



TruPlasma MF Series 7000 (G2)

Technical data

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

RATED POWER	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 HANDLING TIME	25 µs	25 µs	25 µs

IGNITION VOLTAGES

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
LINE 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 DIFFERENCE	2.2 bar	2.2 bar	2.2 bar
MIN. FLOW RATE	30 l/min	31 l/min	31 l/min
COOLING MEDIUM 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
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**TruPlasma MF 7120
(G2) UltraFast****TruPlasma MF 7150
(G2) UltraFast****TruPlasma MF 7050
(G2)****OUTPUT**

RATED POWER	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
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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 HANDLING TIME	25 μ s	25 μ s	50 μ s

IGNITION VOLTAGES

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
LINE 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 DIFFERENCE	2.5 bar	2.5 bar	2.2 bar
MIN. FLOW RATE	36 l/min	36 l/min	28 l/min
COOLING MEDIUM 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
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**TruPlasma MF 7075
(G2)****TruPlasma MF 7100
(G2)****TruPlasma MF 7120
(G2)****OUTPUT**

RATED POWER	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 HANDLING TIME	50 µs	50 µs	50 µs
IGNITION VOLTAGES			
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
LINE INPUT POWER	93 kVA	124 kVA	149 kVA
POWER FACTOR	0.95	0.95	0.95
HOUSING			
WEIGHT	610 kg	610 kg	660 kg
IP PROTECTION CLASS	54	54	54
COOLING REQUIREMENTS			
COOLANT	Water	Water	Water
MAX. WATER PRESSURE	6 bar	6 bar	6 bar
MIN. PRESSURE DIFFERENCE	2.2 bar	2.2 bar	2.5 bar
MIN. FLOW RATE	30 l/min	30 l/min	34 l/min
COOLING MEDIUM 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 7150 (G2)**OUTPUT**

RATED POWER	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 HANDLING TIME	50 µs

IGNITION VOLTAGES

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
LINE 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 DIFFERENCE	2.5 bar
MIN. FLOW RATE	34 l/min
COOLING MEDIUM 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
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