

MasterTig MLS™ Technical Data

MasterTig MLS™		2000	3000	4000
Connection voltage	50/60 Hz	1~, 230 V -10 % ... +10 %	3~, 400 V -15 % ... +20 %	3~, 400 V -15 % ... +20 %
Rated power at max current	TIG	6.5 kVA	8.4 kVA	13.8 kVA
	MMA	7.1 kVA	9.4 kVA	15 kVA
Connection cable	HO7RN-F	3G2.5 (3.3 m)	4G1.5 (5 m)	4G2.5 (5 m)
Fuse, delayed		16 A	10 A	16 A
Load capacity 40° C	30 % ED TIG	200 A/18 V	300 A/22 V	400 A/26 V
	60 % ED TIG	150 A/16 V	230 A/19.2 V	320 A/22.8 V
	100 % ED TIG	130 A/15.2 V	200 A/18 V	270 A/20.8 V
	35 % ED MMA	160 A/26.4 V	-	-
	40 % ED MMA	-	250 A/30 V	350 A/34 V
Welding range	60 % ED MMA	140 A/25.6 V	205 A/28.2 V	285 A/31.4 V
	100 % ED MMA	120 A/24.8 V	160 A/26.4	220 A/28.8 V
	TIG	5 A/10 V–200 A/18 V	5 A/10 V–300 A/22 V	5 A/10 V–400 A/26 V
	MMA	10 A/20.5 V–160 A/26.4 V		
Open circuit voltage		80 V DC	80 V DC	80 V DC
Power factor at max current		0.75	0.95	0.95
Efficiency at maximum current		0.80	0.86	0.86
Stick electrode	ø mm	1.5...4.0	1.5...5.0	1.5...6.0
External dimensions	L x W x H, mm	410 x 180 x 390	500 x 180 x 390	500 x 180 x 390
Weight	kg	15	22	23

Cooling units		MasterCool 10
Connection voltage	50/60 Hz	400 V (-15...+20 %) 230 V (-15...+10 %)
Rated power	100 % ED	250 W
External dimensions	L x W x H, mm	500 x 180 x 260
Weight	kg	10

Power Sources	
MasterTig 2000 MLS™	6112200
MasterTig 3000 MLS™	6114300
MasterTig 4000 MLS™	6114400
Cooling units	
MasterCool 10	6122350
Control panels	
MTL	6116000
MTX	6116005
MTM	6116010
MTZ	6116015
Transport units	
T100	6185250
T130	6185222
T200	6185258

Remote control units	
R 10, 5 m	6185409
R 10, 10 m	618540901
R 11F foot pedal	6185407
R 11T, wireless	6185442
Adapters	
For air-cooled TTK torches	3148720
For liquid-cooled TTK torches	3148720 + 3148710
Cables	
Remote control cable, 10 m (R 10)	6185481
Earthing and welding cables when requested	



The Joy of Welding
Around the World



www.kemppi.com

MasterTig™

DC equipment for industrial applications



MLS™ 2000, 3000, 4000

KEMPPPI
The Joy of Welding



AD2020EN
N02020

Precise and refined welding quality for workshop or site use



MasterTig™ MLS 2000, MLS 3000, MLS 4000



In brief

- Compact size ensures effortless mobility
- Excellent ignition quality, even with long torches
- Quick pulse function increases welding speed and quality
- Suitable for mains or power generator use
- DC TIG and MMA power output



Applications

- Chemical and process industry
- Thin sheet metal fabrication workshops
- Installation and set-up
- Repair and maintenance
- Industrial hire business

MasterTig MLS is a dedicated DC Tig welding range offering a choice of function control panels. Compact, lightweight, but sturdy construction has made MasterTig MLS a favourite for professional DC Tig welding the world over.

Choose from three power class models

MasterTig MLS range includes three power class model options: 200A (230V, 1ph), 300A and 400A (3ph 400V) output current. Each model delivers 30% duty cycle at maximum output current in 40°C ambient temperatures, so you can be sure to have the necessary TIG welding performance even when the heat is on.

Control panel choice suits different needs

MasterTig MLS DC range offers a choice of four control panels to suit your working environment.



■ **MTL control panel** contains all the basic features required for DC TIG and MMA welding. Examples of MTL panel functions:

- Precise HF or contact ignition selection for TIG welding
- Pre-gas and post-gas control
- Torch operating mode selection (2T/4T)
- Remote control and setup options
- Welding current upslope and downslope control
- MMA Ignition pulse control and gas test
- MMA Arc dynamics control.

■ **MTX control panel** contains all MTL panel features and in addition, is equipped with pulse, quick pulse, Spot weld and 4T LOG functions.

■ **MTM control panel** contains all MTX panel features with the exception of the 4T LOG functions, plus memory channel and Minilog function.

■ **MTZ control panel** contains all MTM panel features with the exception of Memory channel.

A cool head

MasterTig models can be equipped with the optional MasterCool units. Incorporating new HydroCool technology, the units compliment the compact and lightweight features of the MasterTig MLS series, providing efficient cooling for liquid cooled TIG torches.

Voltage reduction device (VRD) function

Specific welding environments demand reductions in open-circuit voltage. With MasterTig MLS additional voltage reduction is made possible with a purpose-built VRD accessory.

TIG welding torches

Kemppi TTC welding torch range is designed for use with the Mastertig MLS equipment range. Wide ranging model options include a variety lengths, torch head sizes and innovative design.

Remote current control

MasterTig MLS offers a range of remote control devices including, hand held, on-torch, foot operated and also wireless remote control for MMA welding.



MasterTig MLS™ Ordering information

Power Sources		Remote control units	
MasterTig 2000 MLS™	6112200	R 10, 5 m	6185409
MasterTig 3000 MLS™	6114300	R 10, 10 m	618540901
MasterTig 4000 MLS™	6114400	R 11F foot pedal	6185407
		R 11T, wireless	6185442
Cooling units		Adapters	
MasterCool 10	6122350	For air-cooled TTK torches	3148720
		For liquid-cooled TTK torches	3148720 + 3148710
Control panels		Cables	
MTL	6116000	Remote control cable, 10 m (R 10)	6185481
MTX	6116005	Earthing and welding cables when requested	
MTM	6116010		
MTZ	6116015		
Transport units			
T100	6185250		
T130	6185222		
T200	6185258		