

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

Design : 7 UC3845N  
UC3845N 85V-265V to 15.00V @ 4A

#	Name	Value
1.	Core Part Number	150-1680
2.	Core Manufacturer	Würth Elektronik
3.	Coil Former Part Number	070-5080
4.	Coil Former Manufacturer	Würth Elektronik

### Transformer Electrical Diagram

#### Primary

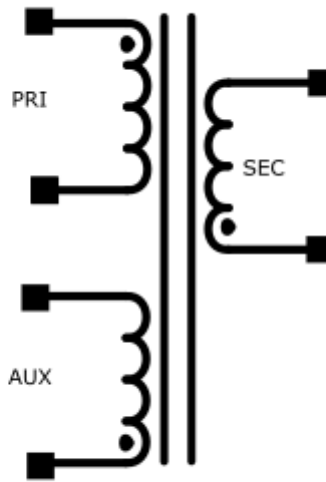
Turns	29.0
AWG	26.0
Layers	2.0
Strands	2.0
Insulation Type	Heavy Insulated Magnet Wire

#### Auxiliary

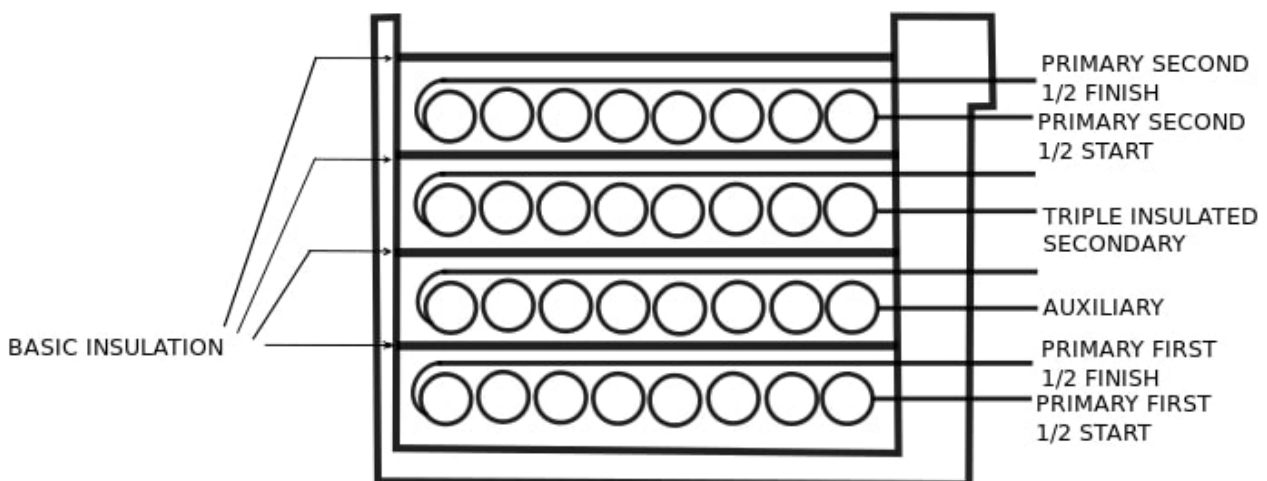
Turns	8.0
AWG	28.0
Layers	1.0
Strands	4.0
Insulation Type	Heavy Insulated Magnet Wire

#### Secondary

Turns	10.0
AWG	26.0
Layers	1.0
Strands	2.0
Insulation Type	Triple Insulated



### Transformer Construction Diagram



### Winding Instruction

Winding	AWG	Turns	Winding Orientation
Primary First 1/2.0	26.0	15	Clockwise
Auxiliary	28.0	8.0	Counter Clockwise
Triple Insulated Secondary	26.0	10.0	Counter Clockwise
Primary Second 1/2.0	26.0	14	Clockwise

## Transformer Parameters

#	Name	Value
1.	Lpri	1.37E-4H
2.	Inductance Factor(AI)	163.0nH
3.	Npri	29.0
4.	Nsec	10.0
5.	Naux	8.0
6.	Core Type	EE25/13/11
7.	Core Material	TP4A
8.	Bmax	0.20T
9.	Switching Frequency	99.31kHz
10.	DMax	0.36
11.	Ipk(Primary)	3.27A
12.	Irms(Primary)	1.24A
13.	Ipk(Secondary)	9.49A
14.	Irms(Secondary)	4.81A

## Design Assistance

1. **UC3845** Product Folder : <http://www.ti.com/product/UC3845> : contains the data sheet and other resources.

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