Standex MEDER ELECTRONICS — Custom Engineered Solutions for Tomorrow

SIZE P900

Power Range 10kW-20kW

"Application Engineering Experts"

CUSTOM IS STANDARD

Total output power (40VDC@250A)	10kW	Pri-sec turns ratio	12:2+2
Operating frequency	30 kHz	Dielectric strength	
Input voltage range	252-308 VDC	Pri-sec/pri-core	4,000 VDC
Topology	Full Bridge ZVS	Isolation sec-core	1,000 VDC
Max volt-µsec product	8236	Ambient temperature	60 °C
Duty cycle	98 %	Total losses	90 W
Primary current	46 Arms	Hot spot temperature	105 °C
Secondary current	177 Arms	Approx. Weight	550 grams

Notes: Assumes transformer is cooled by a heatsink @ 75°C max. and forced airflow

:: DESIGN EXAMPLE ::

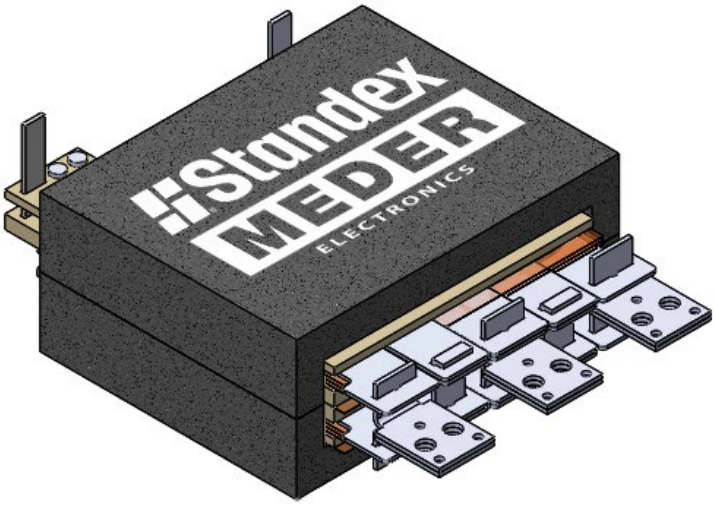
Highlights

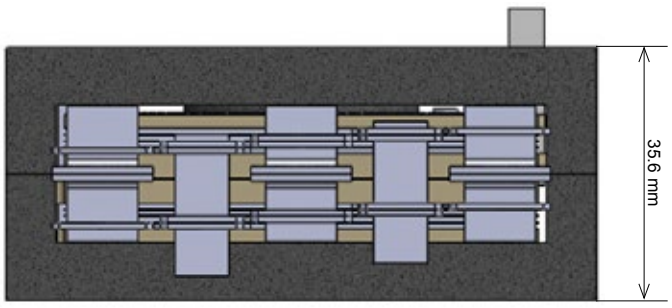
- Patented (**U.S. Patent 7,460,002**) terminals offer mechanical strength and very low resistance
- High efficiency (low losses), ultra compact, low-profile
- Excellent solderability (Pb-free or Pb/Sn Solder)
- Standard sizes / customer configurations
- Quick custom turn-around often without start-up or tooling costs
- Inductors available for design in all packages
- Large secondary pins reduce temperature rise on terminals
- Various terminal options available (SMD, Thru-hole, screw terminals)

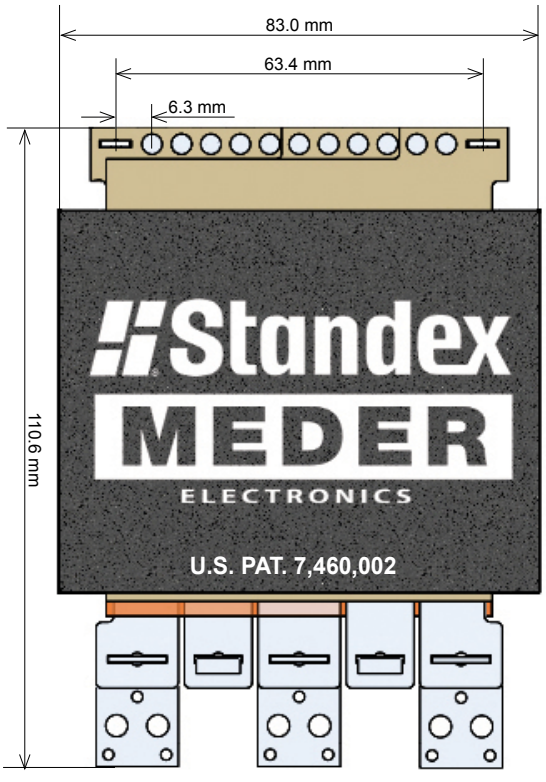
Customize beyond these examples!

Rated power 10KW-20kW / Frequency range 40-125kHZ
Topology - Full Bridge, Half Bridge, Full Bridge ZVS, Push-Pull
Current rating max. 500A
Isolation voltage pri-sec/pri-core 500- 5,000VDC
Soft switching, single or multiple outputs
Different switching frequencies, input/output voltages
Primary turns - other number (no fractions)
Secondary Ns1 turns 1- 4 (no fractions)
Thermal solutions heat sinks, etc.

BUS BAR TERMINATION







These models are for reference only and may NOT exactly match the design examples provided.

Standex MEDER ELECTRONICS — Custom Engineered Solutions for Tomorrow

SIZE P900

Power Range 10kW-20kW

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CUSTOM IS STANDARD

Total output power (45VDC@330A)	15.0kW	Pri-sec turns ratio	8:1+1
Operating frequency	70 - 100 kHz	Dielectric strength	
Input voltage range	548-743 VDC	Pri-sec/pri-core	4,000 VDC
Topology	Full Bridge ZVS	Isolation sec-core	1,000 VDC
Max volt-µsec product	3884	Ambient temperature	75 °C
Duty cycle	96 %	Total losses	95 W
Primary current	32 Arms	Hot spot temperature	122 °C
Secondary current	330 A	Approx. Weight	950 grams

Notes: Assumes transformer is cooled by a coldplate @ 75°C max. and forced airflow

:: DESIGN EXAMPLE ::

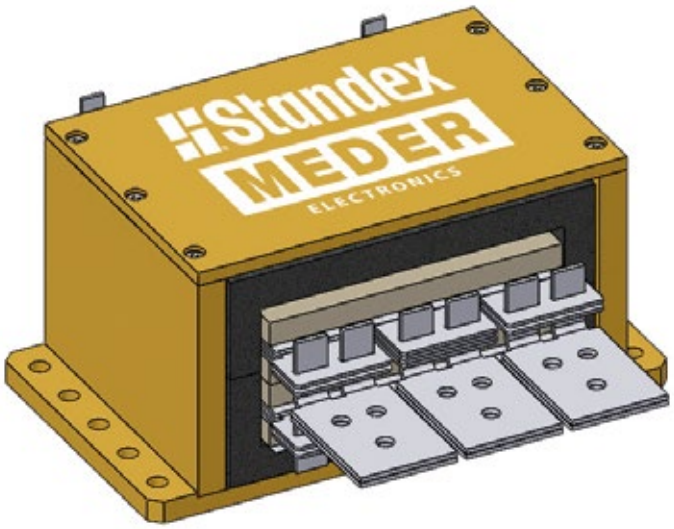
Highlights

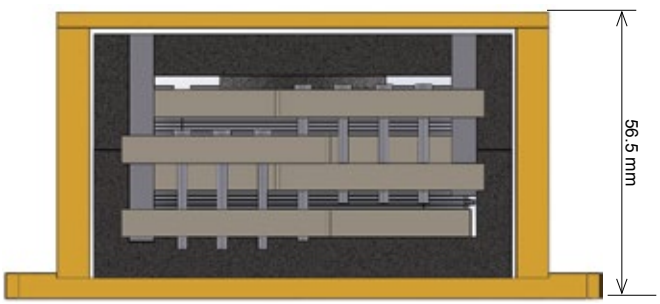
- Anodized aluminum heatsinks offering high thermal conductivity and removing heat from windings
- Patented (**U.S. Patent 7,460,002**) terminals offer mechanical strength and very low resistance
- High efficiency (low losses), ultra compact, low-profile
- Excellent solderability (Pb-free or Pb/Sn Solder)
- Standard sizes / customer configurations
- Quick custom turn-around often without start-up or tooling costs
- Inductors available for design in all packages
- Large secondary pins reduce temperature rise on terminals
- Various terminal options available (SMD, Thru-hole, screw terminals)

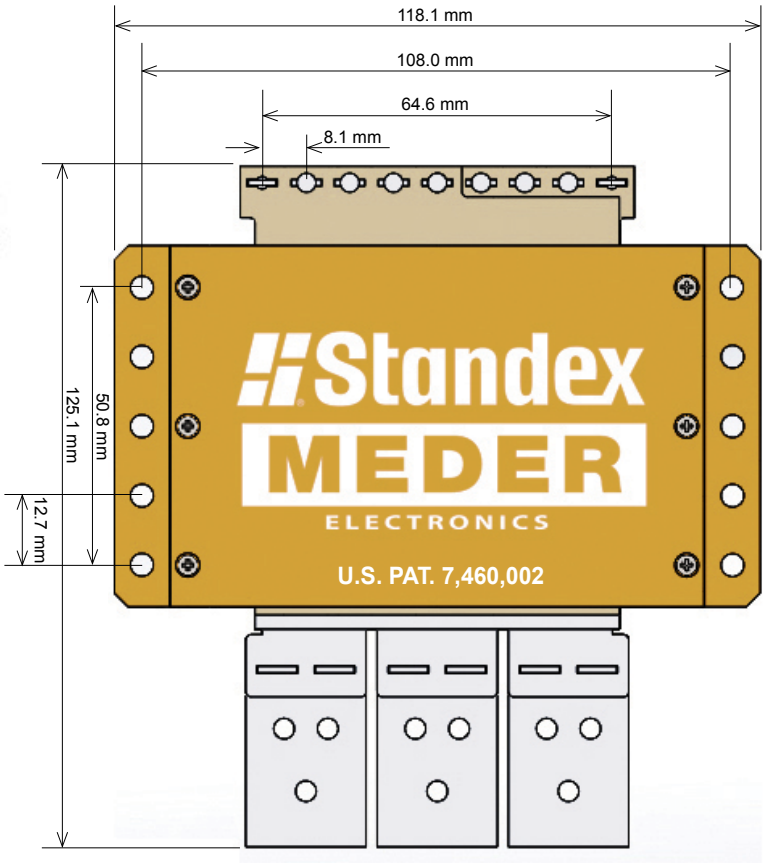
Customize beyond these examples!

Rated power 10KW-20kW / Frequency range 40-125kHZ
Topology - Full Bridge, Half Bridge, Full Bridge ZVS, Push-Pull
Current rating max. 500A
Isolation voltage pri-sec 5,000VDC
Isolation voltage pri-core 500-2,000VDC
Soft switching, single or multiple outputs
Different switching frequencies, input/output voltages
Primary turns - other number (no fractions)
Secondary Ns1 turns 1- 4 (no fractions)
Thermal solutions heat sinks, etc.

BUS BAR TERMINATION







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