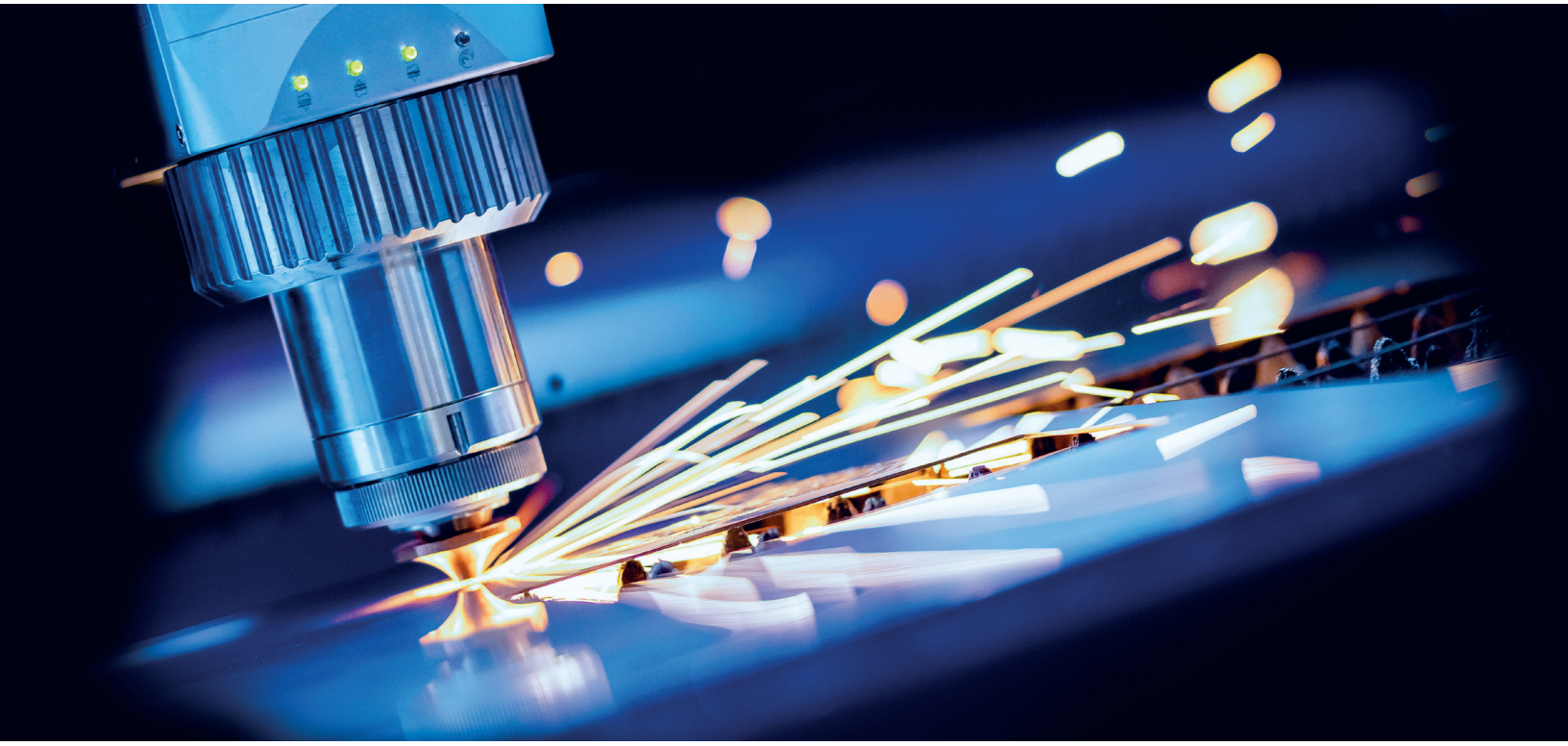
HIGH POWER

FOR INDUSTRIAL APPLICATIONS



bel POWER SOLUTIONS & PROTECTION

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TLP7000 SERIES

KEY FEATURES & APPLICATIONS

- Worldwide 3-phase input voltage range (200 - 480 VAC, L-L)
- Power factor > 0.94
- Power density 20 W/in³ with typical efficiency >95%
- Advanced performance for fast dynamic & pulsed load up to 100 kHz
- Parallel operation up to 15 units (up to 100 kW)
- Design optimized for the installation to 19" rack:
  - 3 pcs in horizontal position 2U height, installed power 21 kW
  - 5 pcs in vertical position 3.5U height, installed power 35 kW
- Liquid cooling system
- Operating temperature range:
  - 0 - 40°C coolant temperature
  - 0 - 70°C ambient air temperature
- RS485 & CAN communication interface
- Active current sharing
- Configurable auxiliary output: 12 V / 2 A or 24 V / 1 A
- SEMI F47 compliant
- Suitable for high power laser cutting machines & charging systems for 48 V batteries

MODEL	INPUT VOLTAGE RANGE	NOMINAL OUTPUT VOLTAGE	ADJUSTABLE OUTPUT VOLTAGE RANGE [1]	MAX OUTPUT CURRENT	MAX OUTPUT POWER
TLP7000-1048	180 – 528 Vrms, 50/60 Hz	48 V [2]	43.2 – 57.6 VDC	146 ADC	7000 W
TLP7000-H048	180 – 528 Vrms, 50/60 Hz	48 V	38.4 – 52.8 VDC	146 ADC or pulse [3]	7000 W

[1] A possibility to adjust or preset output voltage via: SCI (Serial Communication Interface) or analog signal MARGIN
[2] A power supply model optimized for Battery Charging Systems with nominal voltage 48 VDC
[3] PSU model with pulse load operation capability 0 – 100 kHz, 0 – 100% Duty, 0 A/Iout_max.

TCP3500/4000 SERIES

KEY FEATURES & APPLICATIONS

- Worldwide 3-phase input voltage range (180 - 528 VAC, L-L)
- High power density 18.5 W/in³ with efficiency >94%
- Pulse load capability (0 - 100 kHz) with low voltage droop
- Wide adjustable output voltage range
- Parallel operation up to 16 units (50.4 kW)
- Fast output voltage setting response suitable for digital output power control
- Two RS485 communication interfaces
- Cold plate cooling system
- SEMI F47 compliant
- Suitable for laser cutting, industrial printers, welding, engraving, drilling, marking, battery chargers, bulk power systems, cladding, surface treatment, rapid prototyping

MODEL	INPUT VOLTAGE RANGE	NOMINAL OUTPUT VOLTAGE	ADJUSTABLE OUTPUT VOLTAGE RANGE	MAX OUTPUT CURRENT	MAX OUTPUT POWER
TCP4000-H090	180 – 528 Vrms, 50/60 Hz 340 – 528 Vrms, 50/60 Hz	90 VDC	30 – 100 VDC	45 ADC or 39 ADC pulse [1]	3500 W 4000 W
TCP3500-1048G	180 – 528 Vrms, 50/60 Hz	48 VDC	10 – 50 VDC	73 ADC	3500 W
TCP3500-H048G	180 – 528 Vrms, 50/60 Hz	48 VDC	10 – 50 VDC	73 ADC or 73 ADC pulse [1]	3500 W
TCP3500-1024G	180 – 528 Vrms, 50/60 Hz	28 VDC	10 – 32 VDC	125 ADC	3500 W

[1] PSU model with pulse load operation capability 0 – 100 kHz, 0 – 100% Duty, 0 A/Iout_max.

TCR-4-48G RACK

COMPATIBLE WITH TCP3500/4000 SERIES

KEY FEATURES

- 19” rack with water cooling base plate
- Compatible with all TCP series power supply units
- Max. configuration up to 4 units (14/16 kW)
- Low inductance DC output busbar construction allows pulse load operation up to 100 kHz
- Parallel operation capability up to 4 racks (50.4 kW)
- USB interface for system monitoring and control via PC
- Optional 3.2” touch screen display with smart monitoring & control menu
- Auxiliary output 24 VDC / 120 W
- 3-phase solid state relay for power modules AC input connection
- Input & output coolant temperature measurement

TXP3500/4000 SERIES

KEY FEATURES & APPLICATIONS

- Worldwide 3-phase input voltage range (nom. 200 - 480 Vrms)
- Power factor > 0.94
- High power density 16 W/in^3 with 93% efficiency
- Parallel operation of up to 8 units (28/32 kW)
- Serial operation of up to 4 units
- User replaceable fan
- Ambient Temperature Range -20 to 55°C
- RS485 / CAN bus communication interface
- Adjustable output voltage range
- Auxiliary output 12 V / 0.8 A
- Active or passive current sharing
- Suitable for workstations, storage systems or racks for industrial, process & control, machinery and other applications

MODEL	INPUT VOLTAGE RANGE	NOMINAL OUTPUT VOLTAGE	ADJUSTABLE OUTPUT VOLTAGE RANGE	MAX OUTPUT CURRENT	MAX OUTPUT POWER
TXP4000-1110G	350 – 528 Vrms, 50/60 Hz	110 VDC	30 – 137.5 VDC	36.5 ADC	4000 W
TXP3500-1048G	180 – 528 Vrms, 50/60 Hz	48 VDC	10 – 50 VDC	73 ADC	3500 W

FXP/FXC SERIES

BULK POWER SUPPLIES

KEY FEATURES & APPLICATIONS

- Three-phase AC input (180 to 264 V or 342 to 528 V)
- Suitable for 3U or 5U height shelf mounting:
  - FRH7000G (vertical mounting for 2 power supplies)
  - FRV7000G (horizontal mounting for 3 power supplies)
- Module power up to 7000 W, units can be paralleled up to 210 kW
- Single-wire current share or droop current share
- Remote voltage adjustment and current monitoring
- Current share control for up to 30 units
- Overtemperature, overload, and overvoltage protection
- LED supply status indicators
- Front panel selectable-input-range
- Standard & customized rack adaptors available
- Suitable for high power applications, automatic test equipment, telecom, broadcasting, data communications and other distributed power designs

About Bel Power Solutions

Bel Power Solutions provides intelligent, efficient and reliable AC-DC and DC-DC power conversion devices. Applications range from board-mount power to system-level architectures for servers, storage, networking, industrial and transportation. We continue to focus on the growth of our business with strategic customers and distributors. The Modules business incorporates both OEM and ODM design solutions over a wide range of technology fields. The Custom Modules Group provides fast turnkey application-specific solutions as well as manufacturing solutions to a range of customers worldwide.

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