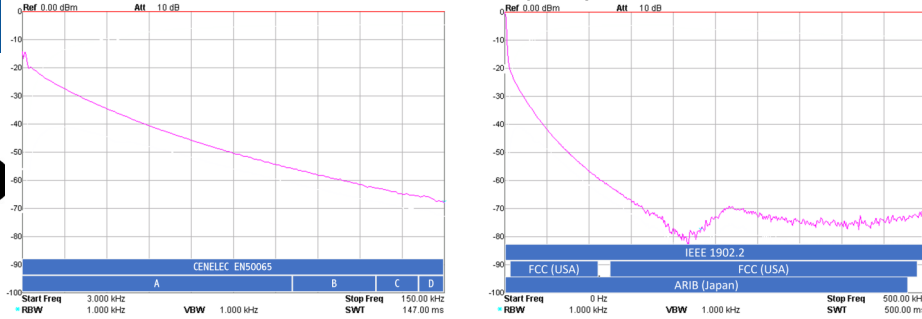


### Specification

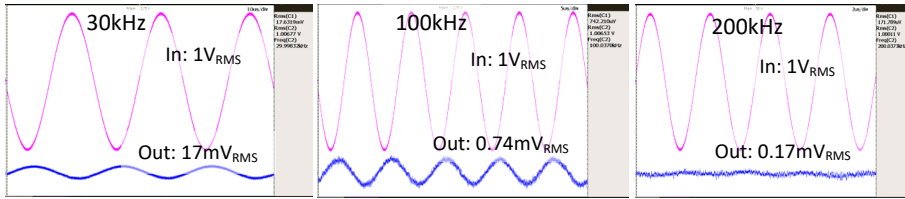
Max. Voltage	250VAC RMS	This filter qualifies for UL 508A panels by certification with UL/IEC 60939
Max. Current	20A RMS	
Leakage Current	<0.5mA	

### Performance(Typical)

Attenuation vs. Frequency



Attenuation in Time Domain



### Filter Care

Normally, filter requires no maintenance and no calibration. During its normal operation filter may have elevated temperature which would feel “warm” to the touch, but not what is considered “hot.” If the filter does feels “hot” to the touch (more than 60°C or 140°F), turn off equipment that is powered via the filter immediately. Verify that the total actual current load does not exceed filter’s maximum rating. Keep in mind that sometimes power rating of equipment is “typical” rather than “maximum” - it is prudent to load filter to no more than 75% of its capacity to accommodate for such situations. Check if the heat dissipation of the filter is obstructed by improper installations such as lack of space around it for proper ventilation, or its placement in small confined space. If such problem is identified, correct it, let the filter cool down and turn equipment back on. Check within 30 minutes and then within an hour the temperature of the filter. If the filter still feels “hot” to the touch, turn your equipment off, disconnect filter from the circuit and discontinue using it. For warranty or other repair contact factory or its authorized distributors.

### Warranty Information

See links at the footer of [www.onfilter.com](http://www.onfilter.com)

### Life- and Mission-Critical Applications

**OnFILTER products shall not be used in life- or mission-critical applications without explicit OnFILTER’ approval in writing.** See Terms and Conditions of Sale for details.



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# Narrow-Band Power Line Communication (PLC) Filters



Model AM2020NG

250VAC 20A Max.

## User’s Guide



Thank you for buying narrow-band power line communication (PLC) filter!

Your new AM2020NG PLC filter can:

- Block narrow-band PLC signals that may interfere with operation of your equipment
- Provide you with two separate PLC communication areas on the same power lines enabling operation of two independent non-interfering PLC networks
- Block EMI from interfering with your PLC

### Safety First!

PLC filters operate with high voltage that may cause property damage, injury, or death. Always observe safety measures when using power line filters. Here are some of the key safety precautions you should take:

#### WARNING

- Do not exceed filter's maximum rating - it may cause overheating
- Do not place filter inside tightly-closed enclosure
- Use filter after the fuse of no more than specified max. rating
- No serviceable parts inside - do not open. High voltage is present inside.
- Before attempting any electrical connection, verify that your power source, such as electrical outlet or junction box, is correctly wired and properly grounded.
- Do not use the filter without proper grounding! Failure to properly ground the filter may result in failure to ground your equipment, in unsafe situation that can cause property damage and injury, as well as failure of the filter to perform.



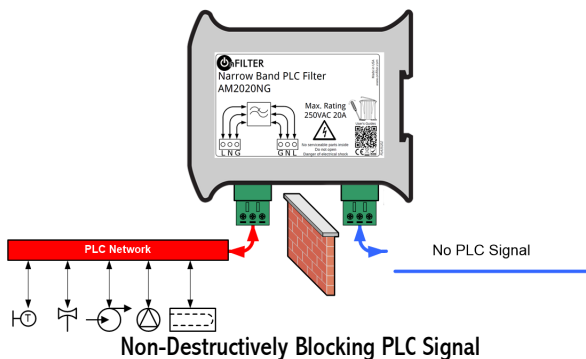
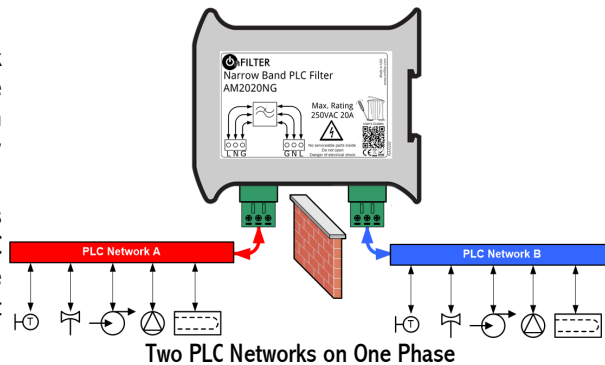
### Brief Summary

AM2020NG filters block propagation of PLC signals while preserving their integrity in sections of AC mains where they are needed.

Bidirectional AM2020NG allows for two independent PLC networks to share the same phase of AC power without mutual interference.

Another application of AM2020NG is where PLC signal seems to interfere with normal operation of other equipment. With AM2020NG this PLC signal can be blocked to a particular power branch without materially affecting quality of PLC signal where it is needed.

AM2020NG can also block excessive EMI from the circuit used by PLC.



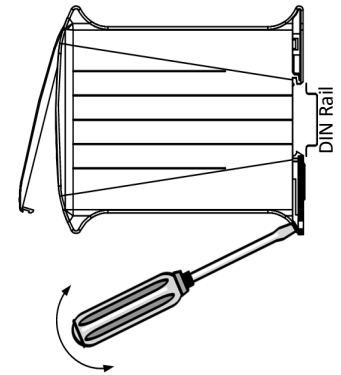
### Installation

Proper placement of the filter helps to assure its continuous operation for a long time. Please follow these requirements for installation:

- Install filter in a dry location away from debris and from the possibility of spillage, including from floor cleaning
- Ambient temperature at the place of installation should not exceed 5°...40°C range
- Do not install filter in small confined spaces with restricted air circulation in order to avoid overheating. Allow at least 15cm (6") on each side for proper ventilation

#### Mounting on DIN Rail

You will need a small-blade slot screwdriver, preferably long. Set filter so that the top rail fits into the top slot of the enclosure. Gently snap the enclosure on the bottom rail. Don't force it. In case of any problem, use slot screwdriver, insert it into the slot in the red latch on the foot of the enclosure and leverage this latch slightly out. The enclosure should install easily.



#### Dismounting the Filter from DIN Rail

To remove the filter from DIN rail use the flat-head screwdriver, leverage the red latch out, gently pull out the bottom part of the filter away from DIN rail, lift it slightly, and remove it from the top rail.

### Connections

Follow indicated polarity of the connections as indicated on the filter's label. The polarity on the connectors is different from each other—do not just swap them. Verify proper polarity before connecting.

The filter is completely symmetrical—there is no defined “Input” or “Output”.

We recommend to pull out removable terminal block plugs and make connection first, then insert plugs back in place. Note that the plug polarities are not interchangeable!

Before applying power verify the correct polarity on each terminal block.

Should you need replacement plugs, here is the part number:

Manufacturer: Wurth Electronics

Part number: 691344410003