



# TruPlasma MF Series 7000 (G2)

Technical data



**TruPlasma MF 7050  
(G2) UltraFast****TruPlasma MF 7075  
(G2) UltraFast****TruPlasma MF 7100  
(G2) UltraFast****OUTPUT**

RATED OUTPUT	50 kW	75 kW	100 kW
MAXIMUM OUTPUT CURRENT	110 A eff	200 A eff	225 A eff
MAXIMUM OUTPUT VOLTAGE	1100 V eff	1100 V eff	1100 V eff
NOMINAL OPERATING FREQUENCY	20 kHz - 50 kHz	20 kHz - 50 kHz	20 kHz - 50 kHz

**ARC PARAMETER**

MAXIMUM ARC RATE	8000 1/s	8000 1/s	8000 1/s
ARC ENERGY	1 mJ/kW	1 mJ/kW	1 mJ/kW
ARC TREATMENT TIME	25 µs	25 µs	25 µs

**IGNITION VOLTAGE**

WITH AUXILIARY IGNITION	3100 V	3100 V	3100 V
WITHOUT AUXILIARY IGNITION	790 V	790 V	790 V

**NETWORK CONNECTION DATA**

LINE VOLTAGE	(±10%) 380 V - 480 V	(±10%) 380 V - 480 V	(±10%) 380 V - 480 V
LINE FREQUENCY	50/60 Hz	50/60 Hz	50/60 Hz
NETWORK INPUT POWER	61 kVA	93 kVA	124 kVA
POWER FACTOR	0.95	0.95	0.95

**HOUSING**

WEIGHT	560 kg	610 kg	610 kg
IP PROTECTION CLASS	54	54	54

**COOLING REQUIREMENTS**

COOLANT	Water	Water	Water
MAX. WATER PRESSURE	6 bar	6 bar	6 bar
MIN. PRESSURE DIFFERENTIAL	2.2 bar	2.2 bar	2.2 bar
MIN. FLOW RATE	30 l/min	31 l/min	31 l/min
COOLANT TEMPERATURE	5 °C - 45 °C	5 °C - 45 °C	5 °C - 45 °C

**GENERAL**

OVERALL EFFICIENCY	91 %	91 %	91 %
CERTIFICATES / STANDARDS	CE, SEMI S2-0709, FCC standard part 18	CE, SEMI S2-0709, FCC standard part 18	CE, SEMI S2-0709, FCC standard part 18

**AMBIENT CONDITIONS**

OUTSIDE TEMPERATURE	5 °C - 40 °C	5 °C - 40 °C	5 °C - 40 °C
---------------------	--------------	--------------	--------------

**TruPlasma MF 7120  
(G2) UltraFast****TruPlasma MF 7150  
(G2) UltraFast****TruPlasma MF 7050  
(G2)****OUTPUT**

RATED OUTPUT	120 kW	150 kW	50 kW
MAXIMUM OUTPUT CURRENT	300 A eff	350 A eff	110 A eff
MAXIMUM OUTPUT VOLTAGE	1100 V eff	1100 V eff	1100 V eff

**TruPlasma MF 7120  
(G2) UltraFast****TruPlasma MF 7150  
(G2) UltraFast****TruPlasma MF 7050  
(G2)**

NOMINAL OPERATING FREQUENCY	20 kHz - 50 kHz	20 kHz - 50 kHz	20 kHz - 50 kHz
-----------------------------	-----------------	-----------------	-----------------

**ARC PARAMETER**

MAXIMUM ARC RATE	8000 1/s	8000 1/s	8000 1/s
ARC ENERGY	1 mJ/kW	1 mJ/kW	10 mJ/kW
ARC TREATMENT TIME	25 $\mu$ s	25 $\mu$ s	50 $\mu$ s

**IGNITION VOLTAGE**

WITH AUXILIARY IGNITION	3100 V	3100 V	3100 V
WITHOUT AUXILIARY IGNITION	790 V	790 V	790 V

**NETWORK CONNECTION DATA**

LINE VOLTAGE	( $\pm$ 10%) 380 V - 480 V	( $\pm$ 10%) 380 V - 480 V	( $\pm$ 10%) 380 V - 480 V
LINE FREQUENCY	50/60 Hz	50/60 Hz	50/60 Hz
NETWORK INPUT POWER	149 kVA	186 kVA	61 kVA
POWER FACTOR	0.95	0.95	0.95

**HOUSING**

WEIGHT	660 kg	660 kg	560 kg
IP PROTECTION CLASS	54	54	54

**COOLING REQUIREMENTS**

COOLANT	Water	Water	Water
MAX. WATER PRESSURE	6 bar	6 bar	6 bar
MIN. PRESSURE DIFFERENTIAL	2.5 bar	2.5 bar	2.2 bar
MIN. FLOW RATE	36 l/min	36 l/min	28 l/min
COOLANT TEMPERATURE	5 °C - 45 °C	5 °C - 45 °C	5 °C - 45 °C

**GENERAL**

OVERALL EFFICIENCY	91 %	91 %	91 %
CERTIFICATES / STANDARDS	CE, SEMI S2-0709, FCC standard part 18	CE, SEMI S2-0709, FCC standard part 18	CE, SEMI S2-0709, FCC standard part 18

**AMBIENT CONDITIONS**

OUTSIDE TEMPERATURE	5 °C - 40 °C	5 °C - 40 °C	5 °C - 40 °C
---------------------	--------------	--------------	--------------

**TruPlasma MF 7075  
(G2)****TruPlasma MF 7100  
(G2)****TruPlasma MF 7120  
(G2)****OUTPUT**

RATED OUTPUT	75 kW	100 kW	120 kW
MAXIMUM OUTPUT CURRENT	200 A eff	225 A eff	300 A eff
MAXIMUM OUTPUT VOLTAGE	1100 V eff	1100 V eff	1100 V eff
NOMINAL OPERATING FREQUENCY	20 kHz - 50 kHz	20 kHz - 50 kHz	20 kHz - 50 kHz

**ARC PARAMETER**

MAXIMUM ARC RATE	8000 1/s	8000 1/s	8000 1/s
ARC ENERGY	10 mJ/kW	10 mJ/kW	10 mJ/kW

**TruPlasma MF 7075  
(G2)****TruPlasma MF 7100  
(G2)****TruPlasma MF 7120  
(G2)**

ARC TREATMENT TIME	50 µs	50 µs	50 µs
<b>IGNITION VOLTAGE</b>			
WITH AUXILIARY IGNITION	3100 V	3100 V	3100 V
WITHOUT AUXILIARY IGNITION	790 V	790 V	790 V
<b>NETWORK CONNECTION DATA</b>			
LINE VOLTAGE	(±10%) 380 V - 480 V	(±10%) 380 V - 480 V	(±10%) 380 V - 480 V
LINE FREQUENCY	50/60 Hz	50/60 Hz	50/60 Hz
NETWORK INPUT POWER	93 kVA	124 kVA	149 kVA
POWER FACTOR	0.95	0.95	0.95
<b>HOUSING</b>			
WEIGHT	610 kg	610 kg	660 kg
IP PROTECTION CLASS	54	54	54
<b>COOLING REQUIREMENTS</b>			
COOLANT	Water	Water	Water
MAX. WATER PRESSURE	6 bar	6 bar	6 bar
MIN. PRESSURE DIFFERENTIAL	2.2 bar	2.2 bar	2.5 bar
MIN. FLOW RATE	30 l/min	30 l/min	34 l/min
COOLANT TEMPERATURE	5 °C - 45 °C	5 °C - 45 °C	5 °C - 45 °C
<b>GENERAL</b>			
OVERALL EFFICIENCY	91 %	91 %	91 %
CERTIFICATES / STANDARDS	CE, SEMI S2-0709, FCC standard part 18	CE, SEMI S2-0709, FCC standard part 18	CE, SEMI S2-0709, FCC standard part 18
<b>AMBIENT CONDITIONS</b>			
OUTSIDE TEMPERATURE	5 °C - 40 °C	5 °C - 40 °C	5 °C - 40 °C

**TruPlasma MF 7150 (G2)**

<b>OUTPUT</b>	
RATED OUTPUT	150 kW
MAXIMUM OUTPUT CURRENT	350 A eff
MAXIMUM OUTPUT VOLTAGE	1100 V eff
NOMINAL OPERATING FREQUENCY	20 kHz - 50 kHz

**ARC PARAMETER**

MAXIMUM ARC RATE	8000 1/s
ARC ENERGY	10 mJ/kW
ARC TREATMENT TIME	50 µs

**IGNITION VOLTAGE**

WITH AUXILIARY IGNITION	3100 V
WITHOUT AUXILIARY IGNITION	790 V

# TruPlasma MF 7150 (G2)

## NETWORK CONNECTION DATA

LINE VOLTAGE	(±10%) 380 V - 480 V
LINE FREQUENCY	50/60 Hz
NETWORK INPUT POWER	186 kVA
POWER FACTOR	0.95

## HOUSING

WEIGHT	660 kg
IP PROTECTION CLASS	54

## COOLING REQUIREMENTS

COOLANT	Water
MAX. WATER PRESSURE	6 bar
MIN. PRESSURE DIFFERENTIAL	2.5 bar
MIN. FLOW RATE	34 l/min
COOLANT TEMPERATURE	5 °C - 45 °C

## GENERAL

OVERALL EFFICIENCY	91 %
CERTIFICATES / STANDARDS	CE, SEMI S2-0709, FCC standard part 18

## AMBIENT CONDITIONS

OUTSIDE TEMPERATURE	5 °C - 40 °C
---------------------	--------------