

Product Data Sheet

Metco 10MR

10MR Power Supply for Plasma Spray

The Metco™ 10MR Power Supply is an advanced solid state rectifier. It provides up to 100 kW of DC power, continuous duty cycle, that is required by the plasma spray gun in a Metco™ 9MC plasma spray system.

The 10MR maintains a constant current value during spray operations with low voltage variation, so coating parameters are easily established and repeatable coating results obtained. Current produced by the 10MR will not vary based on a change in secondary plasma gas, and can compensate for power source fluctuations.

Ruggedly constructed, the 10MR has been designed to operate in demanding production environments with no maintenance or downtime. It has been built to the latest safety requirements.

Available in seven different input power configurations, customers should choose the 10MR model that is suitable for their needs.

1 General Description

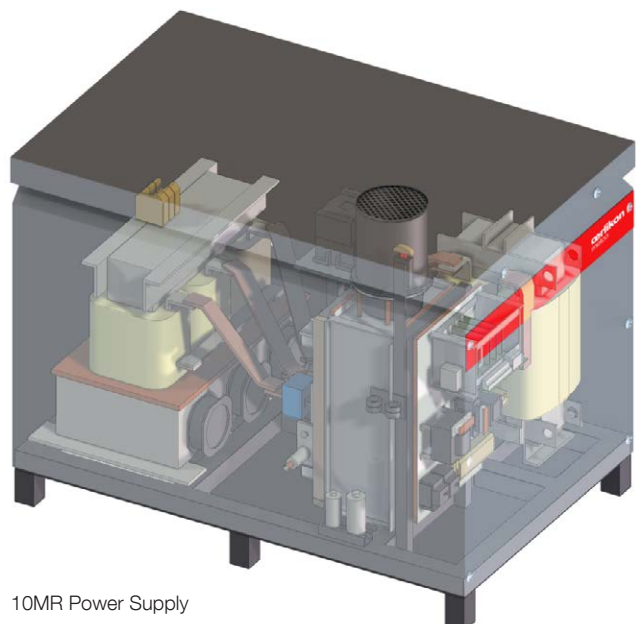
The 10MR takes three-phase, AC input power and converts it to DC power for use by the plasma spray gun. It incorporates digital setpoint control for accurate establishment of starting current and permits precise current adjustment during spray operations. High resolution control and feedback signals provide accurate control of voltage and amperage.

Designed with protective safety systems, the 10MR will shut down in the event of thermal or current overloading.

Six heavy duty cables are provided with the unit (three each for the positive and negative legs) to reliably carry the full system power load.

2 Features and Benefits

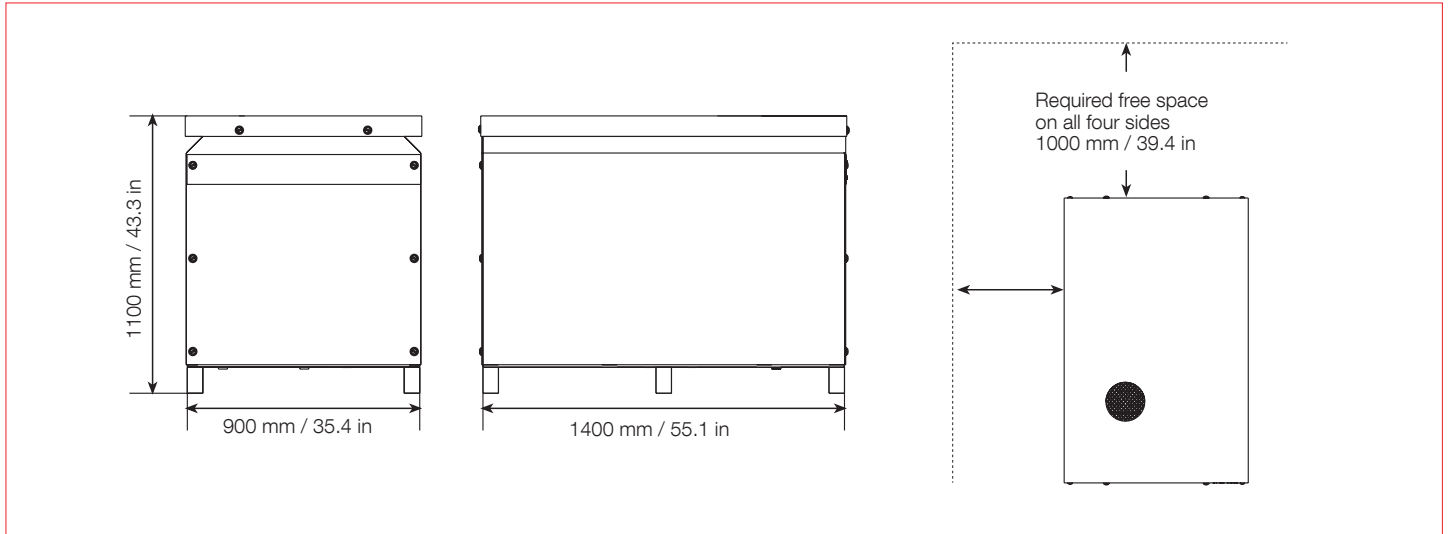
- Efficient operation, even at 100 % duty cycle, reducing electrical power consumption
- Low residual ripple for repeatable coating results
- Efficient cooling, for continuous operation, while protecting personnel from live components
- Small footprint and lightweight design and easy installation
- Rugged design for long service life with no maintenance.
- Simple operation



10MR Power Supply

3 Technical Data

3.1 Dimensions



3.2 Specifications and Models

General Specifications

Weight	950 kg
	2100 lbs
Plasma Controller Compatibility	9MC

Operating Environment

Ambient temperature	+5 to +40 °C
	+41 to +104 °F
Cooling air humidity	< 50 % @ 40 °C (104 °F), non-condensing
	< 90 % @ 20 °C (68 °F), non-condensing

Output Specifications

Voltage	0 to 100 VDC
Current	0 to 1000 ADC
Power, 100 % Duty Cycle	100 kW

Input Requirements	10MR-01	10MR-02	10MR-03	10MR-04	10MR-05	10MR-06	10MR-07
Frequency	50 Hz	60 Hz	60 Hz	50 Hz	60 Hz	60 Hz	60 Hz
Input voltage	3 x 200 V	3 x 200 V	3 x 220 V	3 x 400 V	3 x 380 V	3 x 460 V	3 x 575 V
Input current (max.)	3 x 375 A	3 x 375 A	3 x 340 A	3 x 185 A	3 x 195 A	3 x 165 A	3 x 130 A
Input fuse	3 x 400 A	3 x 400 A	3 x 400 A	3 x 200 A	3 x 200 A	3 x 200 A	3 x 200 A

Information is subject to change without prior notice.