367-13.8-SD

200 Watt, isolated, single output buck converter

All parameters defined on Ta=25°C, IoNom = 14.0 ADC and UiNom = 48VDC

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ABSOLUTE MAXIMUM RATINGS

parameter	unit	typ
Input peak voltage	VDC	85.00
Feedback protection against overvoltage on the output	VDC	20
Worst case output voltage in fault mode	VDC	18

THERMAL CHARACTERISTICS

ax typ
5°C
+90°C
5°C
75% RH
25
-

COMMUNICATION INTERFACE

parameter	unit	fulfilled	conditions	min to max
Option shut down (left open for operation)		\checkmark		
Shutdown voltage for transformer	VDC		loNom	-0.2 to 2.8

SPECIALS

parameter	unit	fulfilled	conditions	typ
Switching frequency	kHz			120
Efficiency at light loads	%		0.25loNom	93.00
Efficiency at medium loads	%		0.5loNom	92.00
Efficiency at full loads	%		loNom	91.00
MTTF	h		SN29500 @ 70°	1 300 000
For active loads or parallel connection		\checkmark	-	
Drives high capacitive loads		\checkmark		
Coupling capacitance input to output	nF		1	transformer winding only
Insulation strength primary to secondary	VDC			2100
Insulation strength primary to case	VDC			1500

COMPLIANCE
parameterfulfillednotes61000-6-2 [EMC-Immunity standard for industrial environment]/61000-4-2 [immunity against ESD-electrostatic discharge]/61000-4-3 [immunity High frequency electromagnetic fields]/61000-4-4 [immunity against burst - electrical fast transients]/61000-4-5 [immunity against surge - high energy surges]/61000-4-6 [immunity against induced, conducted disturbances]/

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 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			
		DATAOL	
		DAIAUI	

367-13.8-SD

200 Watt, isolated, single output buck converter

 \checkmark

61000-6-4 [EMC - Emission standard for industrial environment] 55022<A

 \checkmark

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unit	conditions	min	typ	max
VDC	loNom	30	48	80
mA	UiNom		28	
А	UiNom		8	
VDC	UiNom		30.0	
VDC	UiNom		28.5	
mA	UiNom		5.00	
%	loNom		20	
mVp-p	UiNom/IoNom		280	
mVp-p	UiNom/loNom		30	
mVp-p	UiNom/loNom		30	
	VDC mA A VDC VDC mA % mVp-p mVp-p	VDCIoNommAUiNomAUiNomVDCUiNomVDCUiNommAUiNom%IoNommVp-pUiNom/IoNommVp-pUiNom/IoNom	VDCIoNom30mAUiNomAUiNomVDCUiNomVDCUiNomMAUiNom%IoNommVp-pUiNom/IoNommVp-pUiNom/IoNom	VDC IoNom 30 48 mA UiNom 28 A UiNom 8 VDC UiNom 30.0 VDC UiNom 28.5 mA UiNom 28.5 mA UiNom 20.0 % IoNom 280 mVp-p UiNom/IoNom 30.0

OUTPUT

parameter	unit	conditions	min typ max
Output voltage	VDC	loNom	13.8
No Load output voltage increase	%	UiNom	4
Minimum required load to obtain the specified output voltage	%	UiNom	5
Generated AC-ripple on the output (BW=20MHz)	mVp-p	UiNom/IoNom	50
Generated HF-noise on the output (BW=20MHz)	mVp-p	UiNom/IoNom	60
Typical output noise slew rate (BW=500MHz)	mVp-p	UiNom/IoNom	20
Output voltage accuracy	%	loNom	+/-2.00%
Output voltage overshoot at initial switch-on	%	loNom	overdamped
Rated output power	W		200

CONTROL

parameter	unit	conditions n	nin typ	max
Static line regulation	%	loNom/UiMinUiMax	0.10	
Static load regulation	%	loMinloMax/UiNom	4.0	
Dynamic load change adjusting time	ms	LoadChange 1090%	0.20	
Dynamic load change deviation to nominal output voltage	V	LoadChange 1090%	1.20	
Maximum admissible capacitive load	uF	loNom	infinite	
Initial switch on time	ms	loNom	15	
Softstart ramp up time	ms	loNom	10	

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TECHNICAL DATASHEET

367-13.8-SD

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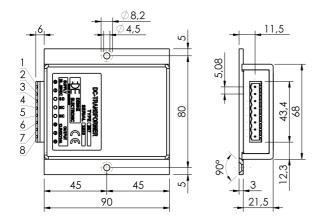
MECHANICAL

parameter	unit	
Overall dimensions	mm	90x90x25
Weight	g	370

Pin No.	Function	Electrical Determination
1	Vi+	Input voltage positive
2	Vi-	Input voltage negative
3	SD	Shut down
6	Vo+	Output voltage positive
7	GO	Output voltage common
8	Vo+	Output voltage positive

Mechanical dimensions and Pin configuration All dimensions in mm

Connector type: CCA 2,5/8-G-5,08 P26THR Case: FMC 90x90x26



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