IEC 61784-5-12

Edition 1.0 2015-06

INTERNATIONAL STANDARD

NORME INTERNATIONALE

AMENDMENT 1
AMENDEMENT 1

Industrial communication networks – Profiles – Part 5-12: Installation of fieldbuses – Installation profiles for CPF 12

Réseaux de communication industriels – Profils – Partie 5-12: Installation de bus de terrain – Profils d'installation pour CPF 12

IEC 61784-5-12:2010-07/AMD1:2015-06(en-fr)

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FOREWORD

This amendment has been prepared by subcommittee 65C: Industrial networks, of IEC technical committee 65: Industrial-process measurement, control and automation.

The text of this amendment is based on the following documents:

CDV	Report on voting
65C/768/CDV	65C/800/RVC

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

The committee has decided that the contents of this amendment and the base publication will remain unchanged until the stability date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

INTRODUCTION

Attention is drawn to the fact that the document IEC 61918 specifies all the installation requirements that apply to large part of the industrial communication networks and that these requirements automatically apply to each single network with the exception of those requirements that in the relevant document of the IEC 61784-5 series are explicitly defined as modified or replaced.

All the additions to the latest edition of the IEC 61918 apply to the networks of CPF 12. Nevertheless, the fact that a few tables of IEC 61918 have been restructured to better define the technical content requires that the document IEC 61784-5-12 Ed.1 be amended to fully match the IEC 61918 revised structure.

GENERAL REPLACEMENT

In all occurrences of "IEC 61918:2010" *replace it with* "IEC 61918:2013".

OTHER REPLACEMENTS

2 Normative references

Add the following references to the existing list:

IEC 60603-7-3, *Connectors for electronic equipment – Part 7-3: Detail specification for 8-way, shielded, free and fixed connectors, for data transmission with frequencies up to 100 MHz*

IEC 60793-2 (all subparts), *Optical fibres – Part 2: Product specifications*

6 Conformance to installation profiles

Replace the following current text:

Compliance to IEC 61784-5-12:2010[1] for CP 12/m<name> or

Compliance to IEC 61784-5-12 (Ed.1.0) for CP 12/m<name>

with the following new text:

Compliance to IEC 61784-5-12:2010[1] and Am.1 for CP 12/m <name> or

Compliance to IEC 61784-5-12 (Ed.1.0 and Am.1) for CP 12/m <name>

A.4.3.2.3 Network characteristics for balanced cabling based on Ethernet

Replace footnote a of Table A.1 with the following:

a See A.4.4.3.2.

A.4.3.2.4 Network characteristics for optical fibre cabling

Replace the existing Table A.2 with the following Table A.2:

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1 The date should not be used when the edition number is used.

Table A.2 – Network characteristics for optical fibre cabling

CP 12/1 and CP12/2		
Optical fibre type	**Description**	
Single mode silica	Bandwidth (MHz) or equivalent at λ (nm)	300 at 1 310
	Minimum length (m)	0
	Maximum length[a] (m)	14 000
	Maximum channel insertion loss/optical power budget (dB)	6 see IEEE 802.3 Clause 58 10 km specified
	Connecting hardware	See A.4.4.2.5
Multimode silica	Modal bandwidth (MHz × km) at λ (nm)	600 at 1 310
	Minimum length (m)	0
	Maximum length[a] (m)	2 000
	Maximum channel insertion loss/optical power budget (dB)	4,5
	Connecting hardware	See A.4.4.2.5
POF	Modal bandwidth (MHz × 100 m) at λ (nm)	35 at 650
	Minimum length (m)	0,055
	Maximum length[a] (m)	50
	Maximum channel insertion loss/optical power budget (dB)	4,2
	Connecting hardware	See A.4.4.2.5
Hard clad silica	Modal bandwidth (MHz × km) at λ (nm)	70 at 650
	Minimum length (m)	0
	Maximum length[a] (m)	100
	Maximum channel insertion loss/optical power budget (dB)	4
	Connecting hardware	See A.4.4.2.5
[a] This value is reduced by connections, splices and bends in accordance with formula (1) in 4.4.3.4.1 of IEC 61918:2013.		

A.4.4.1.4 Optical fibre cables

Replace the existing Table A.6 with the following Table A.6: