0022403 DATA SHEET

valid from: 27.03.2019

UNITRONIC® LIYY A



Application

UNITRONIC® LIYY A is a data cable for low frequency applications with UL and CSA approval. The cable is intended for internal and external wiring of devices, machines and plants for export to the North American market or countries where UL-/CSA approved cables are used. It is designed for fixed installation and for conditional flexible use. It is used in dry and damp interiors but not appropriate for outside usage.

Design

Design based on UL AWM Style 2464, UL 758, CSA C22.2 No. 210 (80°C, 300 V)

and according to VDE 0812

Certification UL AWM Style 2464 (File No. E63634), UL 758

RU AWM I/II A/B (File No. E63634) CSA AWM I A/B II A/B (File No. LL53776)

Conductor multi-wire strands of tinned copper wires

Insulation special PVC-based compound
Core identification code according to DIN 47100
Stranding cores are stranded in layers
Outer sheath special PVC-based compound colour: dark grey (similar RAL 7031)

Electrical properties at 20°C

Conductor resistance 0.14 mm 2 : max. 150 Ω /km

0.23 mm²: max. 94.2 Ω /km 0.34 mm²: max. 59.4 Ω /km 0.5 mm²: max. 36.7 Ω /km 0.75 mm²: max. 29.1 Ω /km 1.0 mm²: max. 29.1 Ω /km 1.5 mm²: max. 14.6 Ω /km

Specific volume resistivity $> 20 \text{ G} \Omega \text{ x cm}$

Mutual capacitance C/C: approx. 120 nF/km

(at 800 Hz)

Inductance approx. 0.65 mH/km

Peak operating voltage 300 V (not for power applications)

Test voltage A/A: 1500 V

Mechanical and thermal properties

Minimum bending radius Flexing: 15 x cable Ø

Fixed installation: 4 x cable Ø

Temperature range Flexing:

VDE: - 5°C up to +70°C UL AWM: up to +80°C Fixed installation: VDE: - 40°C up to +80°C UL AWM: up to +80°C

Flammability flame retardant acc. to IEC 60332-1-2

UL: FT1 and VW1

CSA: FT1

General requirements This cable is conform to the EU-Directive 2011/65/EU

(RoHS, Restriction of the use of certain hazardous substances).