

NFPA 79 Edition 2007 - Certification in the USA

In the course of the periodic updating of the American NFPA /National Fire Protection Association) 79 (Electrical Standard for Industrial Machinery), a change for the use of cables has been introduced in the new edition (Edition 2007).

What effects can this have on the wiring of industrial machinery which is destined for export to the USA? There is uncertainty for users.

Electrical systems in the USA are thoroughly tested and certified. Various organisations are responsible for this, the officially recognised

- NRTL (Nationally Recognized Testing Laboratory)
One of the most well-known is UL (Underwriters Laboratories).

The NRTL makes tests in accordance with the applicable regulations. These are

- NEC (National Electrical Code), in which documents from, for example the NFPA 79 are taken into account and
- local regulations which are not standardised within the USA. The federal states have sole responsibility and take account, for example of different climate conditions.

The AHJ (Authority having Jurisdiction) inspection authority makes the final decision with the local inspector who has certain leeway for his own discretion. This common practice remains unchanged.

Effects:

Modifications of the NFPA 79 will not become effective until they are adopted by the respective federal state as the applicable regulation. As of the start of 2008, only 8 of 50 federal states have decided to implement the Edition 2007 by the end of the year 2008:

1. Ohio (already implemented)
2. Alabama (current Edition: 2001)
3. Arizona (current Edition: 1998)
4. Indiana (current Edition: 2004)
5. Kentucky (current Edition: 2004)
6. Minnesota (current Edition: 2004)
7. Tennessee (current Edition: 2001)
8. Wisconsin (current Edition: 2004)

Whether and when the other states follow is still an open question. It can also be seen that not all states implemented the last version (Edition 2004) as the applicable regulation in the past.

However, only a small proportion of cables is affected after an adoption. Because there is not even a listing for many individual cases such as drag chain cables or PUR cables.

And for the affected types - both according to the NFPA text as well as by the assessment of the NRTL - AWM types continue to be permitted, thus no changes are required if they are "suitable for the intended use" and part of a "listed assembly".

How the authorities - the NRTL as the certification authority and the local AHJ inspection authorities - make decisions in concrete individual cases is a matter of discretion. However, according to previous experience, it can be assumed that a system certified by UL will also be accepted by the local authorities.

HELUKABEL has asked UL to make a statement on this subject. We have not yet received an official response.

Fazit:

Nothing should change initially for many uses, particularly where there is no listing for many applications such as, for example drag chain cables or PUR cables.

3 cases can be distinguished:

- Systems with certification (e.g. by UL) can continue to be repaired, modified or extended according to the rules to date.
- New systems which already have a certification can continue to be produced according to the rules to date. The certification is recognised.
- New systems without certification could be confronted with higher requirements for certain cables (MTW or higher instead of AWM) in certain areas.

HELUKABEL is up to date for these issues.

We also have suitable types with corresponding approval for you in our comprehensive range.

We advise you comprehensively and competently. Simply contact us.