

SiCMobile Family

Silicon Carbide Mobile Heat Treatment Unit



Mobi Cabinet

- Up to 50 kW Heat Treatment Unit
- MF Frequency Range: 10 kHz - 50 kHz
- Efficiency: 98,9 % @ 40 kHz
- Single or Multi-Power Port
- 200% Overcurrent Capability
- Power Regulation: 2..100 %



Wall Cabinet

Compact Induction Heat Treatment Unit

Total Output Continuous Power up to 50 kW

Total Output Intermittent Power up to 100 kW

Frequency Range 10..50 kHz

Integrates Internal Capacitor Bank

Up to 2 Independent Power Outputs.
Capability of Simultaneous Heating

System Based on a SiC MOSFET
Transistor Series Inverter

Connection to Reactive Coaxial
Transformer or a Gun Transformer

Siemens PLC with SIRUIS safety relay

Integrated Smart Digital Controller

Water Cooling

Applications

- Brazing
- Bold Heating
- Deck Straightening
- Spot and Full Bonding.....



The SiCMobile Family Technical Specs

SiCMobile Family	SiCMobi/SiCWall 12k50S Single	SiCMobi/SiCWall 25k50S Single	SiCMobi/SiCWall 25k50D Dual	SiCMobi/SiCWall 50k50S Single	SiCMobi/SiCWall 50k50D Dual
Total Continuous Output Power	12,5 kW	25 kW	25 kW	50 kW	50 kW
Output Circuits	1	1	2	1	2
Power per Output	#1: 12,5 kW	#1: 25 kW	#1: 12,5 kW #2: 12,5 kW	#1: 50 kW	#1: 25 kW #2: 25 kW
Total Intermittent Output Power DT: 50% or Tmax:10 min	#1: 25 kW	#1: 50 kW	#1: 25 kW #2: 25 kW	#1: 100 kW	#1: 50 kW #2: 50 kW
Output Frequency Range	10...50 kHz				
Inverter Efficiency	98,9 % @ 40 kHz				
Mains Voltage ⁽³⁾	400 V _{AC} ± 10 % (Three-Phase)				
Cos (φ)	> 0,99				
Heating Station	LT12k50	LT25k50	2x LT12k50	LT50k50	2x LT25k50
Inductor Short Circuit	Yes				
Controller	Fully Digital Controller				
Power Regulation ⁽²⁾	2...100 %				
Power Setting Time ⁽³⁾	< 1 ms				
SiCMobi Size (W x D x H)-cm	60x70x115	60x70x115	60x70x115	(4)	60x70x115
SiCMobi Weight (w/o coaxial trafo)	87 kg	90 kg	100 kg	(4)	114 kg
SiCWall Size (W x D x H)-cm	60x35x76	60x35x76	60x35x76	(4)	60x35x76
SiCWall Weight (w/o coaxial trafo)	73 kg	76 kg	86 kg	(4)	100 kg
Cooling	Water				
Water Max. Temperature	40 °C				
Minimum Water (including Heating Station)	15 l/min	15 l/min	15 l/min	25 l/min	30 l/min
Delta T	2,4 °C	2,4 °C	2,4 °C	2,9 °C	2,4 °C
Environmental Temperature Range	+5 °C to +50 °C				
Maximum Humidity	90 %				
User Interface	Siemens HMI KTP700				
Standard Fieldbus	ModBus TCP/IP				
Optional Fieldbuses	Profinet, DeviceNet,				
Optional External Control Unit	The Unit comprises: External Star/stop, External power control, External Emergency Stop				
Optional Temperature Control	Low temperature Pyrometer (150-400 °C); High temperature Pyrometer (500-1000 °C)				
Optional Cable Length	10 m				

NOTE: ⁽¹⁾ At Nominal Load
⁽²⁾ At Adaptive Mode
⁽³⁾ For 480 VAC contact with SiCtech
⁽⁴⁾ Contact with SiCtech

Subject to changes

