

IEEE 802.3 Power Delivery Coordinating Committee (PDCC) Ad Hoc 18 September 2024

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[1] IEC TC 64/MT 2 Current carrying capacity of conductors and related overcurrent protection October 2024 meeting

IEEE 802.3 is a Category C liaison member of IEC TC 64/MT 2

Proposed maintenance project on IEC 60364-5-52 'Low-voltage electrical installations – Part 5-52: Selection and erection of electrical equipment – Wiring system' potential topics included 'wiring systems for communication network: e.g. PoE for supply and communication'.

New private area for IEC TC 64/MT 2 documents on the PDCC website

https://www.ieee802.org/3/ad_hoc/PDCC/private/MT2/

Documents to consider for 8 - 10 October 2024 IEC TC 64/MT 2 meeting

8th to 10th October 2024 Draft Agenda (64/MT2/343A/DA)

Maintenance of IEC 60364-5-52: Low-voltage electrical installations – Part 5-52: Selection and erection of electrical equipment – Wiring system (64/2683/DC)

Report of Comments on 64/2683/DC (64/MT2/346)

[2] IEC TC 64: Liaison letter in response to document 64/2694/DC Maintenance of IEC 61140:2016 ED4

IEC TC 64 develop the installation as well as horizontal equipment and installations safety standards

- IEC 60346 Low-voltage electrical installations

- IEC 60364-7-716 Low-voltage electrical installations - Part 7-716: Requirements for special installations or locations – ELV DC power distribution over information and communications technology (ICT) cable infrastructure

- IEC 61140 Protection against electric shock – Common aspects for installations and equipment (horizontal)

IEC TC 108 develop the equipment safety standards

- IEC 62368 Audio/video, information and communication technology equipment

Lack of voltage limit alignment

- IEC 62368-3 Clause 5 'Power transfer using ES1 or ES2 voltages' using ES1

- IEC 62368-1:2014 restricts the maximum voltage to 60 V DC if the current exceeds 2 mA, but also permits the voltage to rise above 60 V DC so long as the current is less than or equal to 2 mA

- IEC 60364-7-716 limits the maximum voltage to 60 V DC without exception

Lack of location alignment

- IEC 62368-1:2018 limits voltage of 'accessible' bare parts in 'outdoor locations' to 0.5 times ES1 (e.g., ≤ 30 V)

- IEC 60364-7-716 limits the voltage to 60 V DC in 'dry locations', and 15 V DC in all other locations, for SELV

- No definition of 'dry location'

[2] IEC TC 64: Liaison letter in response to document 64/2694/DC Maintenance of IEC 61140:2016 ED4

IEC 61140 Scope

According to IEC Guide 104, technical committees, when preparing, amending, or revising their publications, are required to make use of any basic safety publication such as IEC 61140.

IEC TC 108 publications, such as IEC 62368, should be following the IEC 61140 requirements.

IEC 61140 maintenance document for comments (DC) circulated to all IEC committees

64/2694/DC Maintenance of IEC 61140:IEC 61140:2016 ED4 – Protection against electric shock – Common aspects for installations and equipment

Open date: 26 July 2024

Close date: 4 October 2024

IEEE 802.3 has access to this DC as a Category C liaison member

DC available in PDCC private area at https://www.ieee802.org/3/ad_hoc/SCC_18/private/IEC_PT_716/64_2694e_DC.pdf

Proposal

Send a liaison letter in response to DC asking if the IEC 61140 revision could be an opportunity to achieve alignment across these IEC TC 64 and IEC TC 108 standards

[3] BS 7671 2018+A4 IET Wiring Regulations: Amendment 4 draft for public consultation (DPC)

BS 7671 "Requirements for Electrical Installations. IET Wiring Regulations"

Institution of Engineering and Technology (IET) and British Standards Institute (BSI)

BS 7671 2018+A4 IET Wiring Regulations: Amendment 4

Adds a new Section 716, 'Power over Ethernet', based on IEC 60364-7-716

Also addresses functional-equipotential-bonding for Information and Communication Technology Equipment and Systems (ICT)

Draft for public consultation (DPC) open for comment until 3 November 2024

Anybody can register for account on the BSI Standards Development portal to access draft

<https://identity.bsigroup.com/StdDevRegistration/Register?bpurl=https://standardsdevelopment.bsigroup.com/>

New Section 716 on page 38 of part 2 of the BS 7671 2018+A4 draft

https://standardsdevelopment.bsigroup.com/Projects/download/9024-10752?fileName=BS+7671%2bAmendment+4_Part2.pdf

Excellent video https://youtu.be/P_XyqgKV5y0?si=DdfBsi505BSkEpoJ to help guide you through registering for a BSI account, accessing the BS 7671 2018+A4 draft, and submitting comments

Thank you