



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 μ s | 25 μ s | 50 μ 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 |
|--------------------|-------|-------|-------|

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 | 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 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 |

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 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 |
|---------------------|--------------|