

---

## Preventive Measures Suitable for Wall Mounting Drives According to IEC60034-25

The preventive measures will depend on motor characteristics and cable length.

| Motor cable length (unshielded cable)  | Motor conforming to IEC60034-25 | Motor NOT-conforming to IEC60034-25 |
|--|---------------------------------|-------------------------------------|
| 1 m (3 ft) < L < 50 m (164 ft)         | Filter not required             | dV/dt filter                        |
| 50 m (164 ft) < L < 100 m (328 ft)     | Filter not required             | Sinus filter                        |
| 100 m (328 ft) < L < 300 m (984 ft)    | Filter not required             | Sinus filter                        |
| 300 m (984 ft) < L < 500 m (1640 ft)   | dV/dt filter                    | Sinus filter                        |
| 500 m (1640 ft) < L < 1000 m (3281 ft) | Sinus filter                    | Sinus filter                        |

**NOTE:** When calculating cable lengths for the purpose of guarding against these overvoltage situations, a shielded cable should count as twice the length of an unshielded cable. For example, if a shielded cable is 100 m (328 ft) in actual length, it should be considered to be equal to a 200 m (656 ft) length standard cable in the calculation.

**NOTE:** The FS drive is delivered with standard output filters. For motor cable lengths beyond 300 m (984 ft), refer to the ATV660 drive range.

### Additional Information

Further detailed technical information is available in the following white paper *An Improved Approach for Connecting VSD and Electric Motors* available on [www.schneider-electric.com](http://www.schneider-electric.com).