

# COSEL launches enhanced reliability power supplies for industrial applications

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- Low component count for extended reliability
- For system's upgrade Form-Fit Function 100% compatible with the PBA series
- Safety approvals UL62368-1, c-UL (equivalent to CAN/CSA-22.2 No.62368-1), EN62368-1
- Wide operating temperature range -20 to +70 degrees C
- High reliability 5-year warranty

COSEL Co, Ltd (6905: Tokyo) has announced the launch of the PDA series of AC/DC power supplies with further enhanced reliability for industrial applications. In order to offer the highest price/performance ratio while maintaining a high quality standard, the PDA series uses a quasi-resonant topology with a limited number of components, resulting in higher reliability. The PDA series is 100% form, fit and function backwards compatible with the PBA series, which is retiring after 20 years of powering high volume applications worldwide. The first models introduced are the 15W PDA15F, the 30W PDA30F and the 50W PDA50F, with other versions to follow. The PDA series is designed for use in a wide range of applications and can operate over a wide temperature range from -20 to +70 degrees C. The power supplies are UL/EN62368-1 certified.

Designed for worldwide applications, the PDA series has an input voltage range of 85VAC to 264VAC single phase and meets safety standards with an input voltage range of 100-240VAC (50/60Hz).

The 15W PDA15F, the 30W PDA30F and the 50W PDA50F are available in three output voltages, 5V, 12V and 24V with corresponding output currents. The output voltage can be adjusted by a built-in potentiometer.

The PDA series benefits from an optimized quasi-resonant switching topology and has an efficiency of up to 87.5% at 230VAC and rated load. Compared to the predecessor PBA series, the efficiency gain is more than 5 percentage points, reducing heat dissipation and as a consequence also increasing system reliability.

The PDA series includes inrush current limiting, over-current protection with automatic recovery when the fault is removed, and over-voltage protection.



Based on an optimized topology, the PDA series has no built-in active PFC, although it fully complies with IEC61000-3-2 (Class A).

The units are designed to operate from a wide temperature range of -20 to +70 degrees C and can be mounted in any orientation, although derating may apply depending on ambient temperature and environment.

The PDA series complies with FCC-B, VCCI-B, CISPR11-B, CISPR32-B, EN55011-B and EN55032-B in conducted emission tests.

The units have an input-to-output isolation voltage of 3,000 VAC, an input-to-frameground (FG) voltage of 2,000 VAC, and an output-to-frame-ground voltage of 500 VAC.

The PDA series is built into a galvanized sheet steel chassis and a cover is available as an "N" option.

Designed for use in demanding applications where space is often limited, the PDA15F measures just 31 X 78 X 85mm (1.22 X 3.07 X 3.35 inches) and weighs 180g max without cover, and 210g with cover. The PDA30F measures 31 X 78 X 103mm (1.22 X 3.07 X 4.06 inches) and weighs 250g max without cover, and 280g with cover. The PDA50F measures 31 X 82 X 120mm (1.22 X 3.23 X 4.72 inches) and weighs 330g max without cover, and 370g with cover.

The PDA series is form, fit and function backwards compatible with the PBA series and are mechanically interchangeable.

The PDA15F, PDA30F, and PDA50F are suitable for a wide range of applications, including measurement and process control, machine monitoring, display devices, and a variety of industrial equipments. They are RoHS and Low Voltage compliant and carry the CE and UKCA marks.





COSEL's PDA series is 100% form, fit and function backwards compatible with the PBA series

### **Related links:**

PDA15F: <u>https://www.prbx.com/product/pda15f-series/</u> PDA30F: <u>https://www.prbx.com/product/pda30f-series/</u> PDA50F: <u>https://www.prbx.com/product/pda50f-series/</u>

Link to Cosel Europe product page: https://www.coseleurope.eu/Products/AC-DC/PDA



#### About COSEL:

Established in Japan 1969, COSEL is one of the world's leading designers and manufacturers of high performance AC-DC Power Supplies, DC-DC Converters and EMI Filters. With quality, reliability & flexibility as our main focus, we pride ourselves on developing some of the highest quality and most reliable products seen anywhere in the world today. The Cosel Group is a \$255 million global company employing some 710 staff with sales offices throughout Japan, Asia, Europe and North America. Our product range is aimed mostly at demanding applications within the Industrial, Factory Automation, Medical, Telecoms, Lighting, Audio/Broadcast & Renewable Energy sectors. A flexible approach with full in-house design means we deliver products using the very latest technology meeting the growing demands of our customers.

### Note to the Editors:

The Cosel Group includes the European power specialist Powerbox International AB, which has been acquired June 25, 2018 by COSEL.

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## **Reference :**

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