

WEBENCH[®] Transformer Report

Design : 1 UCC28600DR
UCC28600DR 85V-265V to 30.00V @ 4A

#	Name	Value
1.	Core Part Number	150-2171
2.	Core Manufacturer	Würth Elektronik
3.	Coil Former Part Number	070-5783
4.	Coil Former Manufacturer	Würth Elektronik

Transformer Electrical Diagram

Primary

Turns	29.0
AWG	27.0
Layers	2.0
Strands	4.0
Insulation Type	Heavy Insulated Magnet Wire

Secondary

Turns	17.0
AWG	26.0
Layers	1.0
Strands	2.0
Insulation Type	Triple Insulated

Auxiliary

Turns	9.0
AWG	28.0
Layers	1.0
Strands	4.0
Insulation Type	Heavy Insulated Magnet Wire

Transformer Construction Diagram

Winding Instruction

Winding	AWG	Turns	Winding Orientation
Primary First 1/2.0	27.0	15	Clockwise
Auxiliary	28.0	9.0	Counter Clockwise
Triple Insulated Secondary	26.0	17.0	Counter Clockwise
Primary Second 1/2.0	27.0	14	Clockwise

Transformer Parameters

#	Name	Value
1.	Lpri	9.6E-5H
2.	Inductance Factor(Al)	114.0nH
3.	Npri	29.0
4.	Nsec	17.0
5.	Naux	9.0

#	Name	Value
6.	Core Type	ERL35
7.	Core Material	TP4A
8.	Bmax	0.21T
9.	Switching Frequency	67.13kHz
10.	DMax	0.4
11.	Ipk(Primary)	6.63A
12.	Irms(Primary)	2.42A
13.	Ipk(Secondary)	11.3A
14.	Irms(Secondary)	5.87A

Design Assistance

1. Quasi-Resonant Flyback Green-Mode Controller

2. **UCC28600** Product Folder : <http://www.ti.com/product/UCC28600> : contains the data sheet and other resources.

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