

TECHNICAL DATASHEET

ELECTRICAL SPECIFICATIONS

Item No. 437.002 / Page 1 / 3

Print Date 29.12.2025 11:40

DC-Converter 437LT-5.0

30 Watt, isolated, single output forward converter

All parameters defined on Ta=25°C, IoNom = 6.0 ADC and UiNom = 24VDC

ABSOLUTE MAXIMUM RATINGS

parameter	unit	typ
Input peak voltage	VDC	36.00

THERMAL CHARACTERISTICS

parameter	min to max	typ
Ambient temperature range	-40°C / +85°C	
Storage temperature (device not in operation)	-10°C / +65°C	
Relative maximum humidity under storage		75% RH
Storage under worst conditions [in days]		25

SPECIALS

parameter	unit	conditions	typ
Switching frequency	kHz		200
Efficiency at medium loads	%	0.5IoNom	92.20
Efficiency at full loads	%	IoNom	93.30
Coupling capacitance input to output	nF		1
Insulation strength primary to secondary	VDC		500

All technical and general information is provided in all conscience. However, completeness and accuracy cannot be guaranteed. Demke recommends to fully test the product in its determined application. Due to permanent improvements to our products, we reserve the right to change specifications at any time and without prior notification and without obligation to update products already supplied. This is a component for professional equipment manufacturers. Read the safety and installation instruction for proper use. Safety aspect and EMC-aspect must be considered in the end application.

DEMKE
ELECTRONIC

Demke Electronic GmbH
Tonhallestrasse 37
9500 Wil - Switzerland

phone +41 71 511 34 00
e-mail sales@demke-electronic.com

web www.demke-electronic.com

TECHNICAL DATASHEET

ELECTRICAL SPECIFICATIONS

Item No. 437.002 / Page 2 / 3

Print Date 29.12.2025 11:40

DC-Converter 437LT-5.0

30 Watt, isolated, single output forward converter

INPUT

parameter	unit	conditions	min	typ	max
Input voltage range	VDC	IoNom	8	24	32
No load input current	mA	UiNom		53	
Max. input current	A	UiNom		4	
Input start up voltage	VDC	UiNom		7.7	
Undervoltage lockout	VDC	UiNom		7.1	
Input current overshoot during soft start ramp up	%	IoNom		80	
Generated AC-ripple on the supply (BW=20MHz)	mVp-p	UiNom/loNom		30	
Generated HF-noise on the supply (BW=20MHz)	mVp-p	UiNom/loNom		100	

OUTPUT

parameter	unit	conditions	min	typ	max
Output voltage	VDC	IoNom		5.0	
Minimum required load to obtain the specified output voltage	%	UiNom		0	
Generated AC-ripple on the output (BW=20MHz)	mVp-p	UiNom/loNom		10	
Generated HF-noise on the output (BW=20MHz)	mVp-p	UiNom/loNom		100	
Output voltage accuracy	%	IoNom		+/-2.00%	
Output voltage overshoot at initial switch-on	%	IoNom		overdamped	
Rated output power	W			30	

CONTROL

parameter	unit	conditions	min	typ	max
Static line regulation	%	IoNom/UiMin...UiMa		0.10	
Static load regulation	%	IoMin...IoMax/UiNo		0.1	
Dynamic load change adjusting time	ms	LoadChange 10...90		0.60	
Maximum admissible capacitive load	uF	IoNom		10000	
Initial switch on time	ms	IoNom		4	

All technical and general information is provided in all conscience. However, completeness and accuracy cannot be guaranteed. Demke recommends to fully test the product in its determined application. Due to permanent improvements to our products, we reserve the right to change specifications at any time and without prior notification and without obligation to update products already supplied. This is a component for professional equipment manufacturers. Read the safety and installation instruction for proper use. Safety aspect and EMC-aspect must be considered in the end application.

DEMKE
ELECTRONIC

Demke Electronic GmbH
Tonhallestrasse 37
9500 Wil - Switzerland

phone +41 71 511 34 00
e-mail sales@demke-electronic.com

web www.demke-electronic.com

TECHNICAL DATASHEET

ELECTRICAL SPECIFICATIONS

Item No. 437.002 / Page 3 / 3

Print Date 29.12.2025 11:40

DC-Converter 437LT-5.0

30 Watt, isolated, single output forward converter

MECHANICAL

parameter	unit	
Overall dimensions	mm	50x40x10
Weight	g	48

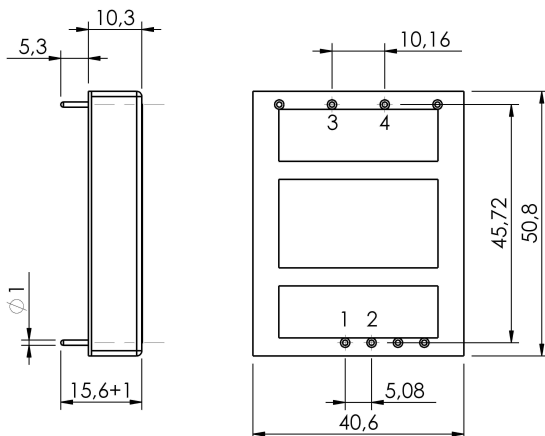
Pin No.	Function	Electrical Determination
1	Vi+	Input voltage positive
2	Vi-	Input voltage negative
3	Vo+	Output voltage positive
4	Vo-	Output voltage negative

Mechanical dimensions and Pin configuration

All dimensions in mm

Connector type: THT

Case: 1.6"x2"



All technical and general information is provided in all conscience. However, completeness and accuracy cannot be guaranteed. Demke recommends to fully test the product in its determined application. Due to permanent improvements to our products, we reserve the right to change specifications at any time and without prior notification and without obligation to update products already supplied. This is a component for professional equipment manufacturers. Read the safety and installation instruction for proper use. Safety aspect and EMC-aspect must be considered in the end application.

DEMKE
ELECTRONIC

Demke Electronic GmbH
Tonhallestrasse 37
9500 Wil - Switzerland

phone +41 71 511 34 00
e-mail sales@demke-electronic.com

web www.demke-electronic.com