

# WEBENCH<sup>®</sup> Transformer Report

Design : 103 UCC28C40DR  
UCC28C40DR 10V-264V to 12.00V @ 1A

#	Name	Value
1.	Core Part Number	B65807J0000R041
2.	Core Manufacturer	TDK
3.	Coil Former Part Number	B65808E1508T001
4.	Coil Former Manufacturer	TDK

## Transformer Electrical Diagram

### Primary

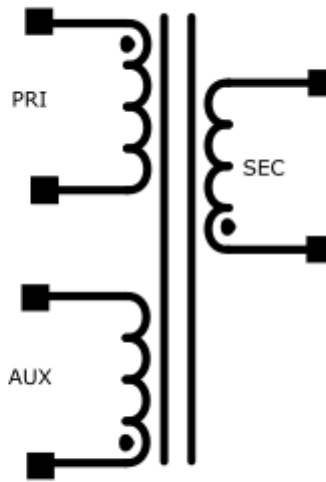
Turns	9.0
AWG	29.0
Layers	2.0
Strands	4.0
Insulation Type	Heavy Insulated Magnet Wire

### Auxiliary

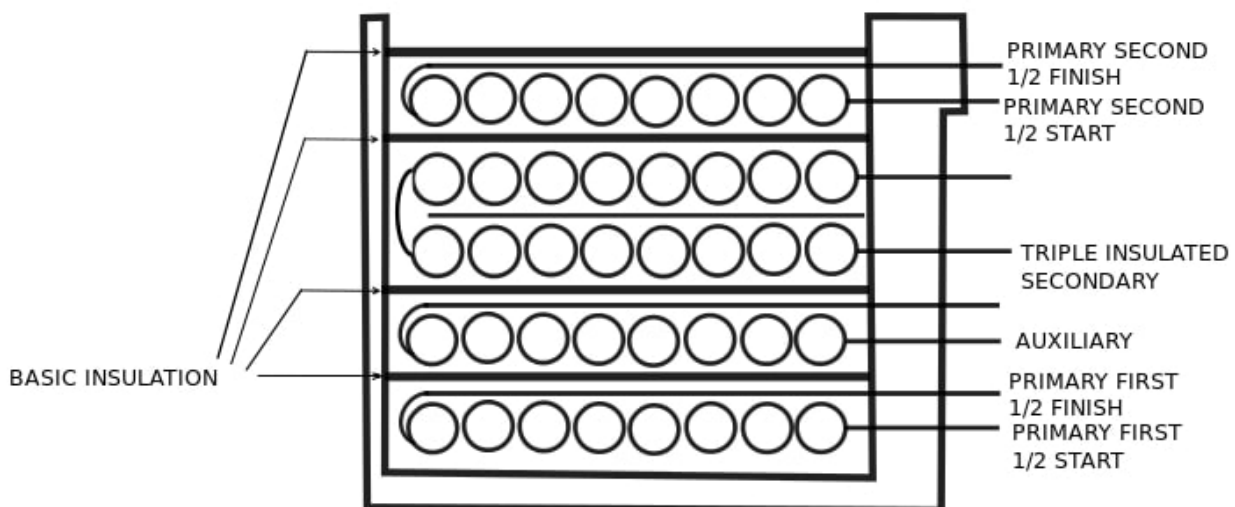
Turns	8.0
AWG	28.0
Layers	1.0
Strands	2.0
Insulation Type	Heavy Insulated Magnet Wire

### Secondary

Turns	9.0
AWG	27.0
Layers	2.0
Strands	2.0
Insulation Type	Triple Insulated



## Transformer Construction Diagram



## Winding Instruction

Winding	AWG	Turns	Winding Orientation
Primary First 1/2.0	29.0	5	Clockwise
Auxiliary	28.0	8.0	Counter Clockwise
Triple Insulated Secondary	27.0	9.0	Counter Clockwise
Primary Second 1/2.0	29.0	4	Clockwise

## Transformer Parameters

#	Name	Value
1.	Lpri	1.7E-5H
2.	Inductance Factor(AI)	214.0nH
3.	Npri	9.0
4.	Nsec	9.0
5.	Naux	8.0
6.	Core Type	RM6
7.	Core Material	N41
8.	Bmax	0.22T
9.	Switching Frequency	98.85kHz
10.	DMax	0.6
11.	Ipk(Primary)	4.13A
12.	Irms(Primary)	2.02A
13.	Ipk(Secondary)	4.13A
14.	Irms(Secondary)	1.65A

## Design Assistance

1. **UCC28C40** Product Folder : <http://www.ti.com/product/UCC28C40> : contains the data sheet and other resources.

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