



# TM - TT

## SINGLE THREE-PHASE TRANSFORMERS



### TRANSFORMERS (TM-TT)

Complete line of single and 3phase power transformers specifically designed to supply Axor Servodrives (all models and types). Power ranges from 100 to 8000 VA.

#### STANDARD FEATURES

- ✓ TM= single phase, range 100÷1000 VA
- ✓ TT= three phase, range 500÷8000 VA
- ✓ In accordance with CEI EN 60742 - VDE 0551

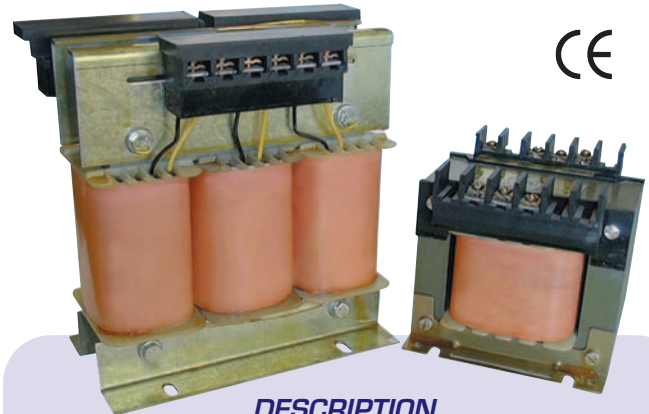
#### SPECIFICATIONS

- ✓ Insulation class "F" type (155°C/max 280°F)
- ✓ Protection category IPOO
- ✓ Operating temperature 0-40°C (32÷104°F)
- ✓ Operating frequency 50÷60 Hz
- ✓ Testing voltage 2500 V
- ✓ Operating altitude 1000 m above sea level

#### POWER RANGE

MODEL 60	POWER (VA)	V I° VAc	V II° VAc	DRIVER'S COUPLING
TM 100/60	100	0 220	0 24 44	MS 60
TM 250/60	250			MTS 60
TM 500/60	500			MCS 60
TM 1000/60	1000			MCS Plus 60
TT 500/60	500	380	24 44 (△)	MCB 60
TT 800/60	800			MCB Plus 60
TT 1500/60	1500			B17A 60
TT 2000/60	2000			
TT 3000/60	3000			
TT 4000/60	4000			

MODEL 200	POWER (VA)	V I° VAc	V II° VAc	DRIVER'S COUPLING
TT 500/200	500	380	145 (△)	MS 200
TT 800/200	800			MTS 200
TT 1500/200	1500			MCS Plus 200
TT 2000/200	2000			MCB Plus 200
TT 3000/200	3000			B17C 200
TT 4000/200	4000			B17BOXC200
TT 5000/200	5000			
TT 6000/200	6000			
TT 7000/200	7000			
TT 8000/200	8000			



#### DESCRIPTION

The TM-TT transformer series is a standard heavy duty power transformer line to be coupled with our drives and net filters (FRM-FRT type). They are always transformers, without center tap on the secondary, **auto transformers are not allowed.**

For correct sizing and electrical connections see the specific servodrive's service manual.

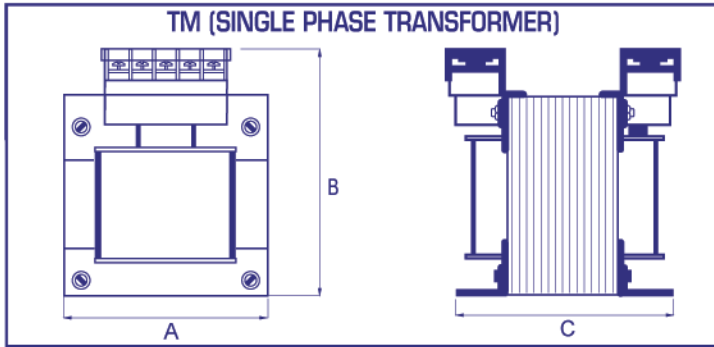
MODEL 140	POWER (VA)	V I° VAc	V II° VAc	DRIVER'S COUPLING
TM 500/140	500	0 220	0 70 95	MS 140
TM 1000/140	1000			MTS 140
TT 500/140	500	380	70 95 (△)	MCS 110*
TT 800/140	800			MCS Plus 140
TT 1500/140	1500			MCB Plus 140
TT 2000/140	2000			B17B 140
TT 3000/140	3000			
TT 4000/140	4000			
TT 5000/140	5000			
TT 6000/140	6000			
TT 7000/140	7000			

MODEL 300	POWER (VA)	V I° VAc	V II° VAc	DRIVER'S COUPLING
TT 500/300	500	380	220 (△)	B17D 300
TT 800/300	800			B17BOXD300
TT 1500/300	1500			
TT 2000/300	2000			
TT 3000/300	3000			
TT 4000/300	4000			
TT 5000/300	5000			
TT 6000/300	6000			
TT 7000/300	7000			
TT 8000/300	8000			

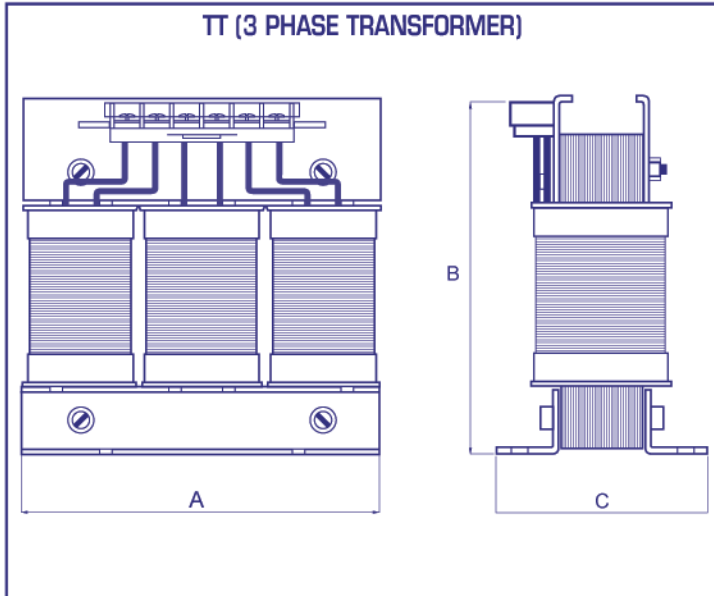
\*: MCS 110 to be coupled with single or 3phase 70 VAc V II°

## MECHANICAL DIMENSIONS

To obtain the dimensions in INCHES, divide mm by 25.4 Ex:  $85 \text{ mm} = 3.34 \text{ Inches}$   
25.4



TYPE (all tensions)	DIMENSIONS mm			WEIGHT kg	F1 MAIN FUSES (T-TYPE)*	MAIN FILTER COUPLING (FOR ALL DRIVES)
	A	B	C			
TM 100	85	87	85	1.94	1A	FRM250-03C01FF-SH FRM250-03C01FF-TM
TM 250	110	108	94	4.1	2A	
TM 500	120	121	116	5.95	4A	
TM 1000	150	148	130	10.5	6A	FRM250-06C01FF-TM FRM250-06C02FF-SH



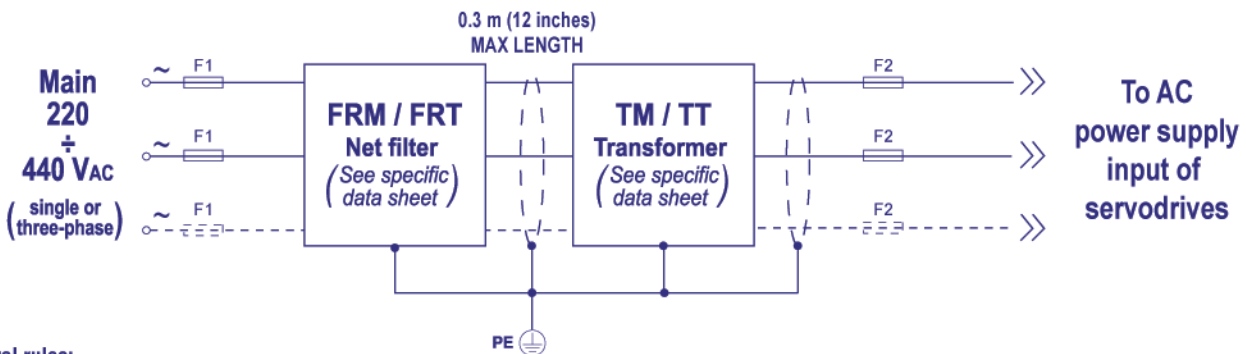
TYPE (all tensions)	DIMENSIONS mm			WEIGHT kg	F1 MAIN FUSES (T-TYPE)*	MAIN FILTER COUPLING (FOR ALL DRIVES)
	A	B	C			
TT 500	180	190	100	8	1A	FRT440-03C01FF-SH*
TT 800	180	195	110	9.8	2A	FRT440-03C01FF-TM*
TT 1500	240	235	130	17.5	4A	FRT440-04C03TW-SH
TT 2000	240	240	140	20	4A	FRT440-04C03TW-SH
TT 3000	300	290	130	27	6A	FRT440-08C03TW-SH
TT 4000	300	290	140	33	8A	FRT440-08C04TT-TM
TT 5000	300	290	150	39	10A	FRT440-12C04TT-TM
TT 6000	300	300	160	43	12A	
TT 7000	300	300	170	46	16A	FRT440-16C05TT-TM
TT 8000	300	300	170	47.5	16A	FRT440-16C05TW-SH

\*: F1 main fuses: T=time lag

\*: Not for use with B17 and B17 Box servodrives

## ELECTRICAL CONNECTIONS

The wiring technique is essential for radio emitted disturbance soppression results!



### General rules:

- 1) The transformers must be placed between FRM/FRT net filter and servodrive (power supply AC input).
- 2) The primary voltage  $V I^{\circ}$  depends on what is available locally (Axor's standard is 220 Vac for TM type and 380 Vac for TT type).
- 3) The secondary voltage  $V II^{\circ}$  depends on the type of servodrives (see front page).
- 4) The size or power is based upon the sum of power from each motor driven (ex:  $POWER (Va) = \text{power absorbed motor } n^{\circ}1 + P.A.M n^{\circ}2 + \dots$ )  
in multi axis applications, the transformer's power can usually be downgraded by 30%.

### ORDERING CODE

Example:

**NAME:** line of transformer  
TM= single phase  
TT= 3 phase

**SIZE:** Nominal Power  
ex: 100 = 100 VA (see reverse)

**TM** - **100** / **60** - **000**

**NOMINAL VOLTAGE:** output nominal voltage  
ex 60 = 0 - 24 - 44 VAC  
to be coupled with drives "60" type

**CUSTOMIZED VERSION:**  
AXOR's internal use