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Field Device Integration (FDI)® – Part 103-1: Profiles – PROFIBUS

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FIELD DEVICE INTEGRATION (FDI®) –

Part 103-1: Profiles – PROFIBUS

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IEC 62769-103-1 has been prepared by subcommittee 65E: Devices and integration in enterprise systems, of IEC technical committee 65: Industrial-process measurement, control and automation. It is an International Standard.

This third edition cancels and replaces the second edition published in 2020. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) added DEVICE_ID to the ProfibusIdentificationType and namespace to Annex A and Annex B;
b) added mapping from PB standard parameters to PA DIM.

The text of this International Standard is based on the following documents:

Draft	Report on voting
65E/862/CDV	65E/919/RVC

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

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FIELD DEVICE INTEGRATION (FDI®) –

Part 103-1: Profiles – PROFIBUS

1 Scope

This part of IEC 62769 specifies an FDI®[1] profile of IEC 62769 for IEC 61784-1_CP 3/1 (PROFIBUS DP)[2] and IEC 61784-1_CP3/2 (PROFIBUS PA)~~[1]~~.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 61784-1, *Industrial communication networks – Profiles – Part 1: Fieldbus profiles*

IEC 61804 (all parts), *Devices and integration in enterprise systems – Function blocks (FB) for process control and electronic device description language (EDDL)*

IEC 62541-100:2015, *OPC Unified Architecture – Part 100: ~~Device Interface~~ OPC UA for Devices*

IEC 62769-2[3], *Field device integration (FDI®) – Part 2: ~~FDI~~ Client*

IEC 62769-4[4], *Field device integration (FDI®) – Part 4: FDI® Packages*

IEC 62769-5[5], *Field device integration (FDI®) – Part 5: ~~FDI~~ Information Model*

IEC 62769-7[6], *Field Device Integration (FDI®) – Part 7: ~~FDI~~ Communication Devices*

PI Order No.: 2.122:2008, *Specification for PROFIBUS – Device Description and Device Integration – Volume 1: GSD, V5.1, July 2008: GSD;* available at <www.PROFIBUS.com>

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~~3 Under preparation. Stage at the time of publication: IEC/RFDIS 62769-2:2020.~~

~~4 Under preparation. Stage at the time of publication: IEC/RFDIS 62769-4:2020.~~

~~5 Under preparation. Stage at the time of publication: IEC/RFDIS 62769-5:2020.~~

~~6 Under preparation. Stage at the time of publication: IEC/RFDIS 62769-7:2020.~~

IEC 62769-103-1

Edition 3.0 2023-04

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Field Device Integration (FDI)® – Part 103-1: Profiles – PROFIBUS

Intégration des appareils de terrain (FDI)® – Partie 103-1: Profils – PROFIBUS

IEC 62769-103-1:2023-04(en-fr)

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Part 103-1: Profiles – PROFIBUS

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FIELD DEVICE INTEGRATION (FDI®) –

Part 103-1: Profiles – PROFIBUS

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IEC 62769-4, *Field device integration (FDI®) – Part 4: FDI® Packages*

IEC 62769-5, *Field device integration (FDI®) – Part 5: Information Model*

IEC 62769-7, *Field device integration (FDI®) – Part 7: Communication devices*

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Partie 103-1: Profils – PROFIBUS

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Cette troisième édition annule et remplace la deuxième édition parue en 2020. Cette édition constitue une révision technique.

Cette édition inclut les modifications techniques majeures suivantes par rapport à l'édition précédente:

a) ajout de DEVICE_ID à ProfibusIdentificationType et d'un espace de noms à l'Annexe A et à l'Annexe B;
b) ajout du mapping des paramètres normalisés PB avec le PA DIM (*Process Automation Device Information Model*).

Le texte de cette Norme internationale est issu des documents suivants:

Projet	Rapport de vote
65E/862/CDV	65E/919/RVC

Le rapport de vote indiqué dans le tableau ci-dessus donne toute information sur le vote ayant abouti à son approbation.

La langue employée pour l'élaboration de cette Norme internationale est l'anglais.

Ce document a été rédigé selon les Directives ISO/IEC, Partie 2, il a été développé selon les Directives ISO/IEC, Partie 1 et les Directives ISO/IEC, Supplément IEC, disponibles sous www.iec.ch/members_experts/refdocs. Les principaux types de documents développés par l'IEC sont décrits plus en détail sous www.iec.ch/publications/.

Une liste de toutes les parties de la série IEC 62769, publiées sous le titre général *Intégration des appareils de terrain (FDI®)*, se trouve sur le site web de l'IEC.

Le comité a décidé que le contenu de ce document ne sera pas modifié avant la date de stabilité indiquée sur le site web de l'IEC sous webstore.iec.ch dans les données relatives au document recherché. À cette date, le document sera

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INTÉGRATION DES APPAREILS DE TERRAIN (FDI®) –

Partie 103-1: Profils – PROFIBUS

1 Domaine d'application

La présente partie de l'IEC 62769 spécifie un profil FDI®[1] de l'IEC 62769 pour le profil de communication CP 3/1 défini dans l'IEC 61784-1 (PROFIBUS DP)[2] et pour le profil de communication CP 3/2 (PROFIBUS PA) défini dans l'IEC 61784-1.

2 Références normatives

Les documents suivants sont cités dans le texte de sorte qu'ils constituent, pour tout ou partie de leur contenu, des exigences du présent document. Pour les références datées, seule l'édition citée s'applique. Pour les références non datées, la dernière édition du document de référence s'applique (y compris les éventuels amendements).

IEC 61784-1, *Réseaux de communication industriels – Profils – Partie 1: Profils de bus de terrain*

IEC 61804 (toutes les parties), *Les dispositifs et leur intégration dans les systèmes de l'entreprise – Blocs fonctionnels (FB) pour les procédés industriels et le langage de description électronique de produit (EDDL)*

IEC 62541-100:2015, *Architecture unifiée OPC – Partie 100: Interface d'appareils*

IEC 62769-2, *Intégration des appareils de terrain (FDI®) – Partie 2: Client*

IEC 62769-4, *Intégration des appareils de terrain (FDI®) – Partie 4: Paquetages FDI®*

IEC 62769-5, *Intégration des appareils de terrain (FDI®) – Partie 5: Modèle d'information*

IEC 62769-7, *Intégration des appareils de terrain (FDI®) – Partie 7: Appareils de communication*

Spécification PI n° 2.122:2008, *Specification for PROFIBUS – Device Description and Device Integration – Volume 1: GSD, V5.1, juillet 2008: GSD,* disponible en anglais à l'adresse <www.PROFIBUS.com>

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2 PROFIBUS est l'appellation commerciale du consortium PROFIBUS & PROFINET International, une organisation à but non lucratif. Cette information est donnée à l'intention des utilisateurs du présent rapport technique et ne signifie nullement que l'IEC approuve le détenteur des appellations commerciales ou l'emploi de ses produits. La conformité n'exige pas l'utilisation de l'appellation commerciale. L'utilisation de l'appellation commerciale exige l'autorisation du détenteur de l'appellation commerciale.