



PMI 50 TL / Basic SP Factsheet

Plasma Multi Inverter Touch Line and Basic Single Phase CCC

Multifunctional device - The ideal solution for welding thin sheets with a thickness of up to ~ 1mm.

TECHNICAL DETAILS

Due to the exact control of the welding current and the electronic plasma gas control, foils, sieves and thin-walled components, from 0.5A, can be welded manually and automatically with the microplasma process.

PMI 50TL PMI 50TL Basic SP 3x400V ±15% 50/60Hz 230V ±15% 50/60Hz 3 Phase 1 Phase 4x16A CCE plug, 2.5mm² Schuko/Guardy plug 2.5mm²

OPTIONS

PGR-05: electr. Plasma gas regulation, range 0.1 ÷ 5 l / min

SGR-20: electr. Shielding gas control, range 0.5 ÷ 20 l / min

Applicable Welding Methods

- PLASMA Seam Welding
- PLASMA Brazing
- PLASMA Coating

Range of suitable material thickness (Plasma seam welding)

~ 0.1 – 1 mm

Operating modes

DC

Supply Voltage

3 × 400 V ±15 % 50/60Hz

Phase

3 Phase

Power connection4 × 16 A CCE plug, 2.5 mm²**Max. welding current at 35 % PMI50; duty cycle (40 °C)**

50A

Max. welding current at 100 % duty cycle (40 °C)

30A

Adjustment range welding current

0.5 – 50 A

Max. pilot current at 35 % duty cycle (40 °C)

15A

Max. pilot current at 100 % duty cycle (40 °C)

15A

Adjustment range pilot current

0.5 – 15 A

Adjustment range TIG mode

0.5 – 50 A

Cooling

Liquid

Degree of protection

IP 21 S

Length

620mm

Width

300mm

Height

555mm

Weight

47kg

Features

- Power source with HF-ignition
- Pilotinverter with HF-ignition
- USB interface
- Ethernet interface
- Integrated welding program memory
- Integrated cooling
- Integrated monitoring / gaging of cooling medium
- Integrated electronic gas regulation (PGR)
- Integrated automation interface
- Software for external controlling via computer (diagnostics, parameter setup, documentation)
- Flowmeter plasma gas
- Flowmeter shielding gas
- Remote Control RC-S
- Foot control of the current
- Touch Screen 5,4"

Automation Interface "Tiny"

- Included

Digital Inputs

2 × 24 V

Digital Outputs

3 × 24 V

Analog Inputs

2 × 0 – 10 V

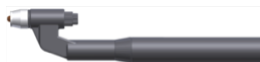
Analog Outputs

1 × 0 – 5 V / 1 × 0 – 10 V

Torches Recommended for Use



TP50-M



TP50-R

About SBI GmbH

SBI was founded in 1999 with the aim of developing rapid prototyping technologies. SBI has therefore developed its plasma technologies and built welding solutions. From automated solutions for coating technologies to the repair of forging dies or plasma arc deposition machines for the maintenance of aircraft turbines, SBI has established world-renowned references in the field of arc deposition plasma. Since 2009, SBI has established itself as the main supplier of its plasma-based technology for the 3D manufacturing of aeronautical parts.

Besides its renown portfolio of superior plasma inverter systems and plasma welding equipment, SBI has been developing its own additive manufacturing machines. The manufacturer put the metal additive manufacturing system M3DP on the market in 2019.

