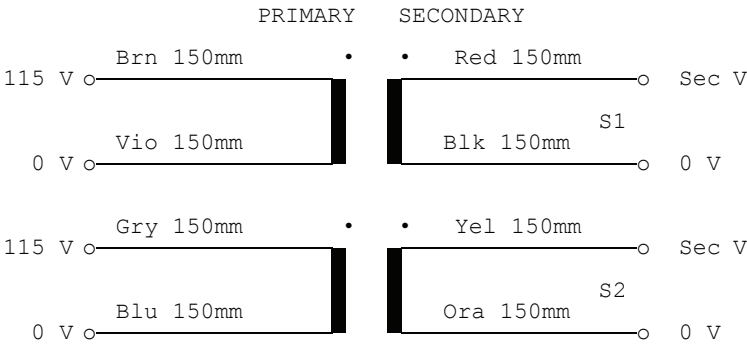


Toroidal Transformers

General Purpose



RoHS
Compliant



MCTA Range General Purpose Toroidal Transformers

Primary:

Dual primary winding for connection in series or parallel only

Series	Input Voltage	Secondary Power
MCTA015 Series	115 or 230V ±10% 50/60Hz	2 × 7.5VA
MCTA030 Series		2 × 15VA
MCTA050 Series		2 × 25VA
MCTA060 Series		2 × 30VA
MCTA080 Series		2 × 40VA
MCTA100 Series		2 × 50VA
MCTA1000 Series		2 × 500VA
MCTA120 Series		2 × 60VA
MCTA160 Series		2 × 80VA
MCTA225 Series		2 × 112.5VA
MCTA250 Series		2 × 125VA
MCTA300 Series		2 × 150VA
MCTA500 Series		2 × 250VA
MCTA625 Series		2 × 312.5VA
MCTA800 Series		2 × 400VA

Termination:

All leads Tri-Rated UL1015 style cable rated 600V /105°C VW-1

Primary leads double insulated with PVC sleeving for a minimum of 20mm.

Lead lengths ± 5mm approx. All leads ends tinned to 6mm

Pri/Sec leads O°



Toroidal Transformers

General Purpose



Temperature Class

Winding wire	: Class H (180°C)
Insulation system	: Class B (130°C)
Leadout insulation	: Class A (105°C)
Overall	: Class A (105°C)

Losses

Series	Iron Loss	Copper Loss	Efficiency	Temperature Rise	Ambient Rated
MCTA015 Series	0.25 Watts Approx.	2.5 Watts Approx.	84% Typical	27°C Approx.	40°C
MCTA030 Series	0.37 Watts Approx.	4.9 Watts Approx.	85% Typical	42°C Approx.	
MCTA050 Series	0.46 Watts Approx.	7.3 Watts Approx.	87% Typical	50°C Approx.	
MCTA060 Series	0.57 Watts Approx.	7.9 Watts Approx.	88% Typical	47°C Approx.	
MCTA080 Series	0.58 Watts Approx.	9.5 Watts Approx.	89% Typical	52°C Approx.	
MCTA100 Series	0.85 Watts Approx.	10.3 Watts Approx.	90% Typical		
MCTA1000 Series	4.49 Watts Approx.	39.1 Watts Approx.	96% Typical	60°C Approx.	
MCTA120 Series	0.98 Watts Approx.	11.4 Watts Approx.	91% Typical	54°C Approx.	
MCTA160 Series	1.12 Watts Approx.	13.9 Watts Approx.			
MCTA225 Series	1.49 Watts Approx.	16.9 Watts Approx.	92% Typical	56°C Approx.	
MCTA250 Series	1.62 Watts Approx.	17.4 Watts Approx.	93% Typical	55°C Approx.	
MCTA300 Series	1.8 Watts Approx.	19.8 Watts Approx.		56°C Approx.	
MCTA500 Series	2.76 Watts Approx.	24.4 Watts Approx.	95% Typical	53°C Approx.	
MCTA625 Series	3.17 Watts Approx.	29.4 Watts Approx.		59°C Approx.	
MCTA800 Series	4.16 Watts Approx.	35.3 Watts Approx.			

Approx. Dimensions/weight (mounting excluded)

Series	Diameter	Height	Weight
MCTA015 Series	64.5mm allow extra 5mm	30.5mm over leadout area	0.33kg
MCTA030 Series	73mm allow extra 5mm	31mm over leadout area	0.48kg
MCTA050 Series	81mm allow extra 5mm	34.5mm over leadout area	0.65kg
MCTA060 Series	91.5mm allow extra 5mm	39mm over leadout area	0.78kg
MCTA080 Series	87.5mm allow extra 5mm	39mm over leadout area	0.96kg
MCTA100 Series	91mm allow extra 5mm	46mm over leadout area	1.13kg
MCTA1000 Series	167mm allow extra 5mm	70.5mm over leadout area	7.48kg
MCTA120 Series	95mm allow extra 5mm	47mm over leadout area	1.32kg
MCTA160 Series	105mm allow extra 5mm	47mm over leadout area	1.64kg
MCTA225 Series	110.5mm allow extra 5mm	51mm over leadout area	2.2kg
MCTA250 Series	119.5mm allow extra 5mm	53.5mm over leadout area	2.38kg
MCTA300 Series	125.5mm allow extra 5mm	54mm over leadout area	2.83kg
MCTA500 Series	139mm allow extra 5mm	59mm over leadout area	4.3kg
MCTA625 Series	139mm allow extra 5mm	71mm over leadout area	5.2kg
MCTA800 Series	163mm allow extra 5mm	59mm over leadout area	6.34kg

Toroidal Transformers

General Purpose



MCTA015 Series

Descriptions	On Load Sec Voltage	Rated Amps per Sec (A)	Off Load Sec Voltage	Sec Flex Gauge	Sec Ω @ 20°C	Part Number
Transformer, 15VA, 2 × 6V	6	1.25	6.9	22AWG	0.46	MCTA015/06
Transformer, 15VA, 2 × 9V	9	0.83	10.4		1.08	MCTA015/09
Transformer, 15VA, 2 × 12V	12	0.63	13.9		1.76	MCTA015/12
Transformer, 15VA, 2 × 15V	15	0.5	17.3		2.78	MCTA015/15
Transformer, 15VA, 2 × 18V	18	0.42	20.9		4.21	MCTA015/18

DC Resistance : 2 × 79.1 Ω ±15% @ 20°C

Magnetising Current : 2.5mA approx. @ 230V 50Hz (5mA approx. @115V 50Hz)

Supplied with:

- 1 × 50mm Dished Mounting Plate
- 2 × 50mm Neoprene Mounting Pads
- 1 × M5 × 40mm Screw, Nut & Washer

MCTA030 Series

Descriptions	On Load Sec Voltage	Rated Amps per Sec (A)	Off Load Sec Voltage	Sec Flex Gauge	Sec Ω @ 20°C	Part Number
Transformer, 30VA, 2 × 6V	6	2.5	6.9	22AWG	0.21	MCTA030/06
Transformer, 30VA, 2 × 9V	9	1.67	10.3		0.44	MCTA030/09
Transformer, 30VA, 2 × 12V	12	1.25	13.9		0.9	MCTA030/12
Transformer, 30VA, 2 × 15V	15	1	17.4		1.44	MCTA030/15
Transformer, 30VA, 2 × 18V	18	0.83	20.9		2.13	MCTA030/18
Transformer, 30VA, 2 × 25V	25	0.6	28.8		3.74	MCTA030/25

DC Resistance : 2 × 42 Ω ±15% @ 20°C

Magnetising Current : 3.5mA approx. @ 230V 50Hz (7mA approx. @115V 50Hz)

Supplied with:

- 1 × 50mm Dished Mounting Plate
- 2 × 50mm Neoprene Mounting Pads
- 1 × M5 × 40mm Screw, Nut & Washer

Toroidal Transformers

General Purpose



MCTA050 Series

Descriptions	On Load Sec Voltage	Rated Amps per Sec (A)	Off Load Sec Voltage	Sec Flex Gauge	Sec Ω @ 20°C	Part Number
Transformer, 50VA, 2 × 6V	6	4.17	6.8	20AWG	0.11	MCTA050/06
Transformer, 50VA, 2 × 9V	9	2.78	10.2		0.23	MCTA050/09
Transformer, 50VA, 2 × 12V	12	2.08	13.6	22AWG	0.44	MCTA050/12
Transformer, 50VA, 2 × 15V	15	1.67	17		0.69	MCTA050/15
Transformer, 50VA, 2 × 18V	18	0.42	21.4		5.4	MCTA050/18
Transformer, 50VA, 2 × 25V	25	1	28.4		1.83	MCTA050/25
Transformer, 50VA, 2 × 55V	55	0.45	62.3		8.93	MCTA050/55

DC Resistance : 2 × 25.5 Ω ±15% @ 20°C

Magnetising Current : 4.5mA approx. @ 230V 50Hz (9mA approx. @115V 50Hz)

Supplied with:

- 1 × 50mm Dished Mounting Plate
- 2 × 50mm Neoprene Mounting Pads
- 1 × M5 × 40mm Screw, Nut & Washer

MCTA060 Series

Descriptions	On Load Sec Voltage	Rated Amps per Sec (A)	Off Load Sec Voltage	Sec Flex Gauge	Sec Ω @ 20°C	Part Number
Transformer, 60VA, 2 × 9V	9	3.33	10.1	20AWG	0.19	MCTA060/09
Transformer, 60VA, 2 × 12V	12	2.5	13.5	22AWG	0.36	MCTA060/12
Transformer, 60VA, 2 × 15V	15	2	16.9		0.51	MCTA060/15
Transformer, 60VA, 2 × 18V	18	1.67	20.2		0.77	MCTA060/18
Transformer, 60VA, 2 × 25V	25	1.2	28		1.36	MCTA060/25

DC Resistance : 2 × 19 Ω ±15% @ 20°C

Magnetising Current : 5.5mA approx. @ 230V 50Hz (11mA approx. @115V 50Hz)

Supplied with:

- 1 × 70mm Dished Mounting Plate
- 2 × 70mm Neoprene Mounting Pads
- 1 × M6 × 50mm Screw, Nut & Washer

Toroidal Transformers

General Purpose



MCTA080 Series

Descriptions	On Load Sec Voltage	Rated Amps per Sec (A)	Off Load Sec Voltage	Sec Flex Gauge	Sec Ω @ 20°C	Part Number
Transformer, 80VA, 2 × 9V	9	4.44	9	20 AWG	0.12	MCTA080/09
Transformer, 80VA, 2 × 12V	12	3.33	12		0.23	MCTA080/12
Transformer, 80VA, 2 × 15V	15	2.67	15	22 AWG	0.35	MCTA080/15
Transformer, 80VA, 2 × 18V	18	2.22	18		0.53	MCTA080/18
Transformer, 80VA, 2 × 25V	25	1.6	27.7		0.93	MCTA080/25
Transformer, 80VA, 2 × 55V	55	0.73	60.7		4.15	MCTA080/55

DC Resistance : 2 × 13.5 Ω ±15% @ 20°C

Magnetising Current : 6.5mA approx. @ 230V 50Hz (13mA approx. @115V 50Hz)

Supplied with:

- 1 × 70mm Dished Mounting Plate
- 2 × 70mm Neoprene Mounting Pads
- 1 × M6 × 50mm Screw, Nut & Washer

MCTA100 Series

Descriptions	On Load Sec Voltage	Rated Amps per Sec (A)	Off Load Sec Voltage	Sec Flex Gauge	Sec Ω @ 20°C	Part Number
Transformer, 100VA, 2 × 12V	12	4.17	13.1	20AWG	0.15	MCTA100/12
Transformer, 100VA, 2 × 15V	15	3.33	16.3		0.23	MCTA100/15
Transformer, 100VA, 2 × 18V	18	2.78	19.7		0.35	MCTA100/18
Transformer, 100VA, 2 × 25V	25	2	27.4		0.68	MCTA100/25

DC Resistance : 2 × 9.9 Ω ±15% @ 20°C

Magnetising Current : 7.5mA approx. @ 230V 50Hz (15mA approx. @115V 50Hz)

Supplied with:

- 1 × 70mm Dished Mounting Plate
- 2 × 70mm Neoprene Mounting Pads
- 1 × M6 × 50mm Screw, Nut & Washer

Toroidal Transformers

General Purpose



MCTA1000 Series

Descriptions	On Load Sec Voltage	Rated Amps per Sec (A)	Off Load Sec Voltage	Sec Flex Gauge	Sec Ω @ 20°C	Part Number
Transformer, 1,000VA, 2 × 40V	40	12.5	41.5	14AWG	0.06	MCTA1000/40
Transformer, 1,000VA, 2 × 50V	50	10	52	16AWG	0.1	MCTA1000/50
Transformer, 1,000VA, 2 × 55V	55	9.09	56.9		0.14	MCTA1000/55

DC Resistance : 2 × 0.39 Ω ±15% @ 20°C

Magnetising Current : 47mA approx. @ 230V 50Hz (94mA approx. @115V 50Hz)

Supplied with:

- 1 × 145mm Dished Mounting Plate
- 2 × 148mm Neoprene Mounting Pads
- 1 × M8 × 80mm Screw, Nut & Washer

MCTA120 Series

Descriptions	On Load Sec Voltage	Rated Amps per Sec (A)	Off Load Sec Voltage	Sec Flex Gauge	Sec Ω @ 20°C	Part Number
Transformer, 120VA, 2 × 12V	12	5	13.2	18AWG	0.12	MCTA120/12
Transformer, 120VA, 2 × 15V	15	4	16.4	20AWG	0.19	MCTA120/15
Transformer, 120VA, 2 × 18V	18	3.33	19.6		0.29	MCTA120/18
Transformer, 120VA, 2 × 25V	25	2.4	27.3		0.55	MCTA120/25
Transformer, 120VA, 2 × 55V	55	1.09	59.5		2.18	MCTA120/55

DC Resistance : 2 × 7.3 Ω ±15% @ 20°C

Magnetising Current : 9mA approx. @ 230V 50Hz (18mA approx. @115V 50Hz)

Supplied with:

- 1 × 70mm Dished Mounting Plate
- 2 × 70mm Neoprene Mounting Pads
- 1 × M6 × 50mm Screw, Nut & Washer

Toroidal Transformers

General Purpose



MCTA160 Series

Descriptions	On Load Sec Voltage	Rated Amps per Sec (A)	Off Load Sec Voltage	Sec Flex Gauge	Sec Ω @ 20°C	Part Number
Transformer, 160VA, 2 × 12V	12	6.67	13	18AWG	0.08	MCTA160/12
Transformer, 160VA, 2 × 15V	15	5.33	16.4		0.13	MCTA160/15
Transformer, 160VA, 2 × 18V	18	4.44	19.6		0.17	MCTA160/18
Transformer, 160VA, 2 × 25V	25	3.2	27	20AWG	0.33	MCTA160/25
Transformer, 160VA, 2 × 30V	30	2.67	32.5		0.5	MCTA160/30
Transformer, 160VA, 2 × 55V	55	1.45	59.5		1.59	MCTA160/55

DC Resistance : 2 × 5.5 Ω ±15% @ 20°C

Magnetising Current : 11mA approx. @ 230V 50Hz (22mA approx. @115V 50Hz)

Supplied with:

- 1 × 90mm Dished Mounting Plate
- 2 × 90mm Neoprene Mounting Pads
- 1 × M6 × 60mm Screw, Nut & Washer

MCTA225 Series

Descriptions	On Load Sec Voltage	Rated Amps per Sec (A)	Off Load Sec Voltage	Sec Flex Gauge	Sec Ω @ 20°C	Part Number
Transformer, 225VA, 2 × 12V	12	9.38	12.7	16AWG	0.05	MCTA225/12
Transformer, 225VA, 2 × 15V	15	7.5	16.1		0.08	MCTA225/15
Transformer, 225VA, 2 × 18V	18	6.25	19.2		0.12	MCTA225/18
Transformer, 225VA, 2 × 25V	25	4.5	26.7	20AWG	0.21	MCTA225/25
Transformer, 225VA, 2 × 30V	30	3.75	32.2		0.32	MCTA225/30
Transformer, 225VA, 2 × 55V	55	2.05	58.7		1	MCTA225/55

DC Resistance : 2 × 3.2 Ω ±15% @ 20°C

Magnetising Current : 14.5mA approx. @ 230V 50Hz (29mA approx. @115V 50Hz)

Supplied with:

- 1 × 90mm Dished Mounting Plate
- 2 × 90mm Neoprene Mounting Pads
- 1 × M6 × 60mm Screw, Nut & Washer

Toroidal Transformers

General Purpose



MCTA250 Series

Descriptions	On Load Sec Voltage	Rated Amps per Sec (A)	Off Load Sec Voltage	Sec Flex Gauge	Sec Ω @ 20°C	Part Number
Transformer, 250VA, 2 × 12V	12	10.42	12.8	16AWG	0.04	MCTA250/12
Transformer, 250VA, 2 × 18V	18	6.94	19.2		0.09	MCTA250/18
Transformer, 250VA, 2 × 25V	25	5	26.7		0.16	MCTA250/25
Transformer, 250VA, 2 × 30V	30	4.17	31.9	20AWG	0.24	MCTA250/30
Transformer, 250VA, 2 × 35V	35	3.57	37.2		0.32	MCTA250/35
Transformer, 250VA, 2 × 40V	40	3.13	42.5		0.4	MCTA250/40
Transformer, 250VA, 2 × 45V	45	2.78	48.1		0.51	MCTA250/45
Transformer, 250VA, 2 × 50V	50	2.5	53.3		0.63	MCTA250/50

DC Resistance : 2 × 3.05 Ω ±15% @ 20°C

Magnetising Current : 17mA approx. @ 230V 50Hz (34mA approx. @115V 50Hz)

Supplied with:

- 1 × 90mm Dished Mounting Plate
- 2 × 90mm Neoprene Mounting Pads
- 1 × M6 × 60mm Screw, Nut & Washer

MCTA300 Series

Descriptions	On Load Sec Voltage	Rated Amps per Sec (A)	Off Load Sec Voltage	Sec Flex Gauge	Sec Ω @ 20°C	Part Number
Transformer, 300VA, 2 × 25V	25	6	26.6	18AWG	0.14	MCTA300/25
Transformer, 300VA, 2 × 30V	30	5	31.9	20AWG	0.19	MCTA300/30
Transformer, 300VA, 2 × 35V	35	4.29	37.1		0.28	MCTA300/35
Transformer, 300VA, 2 × 55V	55	2.73	58.5		0.7	MCTA300/55

DC Resistance : 2 × 2.13 Ω ±15% @ 20°C

Magnetising Current : 18mA approx. @ 230V 50Hz (36mA approx. @115V 50Hz)

Supplied with:

- 1 × 90mm Dished Mounting Plate
- 2 × 90mm Neoprene Mounting Pads
- 1 × M6 × 60mm Screw, Nut & Washer

Toroidal Transformers

General Purpose



MCTA500 Series

Descriptions	On Load Sec Voltage	Rated Amps per Sec (A)	Off Load Sec Voltage	Sec Flex Gauge	Sec Ω @ 20°C	Part Number
Transformer, 500VA, 2 × 25V	25	10	26.3	16AWG	0.06	MCTA500/25
Transformer, 500VA, 2 × 30V	30	8.33	31.4		0.09	MCTA500/30
Transformer, 500VA, 2 × 35V	35	7.14	36.6	18AWG	0.12	MCTA500/35
Transformer, 500VA, 2 × 45V	45	5.56	47		0.19	MCTA500/45
Transformer, 500VA, 2 × 50V	50	5	52.1		0.24	MCTA500/50
Transformer, 500VA, 2 × 55V	55	4.55	57.7		0.3	MCTA500/55

DC Resistance : 2 × 1.12 Ω ±15% @ 20°C

Magnetising Current : 28mA approx. @ 230V 50Hz (56mA approx. @115V 50Hz)

Supplied with:

1 × 112mm Dished Mounting Plate
2 × 110mm Neoprene Mounting Pads
1 × M8 × 75mm Screw, Nut & Washer

MCTA625 Series

Descriptions	On Load Sec Voltage	Rated Amps per Sec (A)	Off Load Sec Voltage	Sec Flex Gauge	Sec Ω @ 20°C	Part Number
Transformer, 625VA, 2 × 40V	40	7.81	41.8	16AWG	0.12	MCTA625/40

DC Resistance : 2 × 0.79 Ω ±15% @ 20°C

Magnetising Current : 33mA approx. @ 230V 50Hz (66mA approx. @115V 50Hz)

Supplied with:

1 × 112mm Dished Mounting Plate
2 × 110mm Neoprene Mounting Pads
1 × M8 × 80mm Screw, Nut & Washer

Toroidal Transformers

General Purpose



MCTA800 Series

Descriptions	On Load Sec Voltage	Rated Amps per Sec (A)	Off Load Sec Voltage	Sec Flex Gauge	Sec Ω @ 20°C	Part Number
Transformer, 800VA, 2 × 55V	55	7.27	57.5	18AWG	0.17	MCTA800/55

DC Resistance : 2 × 0.56 Ω ±15% @ 20°C

Magnetising Current : 43mA approx. @ 230V 50Hz (86mA approx. @115V 50Hz)

Supplied with:

- 1 × 145mm Dished Mounting Plate
- 2 × 148mm Neoprene Mounting Pads
- 1 × M8 × 70mm Screw, Nut & Washer

Standards

Designed and manufactured in accordance with : EN61558-1 / EN61558-1/A1 / EN61558-2-4 or EN61558-2-6

UL recognised under family approval E115159 to UL1411, UL60601-1, UL195059

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