

WEBENCH[®] Transformer Report

Design : 2 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

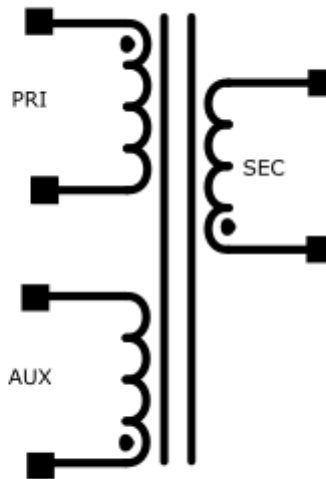
Turns	29.0
AWG	26.0
Layers	2.0
Strands	2.0
Insulation Type	Heavy Insulated Magnet Wire

Auxiliary

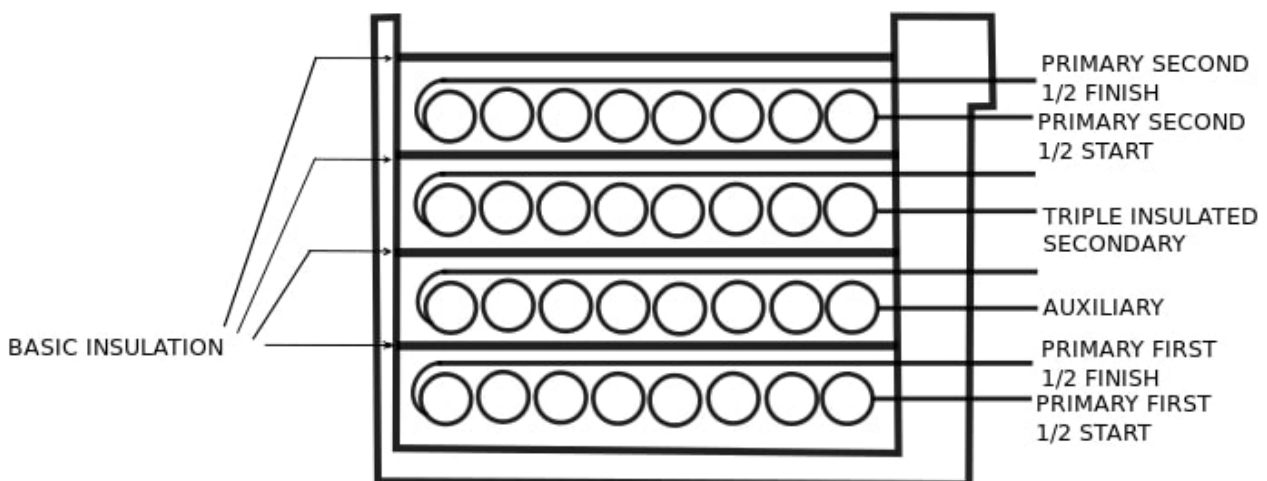
Turns	8.0
AWG	28.0
Layers	1.0
Strands	4.0
Insulation Type	Heavy Insulated Magnet Wire

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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