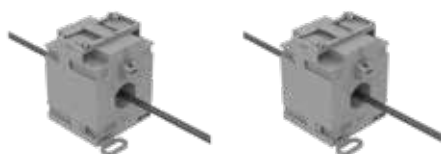


# Active harmonic filter

for frequency inverters or ECblue fans (EC motors)

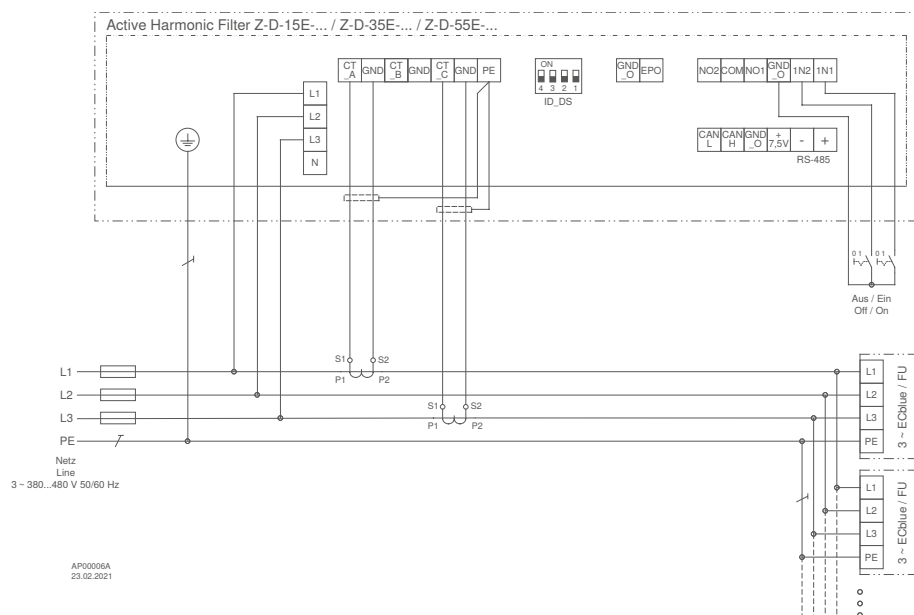


Active harmonic filters primarily reduce harmonics. These are caused by the characteristic power consumption of non-linear loads. Products with power electronics have become indispensable in our daily life. These are LED lamps, IT and telecommunication devices, as well as frequency inverters, pumps, compressors, uninterruptible power supplies, charging stations of electric cars, inverters of solar systems and many more.

Especially critical infrastructure institutions that contribute to the maintenance of important societal functions as well as use sensitive electrical equipment, such as hospitals, data centers or airports, attach great importance to reliability, voltage quality and stability of their supply.

With the different available sizes of the active harmonic filters of 15 A, 35 or 55 A a wide range of applications can be covered. The combination of this filters with ZIEHL-ABEGG ECblue fans and further control technology products, guarantees a perfect matching system, which also fulfills the requirements of the future.

## Connection diagram



AP00006A  
23.02.2021



Active harmonic filter for the reduction of harmonic distortion of non-linear loads. Innovative SiC technology and Schottky diodes, combined with a continuously optimized algorithm, ensure highly harmonic compensation. This active harmonic filter typically reduces the total harmonic distortion of the current (THDi) from 35% to below 5% for a fan or frequency power range of 8 - 30 kW, depending from chosen filter version. Different power ranges on request.

1x active harmonic filter with 2x calibrated current transformers, according to the maximum load current.

**Auto Mode available including**

- Compensation of 2nd to 60th order harmonics
- Power factor correction
- Compensation of mains unbalance

**Integrated LED:**

For status display and error message

**Interface RS485:**

Setting and control via a computer

**Note for product selection:**

The rated current 15 / 35 / 55 A of the active filter, is the harmonically distorted current of the connected power electronic (e. g. ECblue fans, frequency inverters). This is to be determined via the respective THDi value of the connected power electronics.

Please request the required values to select the rated current for filter selection at ZIEHL-ABEGG.

The rated current of the current transformer (e. g. ...-060 / -100 / -200) depends from the connected load.

Active harmonic filter								
3~ 380...480V 50/60Hz								
Type	Article no.	Rated current	Rated temperature	Max. heat dissipation	Maximum ambient temperature	Protection class	Weight	Dimensions (W x H x D)
		A	°C	W	°C		kg	mm
Z-D-15E-060	349114	15	40	207	50	IP20	10.00	89x417x260
Z-D-35E-100	349117	35	40	415	50		17.00	105x560x360
Z-D-55E-200	349120	55	40	721	50		19.00	105x560x360

Products with UL authorisation on request