

# Fronius TransSteel 2700c MV Power Requirements

## TSt 2700c MV

Mains voltage ( $U_1$ )	3 x 200 V
Max. effective primary current ( $I_{1\text{eff}}$ )	13.3 A
Max. primary current ( $I_{1\text{max}}$ )	25.7 A
Mains fuse protection	25 A slow-blow
Mains voltage ( $U_1$ )	3 x 230 V
Max. effective primary current ( $I_{1\text{eff}}$ )	11.6 A
Max. primary current ( $I_{1\text{max}}$ )	22.1 A
Mains fuse protection	25 A slow-blow
Mains voltage ( $U_1$ )	3 x 380 V
Max. effective primary current ( $I_{1\text{eff}}$ )	7 A
Max. primary current ( $I_{1\text{max}}$ )	13.1 A
Mains fuse protection	15 A slow-blow
Apparent power at 400 V AC	8.66 kVA
Mains voltage ( $U_1$ )	3 x 400 V
Max. effective primary current ( $I_{1\text{eff}}$ )	6.6 A
Max. primary current ( $I_{1\text{max}}$ )	12.5 A
Mains fuse protection	15 A slow-blow
Apparent power at 400 V AC	8.66 kVA
Mains voltage ( $U_1$ )	3 x 460 V
Max. effective primary current ( $I_{1\text{eff}}$ )	5.8 A
Max. primary current ( $I_{1\text{max}}$ )	10.8 A

Mains fuse protection	15 A slow-blow		
Apparent power at 400 V AC	8.66 kVA		
Mains voltage (U <sub>1</sub> )	1 x 230 V		
Max. effective primary current (I <sub>1eff</sub> )	16.0 A		
Max. primary current (I <sub>1max</sub> )	22.3 A		
Mains fuse protection	16 A slow-blow		
Apparent power	5.13 kVA		
Mains voltage (U <sub>1</sub> )	1 x 240 V		
Max. effective primary current (I <sub>1eff</sub> )	15.0 A		
Max. primary current (I <sub>1max</sub> )	23.9 A		
Mains fuse protection	15 A slow-blow		
Apparent power	5.74 kVA		
Mains voltage (U <sub>1</sub> )	1 x 240 V		
Max. effective primary current (I <sub>1eff</sub> )	18.1 A		
Max. primary current (I <sub>1max</sub> )	24.9 A		
Mains fuse protection	20 A slow-blow		
Apparent power	5,98 kVA		
Mains voltage (U <sub>1</sub> )	1 x 240 V		
Max. effective primary current (I <sub>1eff</sub> )	18.1 A		
Max. primary current (I <sub>1max</sub> )	28.1 A		
Mains fuse protection	30 A slow-blow		
Apparent power	6.74 kVA		
Mains voltage tolerance	-10 % /+ 15 %		
Mains frequency	50 / 60 Hz		
Max. permitted mains impedance Z <sub>max</sub> on PCC <sup>1)</sup>	142 mOhm		
Welding current range (I <sub>2</sub> )			
MIG/MAG	10 - 270 A		
Rod electrode	10 - 270 A		
Welding current range (I <sub>2</sub> ) in single-phase operation			
MIG/MAG	10 - 220 A		
Rod electrode	10 - 180 A		
Welding current at 10 min / 40 °C (104 °F)	30 %	60 %	100 %
U <sub>1</sub> = 200 - 230 V:	270 A	200 A	170 A
U <sub>1</sub> = 380 - 460 V:	270 A	200 A	170 A

Welding current in single-phase operation at 10 min / 40 °C (104 °F) U <sub>1</sub> = 230 V, Fuse 16 A	15 % <sup>2)</sup> 180 A	100 % 145 A
Welding current in single-phase operation at 10 min / 40 °C (104 °F) U <sub>1</sub> = 240 V, Fuse 15 A	8 % <sup>2)</sup> 180 A	100 % 145 A
Welding current in single-phase operation at 10 min / 40 °C (104 °F) U <sub>1</sub> = 240 V, Fuse 20 A	11 % <sup>2)</sup> 200 A	100 % 160 A
Welding current in single-phase operation at 10 min / 40 °C (104 °F) U <sub>1</sub> = 240 V, Fuse 30 A	40 % <sup>2)</sup> 220 A	100 % 160 A
Output voltage range according to standard char- acteristic (U <sub>2</sub> ) MIG/MAG Rod electrode		14,5 - 34,3 V 20.4 - 34.3 V
Output voltage range according to standard char- acteristic (U <sub>2</sub> ) in single-phase operation MIG/MAG Rod electrode		14.5 - 24 V 20.4 - 27.2 V
Open circuit voltage (U <sub>0</sub> peak / U <sub>0</sub> r.m.s)		42 V
Protection class		IP 23
Insulation class		B
Overvoltage category		III
Pollution level according to IEC60664		3
EMC device class		A <sup>3)</sup>
Safety symbols		S, CE, CSA
Dimensions l x w x h	687 x 276 x 445 mm 27.1 x 10.9 x 17.5 in.	
Weight		30 kg 66.1 lb.
Max. shielding gas pressure		7 bar 101.49 psi
Wire feed speed		1 - 25 m/min 40 - 980 ipm
Wire drive		4-roller drive
Wire diameter		0.8 - 1.6 mm 0.03 - 0.06 in.
Wirespool diameter		max. 300 mm max. 11.81 in.
Wirespool weight		max. 20.0 kg max. 44.1 lb.
Idle state power consumption at 400 V		38.5 W
Power source efficiency at 270 A / 30.8 V		89 %

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- 1) Interface to a 230 / 400 V, 50 Hz public grid
  - 2) Detailed information concerning the duty cycle in single-phase operation is located in chapter „Installation and commissioning“, section „single-phase operation“
  - 3) A device in emissions class A is not intended for use in residential areas in which the electrical power is supplied via a public low-voltage grid. The electromagnetic compatibility may be influenced by conducted or radiated radio frequencies.
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