



Optimizing your drive!

LHS-Active 15/3.5-480-50/60-20-A



Main

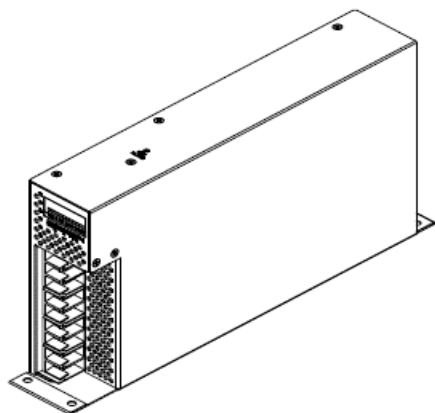
Product type	Low Harmonic Supply with internal Active harmonic filter for reduction of the harmonic distortion of variable frequency drives or other non linear loads. SiC-Power MOSFET's and Schottky Diodes allows for very high efficiency and also enables switching frequency of 72kHz, which results in efficient elimination of high harmonics. This filter reduces the THD of the current from typically 35% to below 5%.
Type code	LHS-Active 15/3.5-480-50/60-20-A
Topology	SiC-Power MOSFET's and Schottky Diode
Order code	35000301
Supply voltage	3 • 380 - 480V (+10% / -15%) 50Hz/60Hz (+/- 2%)
Compensation	Harmonic Mitigation of Harmonics 2nd to 50th order Power Factor Corection Imbalance compensation
Line current	15A
Comp. current	3.5A
Typical Drive Rat.	5.5kW
CT	Internal
Switching Freq.	72kHz
Standards and requirements	IEC/EN 61000-2-2 / -4 IEC/EN 61000-3-2 / -4 / -12 IEEE 519-2022 G5/4
Humidity	5.....95% - (non-condensing) during operation
Ambient temp.	min. -10°C (14°F) max. 40 °C (104°F) derating above 40°C (104°F): >40°C <45°C = 10% ≥45°C <50°C = 20% ≥50°C <55°C = 30% ≥55°C = 100% (off)
Altitude	<1000m derating above 1000m: -5%/1000m (up to 4000m)

specific data

Power loss	95W
Effiicency	99%
Weight	2.6kg

Electrical connections, controls and auxiliary supply

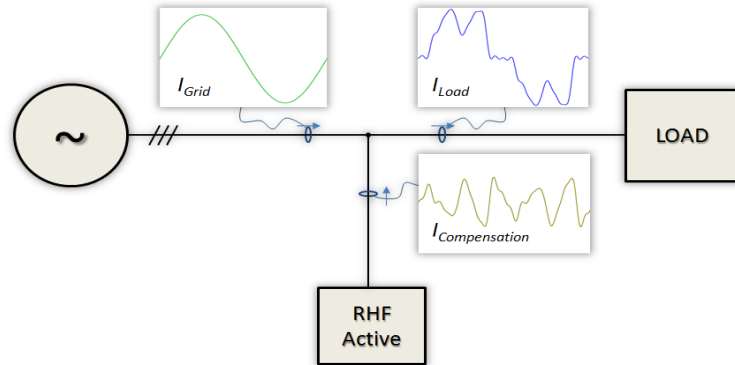
Main supply	M3.5 - 12~22AWG (0.32mm ² - 3.31mm ²) Tightening torque, min-max.: tbd
Control	RS485 PC control, USB, Free configuartion software



Working principle LHS-Active

Active Harmonic Filters are parallel filter circuits injecting harmonics into the supply. These Harmonics have phase shift of 180° compared to the harmonics in the system. Therefore the injected Harmonics are eliminating the Harmonics seen from the mains supply. The following picture helps to verify the principle.

The REVCON RHF-Active, do not require any expensive commissioning on site. After power up, the unit will do self commissioning in order to reach the best possible performance, but of course individual settings are also possible. Beside harmonic mitigation of harmonics from the 2nd to 60th order, the RHF-Active offer compensation functions such as power factor correction and imbalance compensation.



Physical dimensions filter LHS-Active 15/3.5-480-50/60-20-A

