

# Sine Filters

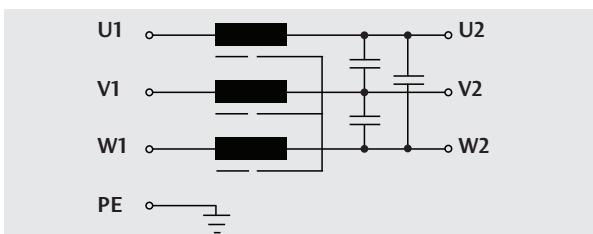
## 460-1460A SERIES, TYPE SINE



### FILTER SERIES FOR PROTECTING THE MOTORS

- Eliminates the additional voltage stress from the drive output voltage
- Increases the lifetime of the motor
- Sine filters reduce the insulation stress of the motors by filtering the output voltage of the variable speed drive. The reduced stress increases the lifetime of motor windings.
- Sine filters can be used with cable lengths longer than dU/dt- filters. Sine filters are designed for a switching frequency of 1,5 - 4,0 KHz.
- Sine filters can also be used in retrofit applications, where the motor is not designed for use with a variable speed drive

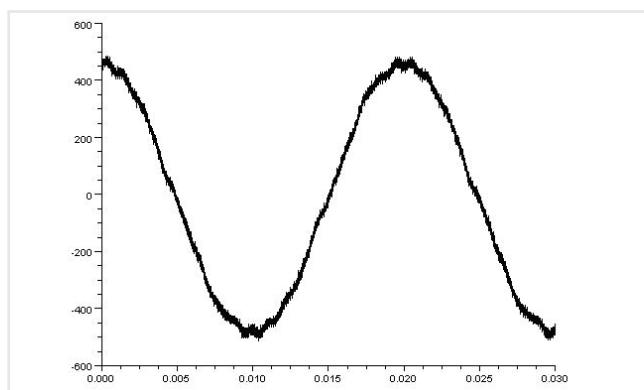
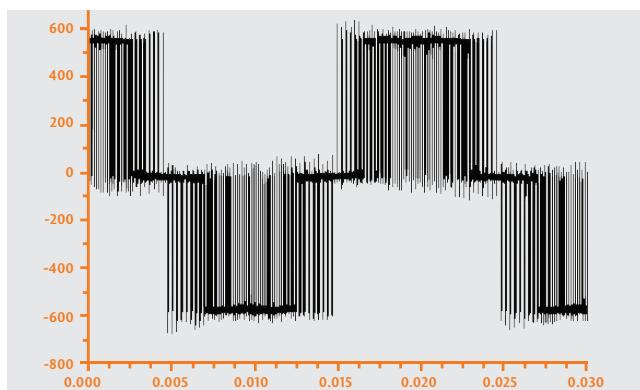
### Connection diagram



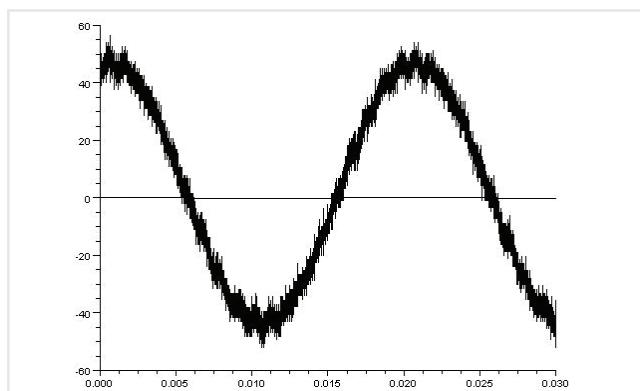
### Technical specifications

<b>Standards</b>	UL/Ur, RoHs, CE	<b>Max. cable lenght</b>	No limit
<b>Design</b>	Open frame design	<b>Voltage loss</b>	ap 6 % at nominal current
<b>Operating voltage range</b>	380...500 V ±10%	<b>Ambient temperature</b>	40 °C in operation
<b>Motor current frequency</b>	0-70 Hz	<b>Moisture</b>	< 95 % RH, no condensation
<b>Switching frequency</b>	380 - 500 V 1,5 - 4 ,0 kHz	<b>Protection class</b>	IP00
<b>Max remaining voltage ripple</b>	40 V p-p	<b>Materials</b>	UL-listed

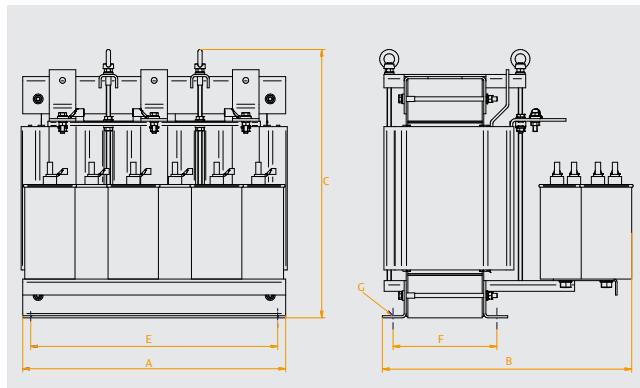
The waveform of the inverter voltage without sine filter. The waveform of the motor voltage with sine filter.



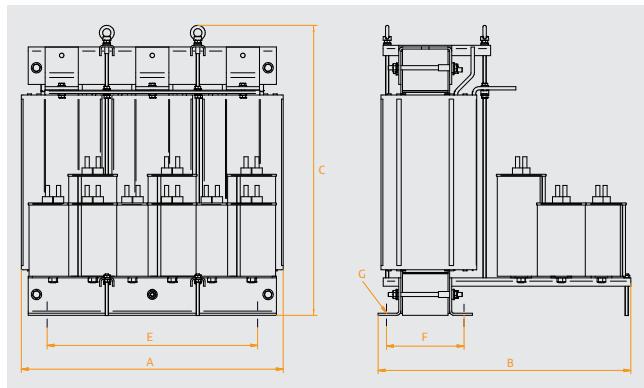
The waveform of the motor current with sine filter.



#### Mechanical data 460A-840A



#### Mechanical data 1160A-1460A



Order code	Rated current [A]	A [mm]	B [mm]	C [mm]	E [mm]	F [mm]	G [mm]	Weight [kg]
SINE460	460	495	470	505	465	200	11x20	201,00
SINE580	580	550	483	537	520	162	11x20	192,00
SINE840	840	578	518	627	520	162	11x20	238,00
SINE1160	1160	600	611	697	570	172	11x20	306,00
SINE1460	1460	568	636	797	520	197	11x20	376,00

## Muuntosähkö

Trafox is a brand of Muuntosähkö Oy. We develop, manufacture and customise high-quality transformers, chokes, filters and Trafox Superintend® monitoring devices for a large number of applications.

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P.O. Box 10 | FI-00621 Helsinki | Tel. +358 207 933 700 | Fax +358 207 933 746 | sales@trafox.fi

