



## COSEL announces free-air convection cooled open-frame power supplies with 200% peak-power for industrial applications

Press Release

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- EN62477-1 OVC III certified for 'safe power'
- Small and compact PCB layout optimized for free-air convection
- High efficiency to reduce energy consumption
- Up to 10 seconds 200% peak power as standard
- 5 year standard warranty

COSEL Co, Ltd (6905: Tokyo) today announced the addition of 150W and 300W free air convection cooled power supplies, the LHP150F and the LHP300F. Designed for industrial applications requiring high levels of safety, the LHP150F and the LHP300F are certified according to EN62477-1 (OVC III). The products work over a wide universal input voltage range of 85 to 264VAC and have a high typical efficiency rating of 93%. The LHP150F and LHP300F are available in five different output voltages commonly used in industrial automation and processes, with 200% peak power capability for up to 10 seconds for dynamic loads. The standard product is an open frame PCB type, with a chassis and cover available as an option.

Industrial applications require efficient power supplies able to work in various environments with a high level of safety. The LHP150F and LHP300F are certified to the EN62477-1 Over Voltage Category Three (OVC III), meaning that a final equipment powered by the products can be connected directly to the main distribution panel without adding an extra level of isolation. This simplifies the system designer's task, reducing cost and guaranteeing the highest level of efficiency.

Designed for world-wide applications, the LHP150F and LHP300F have an input voltage of 85 to 264VAC. Five output voltages are available: 24V, 30V, 36V, 42V and 48V with respective output current of 6.3A, 5.0A, 4.2A, 3.6A and 3.2A for the LHP150F and 12.5A, 10.0A, 8.4A, 7.2A and 6.3A for the LHP300F. The output voltage can be adjusted using a built-in potentiometer.

Industrial applications often require higher current during start-up or during peak operation.



The LHP150F and LHP300F are designed with a high dynamic control level and a power stage able to sustain long peak loads making it possible to deliver 200% for up to 10 seconds of the nominal power when a peak load situation occurs. For example, the LHP150F 24V output version delivers a permanent current of 6.3A with up to 12.6A peak. The same ratio applies to all versions of the LHP150F and LHP300F.

For low harmonic current distortion, the LHP150F and LHP300F use an active Power Factor Corrector (PFC), and the switching stage uses an LLC resonant topology combined with the latest generation of power semiconductors, conferring a typical efficiency of up to 94%.

Optimized for convection cooling, the power supplies can be operated within an ambient temperature range of -10 to +70 degree centigrade. Depending on the assembly method and ventilation across the final equipment, a derating may apply as specified in the technical documentation.

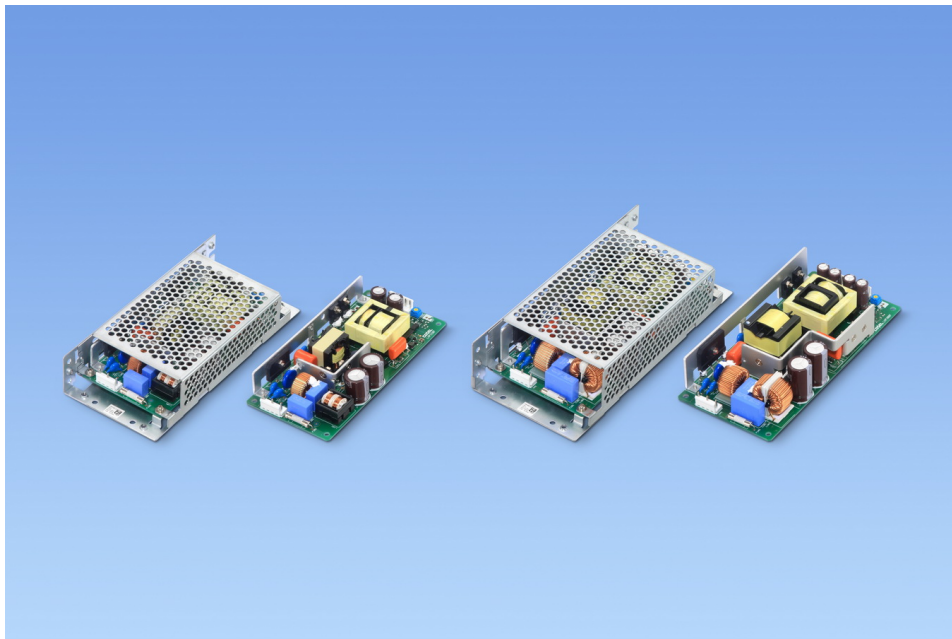
Open frame type, the LHP150F measures 75 x 27 x 160mm (2.95 x 1.07 x 6.30 inches and weighs 320g max, while the LHP300F measures 84 x 37 x 180mm (3.31 x 1.46 x 7.09 inches) and weighs 580g max.

The LHP150F and LHP300F have an input to output isolation of 3,000VAC, input to ground (FG) of 2,000VAC and output to ground (FG) of 500VAC. They include built-in inrush, overcurrent and overvoltage protection circuits.

Both power supplies comply with safety requirements UL (USA), C-UL (Canada), DEMKO (Denmark), and TUV (Germany). The products are UL62368-1, C-UL (equivalent to CAN/CSA-C22.2 No.62368-1), EN62368-1, EN62477-1 (OVC III) certified. The LHP150F and LHP300F are as well complying with DEN-AN.

Exhibiting versatility and attention to detail, to accommodate application specific requirements, a number of options are available including Coating (C), Low leakage current (G), EP connector type (J4), Remote ON/OFF (R), Chassis (S), Chassis & Cover (SN), Terminal block type (T), Connector to an external capacitor bank (U1), Output 8 pin connector (LHP300 only) (J5), Push-in terminal block (T4), and Built-in DC fuse (DC).

The LHP150F and LHP300F series have a five-year warranty and conform to the European RoHS, REACH and Low Voltage Directives.



Designed for industrial applications requiring high levels of safety, the LHP150F and LHP300F are certified to meet EN62477-1 (OVC III).

**Related links:**

<https://www.coseurope.eu/Products/AC-DC/LHP>

**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 \$250m global company employing some 700 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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