1.3 Product documentation

1.3.1 Product documentation set



Figure 1: The intended use of manuals throughout the product lifecycle

The engineering manual contains instructions on how to engineer the IEDs using the various tools available within the PCM600 software. The manual provides instructions on how to set up a PCM600 project and insert IEDs to the project structure. The manual also recommends a sequence for the engineering of protection and control functions, as well as communication engineering for IEC 61850.

The installation manual contains instructions on how to install the IED. The manual provides procedures for mechanical and electrical installation. The chapters are organized in the chronological order in which the IED should be installed.

The commissioning manual contains instructions on how to commission the IED. The manual can also be used by system engineers and maintenance personnel for assistance during the testing phase. The manual provides procedures for the checking of external circuitry and energizing the IED, parameter setting and configuration as well as verifying settings by secondary injection. The manual describes the process of testing an IED in a substation which is not in service. The chapters are organized in the chronological order in which the IED should be commissioned. The relevant procedures may be followed also during the service and maintenance activities.

The operation manual contains instructions on how to operate the IED once it has been commissioned. The manual provides instructions for the monitoring, controlling and setting of the IED. The manual also describes how to identify disturbances and how to view calculated and measured power grid data to determine the cause of a fault.

The application manual contains application descriptions and setting guidelines sorted per function. The manual can be used to find out when and for what purpose a typical protection function can be used. The manual can also provide assistance for calculating settings.

The technical manual contains operation principle descriptions, and lists function blocks, logic diagrams, input and output signals, setting parameters and technical data, sorted per function. The manual can be used as a technical reference during the engineering phase, installation and commissioning phase, and during normal service.

The communication protocol manual describes the communication protocols supported by the IED. The manual concentrates on the vendor-specific implementations.

The point list manual describes the outlook and properties of the data points specific to the IED. The manual should be used in conjunction with the corresponding communication protocol manual.

The cyber security deployment guideline describes the process for handling cyber security when communicating with the IED. Certification, Authorization with role based access control, and product engineering for cyber security related events are described and sorted by function. The guideline can be used as a technical reference during the engineering phase, installation and commissioning phase, and during normal service.

1.3.2 Document revision history

Document revision/date	History
-/May 2017	First release
A/October 2017	Information updated
B/March 2018	2.2 Maintenance release 1
C/June 2018	Added new functions and resolved bugs
D/November 2018	Added harmonic, delta, and PSTPDIF functions

1.3.3 Related documents

Documents related to RES670	Document numbers
Application manual	1MRK 511 407-UEN
Commissioning manual	1MRK 511 409-UEN
Product guide	1MRK 511 410-BEN
Technical manual	1MRK 511 408-UEN
Type test certificate	1MRK 511 410-TEN

670 series manuals	Document numbers	
Operation manual	1MRK 500 127-UEN	
Engineering manual	1MRK 511 398-UEN	
Installation manual	1MRK 514 026-UEN	
Communication protocol manual, DNP3	1MRK 511 391-UUS	
Communication protocol manual, IEC 60870-5-103	1MRK 511 394-UEN	
Communication protocol manual, IEC 61850 Edition 1	1MRK 511 392-UEN	
Communication protocol manual, IEC 61850 Edition 2	1MRK 511 393-UEN	
Communication protocol manual, LON	1MRK 511 395-UEN	
Communication protocol manual, SPA	1MRK 511 396-UEN	
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