

5. TROUBLESHOOTING

Problem	Cause
The main switch indicator will not light up	No electricity connected to the machine • Check the mains supply fuses. • Check the mains cable and plug.
Poor welding result	Several factors affect the welding quality. • Check that the earthing clamp is firmly attached, the point of attachment is clean and that the cable and its connectors are intact. • Check that the shielding gas flows out of the torch tip. • Check that the electric voltage is not irregular or too low/high.
Overheating indicator lit	The device has overheated. • Ensure that cooling air has unrestricted flow. • If the machine's duty cycle has been exceeded, wait for indicator to turn off. • Too low or high supply voltage.

If the machine's malfunction is not eliminated with these measures, contact KEMPPI service.

6. TECHNICAL DATA

Minarc 220			
Connection voltage	3 ~, 50/60 Hz		400 V –20 %... +15 %
Rated power at max. current	MMA		8.2 kVA (220 A/28.8 V)
	TIG		7.2 kVA (220 A/18,8 V)
Supply current, I_{1max}	MMA		12 A (220 A/28.8 V)
	TIG		8 A (220 A/18.8 V)
Supply current, I_{1eff}	MMA		8 A (150 A/26.0 V)
	TIG		6 A (160 A/16.4 V)
Connection cable		H07RN-F	4G1.5 (5 m)
Fuse (delayed)			10 A
Load capacity 40° C	MMA	35 % ED	220 A/28.8 V
		100 % ED	150 A/26.0 V

	TIG	35 % ED	220 A/18.8 V
		100 % ED	160 A/16.4 V
Welding range	MMA		10 A/20.4 V – 220 A/28.8 V
	TIG		10 A/10.4 V – 220 A/18.8 V
Open circuit voltage	MMA		85 V (30 V in the VRD version)
	TIG		60 V (30 V in the VRD version)
Idle power	MMA		40 W
Power factor at 100% ED	TIG		0.92
	MMA		0.91
Efficiency at 100% ED	TIG		0.80
	MMA		0.86
Stick electrodes	MMA		ø 1.5–5.0 mm
External dimensions (L × W × H)			400 × 180 × 340
Weight			9.2 kg (10.2 kg with connector cable)
Temperature class			H (B)
Degree of protection			IP23S
EMC class			A
Minimum short circuit power S_{SC} of supply network*			1.6 MVA
Operating temperature range			-20° C ... +40° C
Storage temperature range			-40° C ... +60° C
Recommended generator			> 15 kVA

* See paragraph 2.3.