- Active field distributors
  - AFD (Active Field Distributors) product version 02: 6ES7157-0AF81-0XA0
  - AFS (Active Field Splitters), product version 02: 6ES7157-0AF82-0XA0
  - AFDiS (Active Field Distributor intrinsic safety): 6ES7157-0AG83-0XA0

These operating instructions contain a description of the components that was valid at the time the operating instructions were published. We reserve the right to include product information with information updates with new components and components with a new product status.

Changes compared to the previous version

The following changes have been made to these operating instructions compared to the previous version (10/2006 edition):

- New: Active field distributor AFDiS for use in hazardous areas
- Integration of the product information 09/2008 and 11/2009

Configuring with *STEP 7*

The DP/PA coupler FDC 157-0 can be configured with *STEP 7* from V5.3 SP3 and HSP0095 or optionally with SIMATIC PCS 7 V7.0 or higher for diagnostic purposes.

Position in the overall information structure

Depending on the hardware used you require the following manuals in addition to these operating instructions:

- The manual for the implemented DP master, including the following special information:
  - Configuring and commissioning of a DP master system
  - Description of the DP master
- The manual SIMATIC NET, PROFIBUS network manual (http://support.automation.siemens.com/WW/view/en/35222591)
- The operating instructionsSIMATIC S7-300 CPU 31xC and CPU 31x: Installation (http://support.automation.siemens.com/WW/view/en/36305386)
- The manual Automation Systems S7-300, ET 200M Ex I/O modules (http://support.automation.siemens.com/WW/view/en/1096709), including in particular information on the topics intrinsic safety and explosion protection.
- System manual Principles of Explosion Protection (http://support.automation.siemens.com/WW/view/en/12521844)

More information on explosion protection can be found in the corresponding directives and standards.

14.7 Technical data - active field distributor (AFD) (6ES7157-0AF81-0XA0)

Technical specifications	
Product version	02
Protection class	IP65
Dimensions and weight	
Dimension W x H x D (mm)	125 X 57 x 80; with screw gland 175 x 57 x 105
Weight	Approx. 700 g
Voltages, currents, potentials	
Rated supply voltage	16 VDC to 32 VDC
T_{max}	35 V
• Polarity reversal protection	Yes
Internal power consumption	Max. 25 mA; with an open main connection line 59 mA
Status, interrupts, diagnostics	
Status display	No
Interrupts	None
Diagnostics function	Yes
• Status PA main line PA1, PA2	Green LED
• Fault PA main line PA1, PA2	Red LED
• Status / fault PA spur line X1 to X4	Green LED
Data for selecting the PA field devices	
Connection	• Field devices with certification for PROFIBUS PA • max. 4 PA field devices can be connected
Current I_{max} pro PA spur line X1 to X4	• 60 mA

A.2 Order numbers

A.2.1 Components of the bus links

Components of the bus links

Table A- 1 Order numbers for the components of the bus couplers

Component	Order number
IM 153-2 High Feature	6ES7153-2BA02-0XB0
IM 153-2 High Feature Outdoor	6ES7153-2BA82-0XB0
DP/PA coupler FDC 157-0	6ES7157-0AC83-0XA0
DP/PA coupler Ex [i]	6ES7157-0AD82-0XA0
Y coupler	6ES7197-1LB00-0XA0
Bus module BM PS/IM	6ES7195-7HA00-0XA0
Bus module BM PS/IM SIPLUS extreme	6AG1195-7HA00-2XA0
Bus module BM IM/IM	6ES7195-7HD10-0XA0
Bus module BM IM/IM Outdoor	6ES7195-7HD80-0XA0
Bus module BM FDC	6ES7195-7HF80-0XA0
Bus module BM FDC/FDC (redundant)	6ES7195-7HG80-0XA0
Bus module BM Y coupler	6ES7654-7HY00-0XA0
Active field distributor (AFD)	6ES7157-0AF81-0XA0
Active field distributor AFDiS	6ES7157-0AG83-0XA0
Active field splitter (AFS)	6ES7157-0AF82-0XA0
Complete package Y link: • 2 x IM 153-2 High Feature • 1 x bus module BM IM/IM • 1 x Y coupler • 1 x bus module BM Y coupler	6ES7197-1LA04-0XA0
Complete package Y link: • 2 x IM 153-2 High Feature Outdoor • 1 x bus module BM IM/IM • 1 x Y coupler • 1 x bus module BM Y coupler	6ES7197-1LA11-0XA0