

# FE Series - (Encapsulated)

## Single Primary - Toroidal Transformers



### Features:

- Very high quality construction.
- High efficiency and smaller size compared to conventional EI transformers.
- Extremely low radiated magnetic field, suitable for sensitive electronics.
- Double insulated primary leads.
- Flexible leadouts can be trimmed to any length without the need of enamel removal.
- Fully resin encapsulated in case.
- Designed, tested and manufactured in accordance with EN60742, EN60065 and EN60950.
- 100% electrical and flash tested.

### Specifications

VA	Regulation % typical	Iron Loss Watts	Copper Loss Watts	Temperature rise (°C)	Efficiency % typical	Diameter	Height	Weight (kg)	Fixing Hole Diameter
15	16	0.24	2.9	2.9	83%	62.4	34.5	0.34	5.1
30	12	0.39	4.5	4.5	86%	81.5	39.1	0.62	
50	11	0.52	6.1	6.1	88%	87.3	42	0.84	
80	10	0.64	8.7	8.7	90%	96.7	44	1.12	6.1
120	7	0.89	9.6	9.6	92%	104.2	52.1	1.62	
160		1.23	11.9	11.9		115	53.2	2.05	
225	6	1.51	14.9	14.9	93%	25.4	52.4	2.5	
300	5	1.89	17	17	94%		65.3	3.19	8.2
500		2.76	24.6	24.6	95%	147.1	64.7	4.57	

Dimensions : Millimetres

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Maximum ambient temperature 40°C.  
Overall temperature rating Class A (105°C).  
Secondary voltage tolerance  $\pm 1\%$  at nominal input and full resistive load.  
All leads 150mm long, stripped and tinned for last 6.0mm.  
No mounting screw supplied.

Note: Under no circumstances should both ends of any fixing bolt be allowed to come simultaneously in contact with metal chassis or framework so that an electrical path is formed through the bolt in the centre of the transformer via the external frame work. This would constitute a shorted turn and would cause irreparable damage.

### Specification Table

Specifications	Load (VA)
0-6V, 0-6V @ 1.25A	15
0-9V, 0-9V @ 0.83A	
0-12V, 0-12V @ 0.63A	
0-15V, 0-15V @ 0.5A	
0-18V, 0-18V @ 0.42A	
0-25V, 0-25V @ 0.3A	
0-6V, 0-6V @ 2.5A	30
0-9V, 0-9V @ 1.67A	
0-15V, 0-15V @ 1A	
0-18V, 0-18V @ 0.83A	
0-25V, 0-25V @ 0.6A	
0-9V, 0-9V @ 2.78A	50
0-12V, 0-12V @ 2.08A	
0-15V, 0-15V @ 1.67A	
0-18V, 0-18V @ 1.39A	
0-25V, 0-25V @ 1A	
0-9V, 0-9V @ 4.44A	80
0-12V, 0-12V @ 3.33A	
0-18V, 0-18V @ 2.22A	
0-25V, 0-25V @ 1.6A	
0-12V, 0-12V @ 5A	120
0-15V, 0-15V @ 4A	
0-18V, 0-18V @ 3.33A	
0-25V, 0-25V @ 2.4A	

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Specifications	Load (VA)
0-18V, 0-18V @ 4.44A	160
0-25V, 0-25V @ 3.2A	
0-30V, 0-30V @ 2.67A	
0-12V, 0-12V @ 9.38A	
0-15V, 0-15V @ 7.5A	225
0-18V, 0-18V @ 6.25A	
0-25V, 0-25V @ 4.5A	
0-30V, 0-30V @ 3.75A	
0-25V, 0-25V @ 6A	300
0-30V, 0-30V @ 5A	
0-35V, 0-35V @ 4.29A	
0-25V, 0-25V @ 10A	500
0-35V, 0-35V @ 7.14A	
0-40V, 0-40V @ 6.25A	

### Part Number Table

Description	Part Number
TRANSFORMER, 15VA, 2 X 6V	MCFE015/06
TRANSFORMER, 15VA, 2 X 9V	MCFE015/09
TRANSFORMER, 15VA, 2 X 12V	MCFE015/12
TRANSFORMER, 15VA, 2 X 15V	MCFE015/15
TRANSFORMER, 15VA, 2 X 18V	MCFE015/18
TRANSFORMER, 15VA, 2 X 25V	MCFE015/25
TRANSFORMER, 30VA, 2 X 6V	MCFE030/06
TRANSFORMER, 30VA, 2 X 9V	MCFE030/09
TRANSFORMER, 30VA, 2 X 15V	MCFE030/15
TRANSFORMER, 30VA, 2 X 18V	MCFE030/18
TRANSFORMER, 30VA, 2 X 25V	MCFE030/25
TRANSFORMER, 50VA, 2 X 9V	MCFE050/09
TRANSFORMER, 50VA, 2 X 12V	MCFE050/12
TRANSFORMER, 50VA, 2 X 15V	MCFE050/15
TRANSFORMER, 50VA, 2 X 18V	MCFE050/18

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### Part Number Table

Description	Part Number
TRANSFORMER, 50VA, 2 X 25V	MCFE050/25
TRANSFORMER, 80VA, 2 X 9V	MCFE080/09
TRANSFORMER, 80VA, 2 X 12V	MCFE080/12
TRANSFORMER, 80VA, 2 X 18V	MCFE080/18
TRANSFORMER, 80VA, 2 X 25V	MCFE080/25
TRANSFORMER, 120VA, 2 X 12V	MCFE120/12
TRANSFORMER, 120VA, 2 X 15V	MCFE120/15
TRANSFORMER, 120VA, 2 X 18V	MCFE120/18
TRANSFORMER, 120VA, 2 X 25V	MCFE120/25
TRANSFORMER, 160VA, 2 X 18V	MCFE160/18
TRANSFORMER, 160VA, 2 X 25V	MCFE160/25
TRANSFORMER, 160VA, 2 X 30V	MCFE160/30
TRANSFORMER, 225VA, 2 X 12V	MCFE225/12
TRANSFORMER, 225VA, 2 X 15V	MCFE225/15
TRANSFORMER, 225VA, 2 X 18V	MCFE225/18
TRANSFORMER, 225VA, 2 X 25V	MCFE225/25
TRANSFORMER, 225VA, 2 X 30V	MCFE225/30
TRANSFORMER, 300VA, 2 X 25V	MCFE300/25
TRANSFORMER, 300VA, 2 X 30V	MCFE300/30
TRANSFORMER, 300VA, 2 X 35V	MCFE300/35
TRANSFORMER, 500VA, 2 X 25V	MCFE500/25
TRANSFORMER, 500VA, 2 X 35V	MCFE500/35
TRANSFORMER, 500VA, 2 X 40V	MCFE500/40

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