WEBENCH® Transformer Report

Design : 1713666/213 UCC25630-3DDBR
UCC25630-3DDBR 290.0V-390.0V to 19.00V @ 25.0A

#	Name	Value
1.	Core Part Number	B66317G0000X187
2.	Core Manufacturer	TDK
3.	Coil Former Part Number	B66208X1110T001
4.	Coil Former Manufacturer	TDK

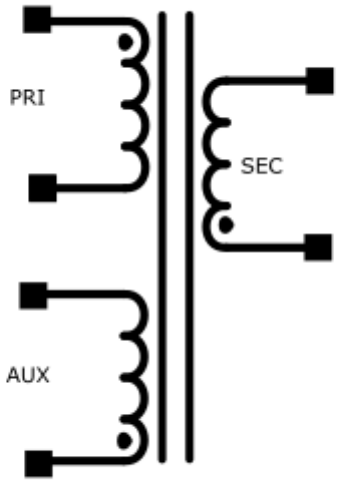
Transformer Electrical Diagram

Primary

Turns	20
AWG	33
Layers	2
Strands	6
Insulation Type	Heavy Insulated Magnet Wire

Auxiliary

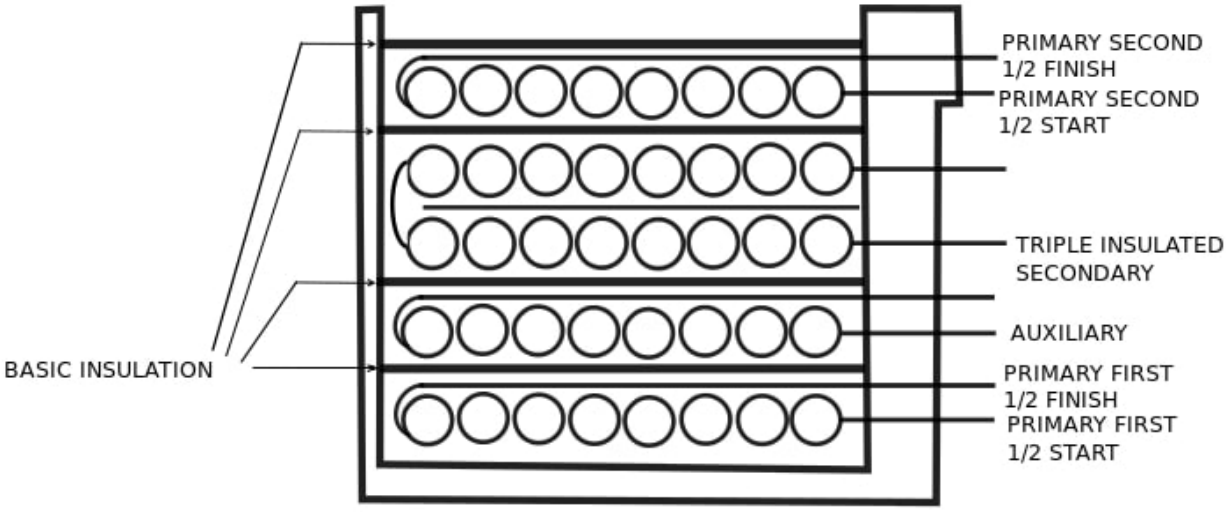
Turns	2
AWG	28
Layers	1
Strands	1
Insulation Type	Heavy Insulated Magnet Wire



Secondary

Turns	2
AWG	32
Layers	2
Strands	27
Insulation Type	Triple Insulated

Transformer Construction Diagram



Winding Instruction

Winding	AWG	Turns	Winding Orientation
Primary First 1/2	33	10	Clockwise
Auxiliary	28	2	Counter Clockwise
Triple Insulated Secondary	32	2	Counter Clockwise
Primary Second 1/2	33	10	Clockwise

Transformer Parameters

#	Name	Value
1.	Lpri	4.1E-5H
2.	Inductance Factor(Al)	103nH
3.	Npri	20
4.	Nsec	2
5.	Naux	2
6.	Core Type	E25/13/7
7.	Core Material	N87
8.	Bmax	0.26T
9.	Switching Frequency	340.20kHz
10.	DMax	0.5
11.	Ipk(Primary)	6.68A
12.	Irms(Primary)	4.72A
13.	Ipk(Secondary)	66.8A
14.	Irms(Secondary)	47.2A

Design Assistance

1. **UCC256303** Product Folder : http://www.ti.com/product/UCC256303 : contains the data sheet and other resources.