

# COSEL announces low profile open frame OVC III certified power supplies for industrial applications

## Press Release 2019-10-23

- Low profile open frame (150W 27mm, 300W 37mm)
- Safety approvals UL62368-1, c-UL (equivalent to CAN/CSA-22.2 No.62368-1), EN62368-1 and EN62477-1 OVC III
- Harmonic attenuator IEC61000-3-2 compliant (Class A)
- Wide temperature range -10 to +70 degrees C
- High reliability 5-year warranty

Cosel Co, Ltd (6905: Tokyo) today announced a new series of open frame compact power supplies that are EN62477-1 OVC III certified for demanding industrial applications. Benefiting from the latest power switching technologies, the LHA150F is 30% smaller and gains up to 4.5 efficiency points compared to the previous LFA150F, whilst the more powerful LHA300F gains up to 6 points of efficiency and is 50% smaller than the LFA300F. In addition to higher efficiency, by using an LLC resonant topology and an active filter, noise and ripple levels have been reduced. Designed for use in a wide range of applications, the LHA150F and LHA300F offer a wide temperature range from -10 to +70 degrees C. The power supplies are UL/EN62368-1 certified.

With the increased levels of systems integration, factory automation requires more compact power supplies able to work with the highest levels of safety in a variety of environments. Meeting the Over Voltage Category level III (OVCIII) specified in the EN62477-1, Cosel's LHA150F and LHA300F offer system designers a simple and easy to use AC/DC power supply that complies with the high isolation levels needed in order to connect their equipment to the facility distribution panel without the need for an additional isolation transformer.

Designed for worldwide applications, the LHA150F and LHA300F have an input voltage range of 85VAC to 264VAC single phase, and conform to the safety standards input voltage range of 100-240VAC (50/60Hz).

The 150W LHA150F is available in four output voltages, 12V/12.5A, 24V/6.3A, 36V/4.2A and 48V/3.2A. The 300W LHA300F offers three output voltages, 12V/25A, 24V/12.5A and 48V/6.3A. The output voltage can be adjusted by a



potentiometer as standard in the LHA300F, and optionally for the LHA150F (option Y).

In addition to their optimized switching topology that provides an energy efficiency figure of up to 93.5%, to reduce energy consumption when unit is operating at light loads or in standby the LHA150F and LHA300F automatically switch to an energy saving mode using intermittent pulse modulation. This contributes to excellent performance and high reliability. The power supplies include inrush current protection, over-current protection with automatic recovery when the default is removed, and over-voltage protection.

The units are designed to operate from -10 to +70 degrees C and they can be mounted in any direction, though depending on the ambient temperature and environment, a derating may apply.

In conducted noise tests, the LHA150F and LHA300F comply with FCC-B, VCCI-B, CISPR11-B, CISPR32-B, EN55011-B, and EN55032-B. For further improved noise performance COSEL offers IEC61000-3-2 (Class A) compliant harmonic attenuation filters type EAC-03-472 for the LHA150F and EAC-06-472 for the LHA300F. The units have a 3,000VAC input to output isolation voltage, 2,000VAC input to ground and 500VAC output to ground.

Designed for use in demanding applications where space is often limited, the LHA150F measures 75 X 27 X 160mm (2.95 X 1.07 X 6.30 inches) and weighs 320g. The LHA300F measures 84 X 37 X 180mm (3.31 X 1.46 X 7.09 inches) and weighs in at 580g.

Additional options are available for specific applications, option-C for a conformal coating for improved moisture resistance, option-G for a lower leakage current (0.15mA max.), option-J4 for input and output EP connectors, and option-Y for an output voltage potentiometer.

The LHA150F and LHA300F are suitable for a wide range of applications including measurement and analysis equipment, machine tools and industrial robots, display equipment and semiconductor manufacturing equipment. They comply with the RoHS directive and are CE marked in accordance with the Low Voltage Directive.





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**Related links:** 

LHA150 and LHA300 https://en.cosel.co.jp/product/powersupply/LHA/



#### 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 \$253m global company employing some 810 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 inhouse 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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