

Secondary 1/ Secondary 2:

Capacitance Prim/Sec/Sec: typical <15pF
Part-No.: /2 partial-discharge 2,3kV AC free (TE - frei)
Part-No.: /5 5kV AC discharge free available

add isolation quality specifier to part-no. e. g. /2

Part-No.: /9 imbalanced outputs

up to 86%
insulation test voltage 10 kV
du/dt...>100kV/μs
insulation test voltage 10kV
du/dt...>100kV/μs

CAUTION: NO INPUT POLARITY CHANGE ALLOWED!

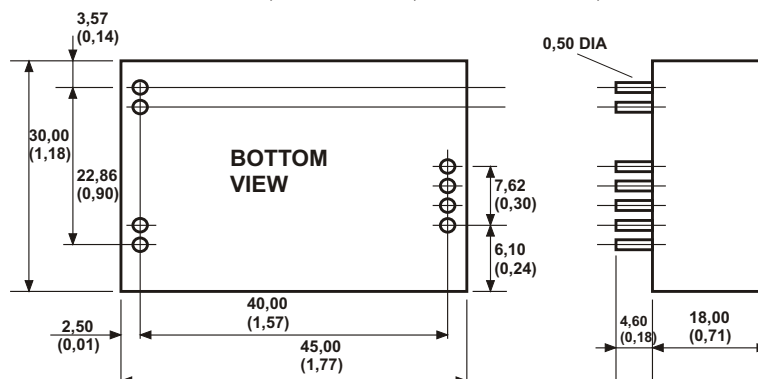
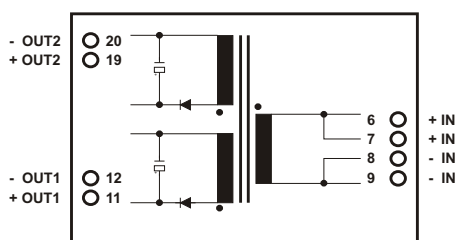
Part-No.	Input Voltage DC	Output Voltage DC	Output current mA
LHVI-051515	4,75V - 5,5V	15V / 15V	200mA / 200mA
LHVI-121515	10,8V - 13,2V	15V / 15V	200mA / 200mA
LHVI-151515	13,5V - 16,5V	15V / 15V	200mA / 200mA
LHVI-241515	21,6V - 26,4V	15V / 15V	200mA / 200mA

The input voltage can be increased by the value of the selected output voltage in boost operation (see Application Note C43, page 149).

any other IN & OUTPUT voltage available also with unequal output voltages !

Example for imbalanced outputs:

LHVI-121515/9 10,8V - 13,2V 15V / 15V U1 U2 18,3V 15,4V 80%
15,2V 15,8V ±0,4%



additional 220μF input & output capacitors recommended
ripple & noise depend on load & external capacitors

All specifications typical @ Ta +25°C
Nom. Vin & full load, unless otherwise specified!

ALL DIMENSIONS IN MM (INCHES)
MILLIMETERS +/- 0,5mm
(INCHES +/- 0,02")
All pins on a 2,54mm pitch.

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unregulated

MEDICAL - INDUSTRIAL DC/DC Converters

6 Watt

Series: MED-LHVI

Applications:

- IGBT auxiliary supply
- medical application

EN/UL/CSA 60601-1 & 2

REINFORCED INSULATION

Electrical specifications:

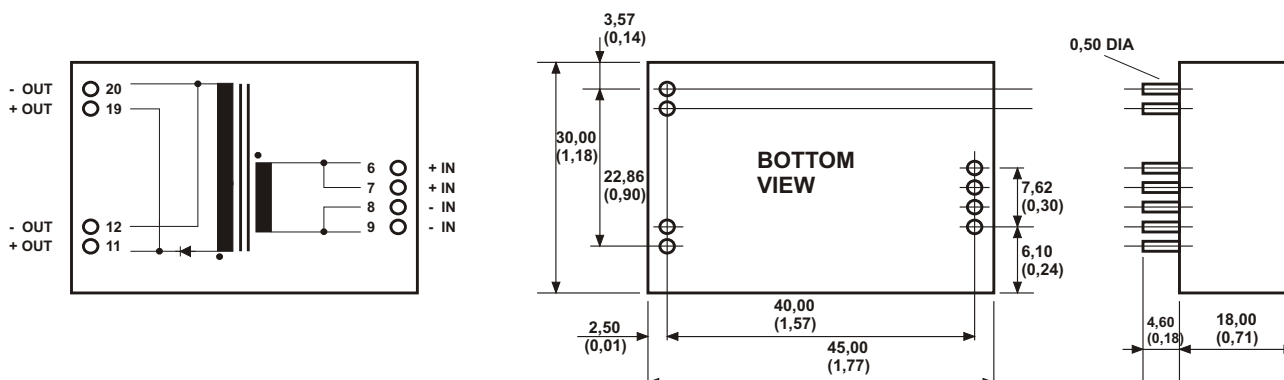
Output voltage accuracy:	unregulated	Efficiency:	up to 85%
Short circuit protection:	continuous	primary / secondary	
Operating temperature:	@ 24Vin: short-time	Insulation test voltage:	4000V AC rms 1 min. type test
Ambient temperature:	-40°C up to +95°C	Insulation:	du/dt...>100kV/μs
Optional:	-40°C to +71°C	primary / secondary	1500V AC rms partial discharge free
Part-No.: /8	-55°C to +85°C	Capacitance Prim/Sec:	< 10pC
	ambient temperature		typ. <15pF

CAUTION: NO INPUT POLARITY CHANGE ALLOWED!

Part-No.	Input Voltage DC	Output Voltage DC	Output current mA
MED-LHVI-05yy	4,75V - 5,5V	3,3 V	1800mA
MED-LHVI-12yy	10,8V - 13,2V	5 V	1100mA
MED-LHVI-15yy	13,5V - 16,5V	12 V	500mA
MED-LHVI-24yy	21,6V - 26,4V	15 V	400mA
		24 V	250mA

The input voltage can be increased by the value of the selected output voltage in boost operation (see Application Note C43, page 149).

Any other IN & OUTPUT voltage available !!



additional 220μF input & output capacitors recommended
ripple & noise depend on load & external capacitors

All specifications typical @ Ta +25°C
Nom. Vin & full load, unless otherwise specified!

ALL DIMENSIONS IN MM (INCHES)
MILLIMETERS +/- 0,5mm
(INCHES +/- 0,02")
All pins on a 2,54mm pitch.

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unregulated

MEDICAL - INDUSTRIAL

DC/DC Converters

2x3 Watt = 6 Watt

Series: MED-LHVI

Applications:

- IGBT auxiliary supply
- medical application

EN/UL/CSA 60601-1 & 2

REINFORCED INSULATION

Electrical specifications:

Output voltage accuracy:
Short circuit protection:

unregulated
continuous
@ 24Vin: short-time
-40°C up to +95°C
-40°C to +71°C

Operating temperature:
Ambient temperature:

Optional:
Part-No.: /8

-55°C to +85°C
ambient temperature

Efficiency:
primary / secondary
Insulation test voltage:

Insulation:
Capacitance Prim/Sec:

up to 83%

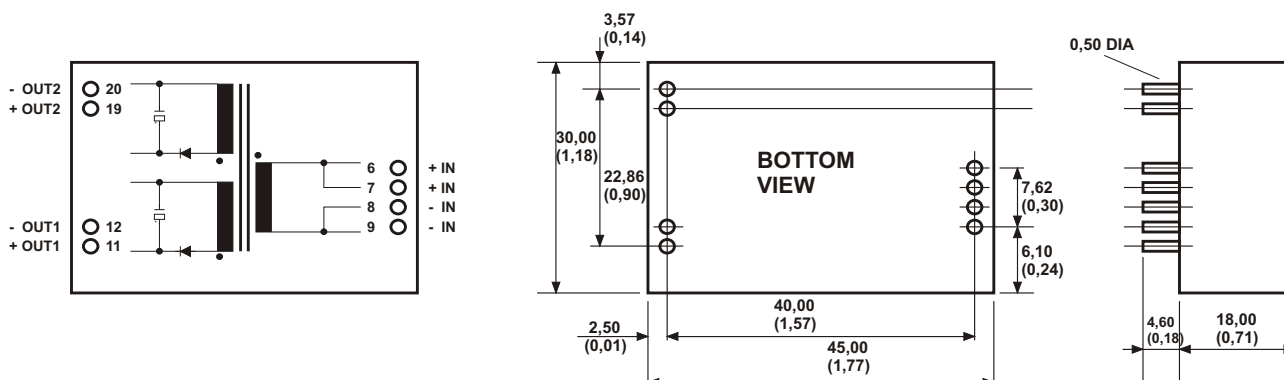
4000V AC rms 1 min. type test
du/dt...>100kV/μs
1500V AC rms partial discharge free
typ. <15pF

CAUTION: NO INPUT POLARITY CHANGE ALLOWED!

Part-No.	Input Voltage DC	Output Voltage DC	Output current mA
MED-LHVI-051515	4,75V - 5,5V	15V / 15V	200mA / 200mA
MED-LHVI-121515	10,8V - 13,2V	15V / 15V	200mA / 200mA
MED-LHVI-151515	13,5V - 16,5V	15V / 15V	200mA / 200mA
MED-LHVI-241515	21,6V - 26,4V	15V / 15V	200mA / 200mA

The input voltage can be increased by the value of the selected output voltage in boost operation (see Application Note C43, page 149).

any other IN & OUTPUT voltage available also with unequal output voltages !



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