

TBE/KBE <small>Title</small> Revision List	Document TBE/KBE-REV
	Issue 19
	Date 2024-12-06
	Supersedes 18

Document	Description of Revisions	Issue	Date
TBE/KBE HI Expired		1 (E)	01-12
	Update: - Removed references to Barsebäck - Removed Chapter 9.	2 (E)	13-08-20
	Update: - New Chapter 6 "Seismic requirements" was moved from TBE 102:2. - Linguistic changes.	3 (E)	15-10-07
	Update: - Linguistic changes - SKB is added to the list of document owners - Updated chapter 2, Definitions have been arranged in alphabetical order - Chapter 2.2 title changed to "2.2 Abbreviations/Acronyms", Content changed to alphabetical order - All images have been reviewed and detected, not relevant information has been changed. - New classes SL1, SL2 and SL5 replace the previous classes - Chapter 8 text has been revised.	4 (E)	17-05-22
TBE/KBE HI		1 (S)	01-12
	Uppdatering: - Borttagen referens till Barsebäck - Borttagning av kap 9.	2 (S)	13-08-20
	Uppdatering: - Nytt kap 6 "Seismiska krav" flyttades från TBE 102:2. - Språkliga ändringar.	3 (S)	15-10-07

Document	Description of Revisions	Issue	Date
	<p>Uppdatering:</p> <ul style="list-style-type: none"> - Språkliga ändringar i hela dokumentet - SKB läggs in i dokumentägare listan. - Förord texten har omarbetats. - Kap 2 ”definitioner och förkortningar” har aktualitetsgranskats och ordningen ändrades till alfabetiskt. - Hänvisning till TBE 100:2 har tillkommit. - Nya klasser SL1, SL2 och SL5 ersätter de kvarvarande tidigare klasser. - Alla bilder har aktualitetsgranskats, inte aktuella uppgifter, har ändrats. 	4 (S)	17-05-22
	Tillägg TS-R och TS-M som defintion i kapitel 3 och en del av arbetsflödet i kapitel 8	5 (S)	18-10-03
		6 (S)	20-07-01
	ändringar är främst gjorda i avsnitt 9.2, 9.4 samt bilaga 1 avsnitt 2.22.	7 (S)	22-02-08
TBE 100 Expired	<p>Update:</p> <ul style="list-style-type: none"> - Enclosure class, chapter 3.4.1 - Transient disturbances in main and auxiliary power supply, chapter 3.11. 	4 (E)	09-10-07
	<p>Update:</p> <ul style="list-style-type: none"> - Reworked documentation requirements, section 7, page 19 - FAT, SAT and OAT moved to KBE 100. 	5 (E)	11-06-15
	Updated table in chapter 3.9	6 (E)	13-08-20
	Rev. 13 consists of two documents: TBE 100:1 and TBE 100:2.	-	15-10-07
TBE 100:1	<p>Update:</p> <ul style="list-style-type: none"> - Rev. 13 consists of two documents: TBE 100:1 and TBE 100:2. TBE 100:1 will be issue 1. 	1 (E)	15-10-07
	<ul style="list-style-type: none"> - Linguistic changes - Chapter 2 definitions updated, Equipment Qualification definition applied - TBY replaced with TBM - Chapter 3.4 updated - Chapter 7 requires documentation to be delivered in A3 size modified to “Circuit diagrams shall be supplied in agreed format” 	2 (E)	17-05-22

Document	Description of Revisions	Issue	Date
	<p>Update:</p> <ul style="list-style-type: none"> - Chapter 1 removed “as defined in TBE 106: x” - Chapter 3.10 remove “Extended requirements according to section 5.5 for signal interchange with safety related equipment” - Chapter 3.11 remove “Special requirements concerning asynchronous motors are stipulated in TBE 103.” - Chapter 4.4 add “Bolts” - Chapter 4.7 rewrite paragraphs with Terminal blocks - Chapter 6.3 remove “The Manufacturer/Supplier shall on request examine the Purchasers documentation for installation, assist during installation, testing, commissioning and start-up.” 	3 (E)	18-10-03
	<ul style="list-style-type: none"> - Update: Chapter 2 add in definition “Verbal forms” - 3.17.5 change reference from “TBE 105” to “TBE 104”. - Chapter 5.2 rewrite paragraph with “Electronic components that is sensitive to ionizing radiation, eg. microprocessors shall be avoided in environments where it may be exposed to an integrated ionizing radiation greater than 10 Gy TID (total integrated dose)” 	4	20-04-20
	<ul style="list-style-type: none"> - Rewrite chapter 3.4 title to “Cyber Security” - Rewrite chapter 3.6 regarding LTO and change “Design life” to “Product Quality”. - Change chapter 4.1 “Screen protection” to “Contact protection” - Rewrite chapter 5.3 to also include seismic DBE in mild environmental - Linguistic changes in the whole document 	5	21-06-01
	<ul style="list-style-type: none"> - Severity E added to section 3.5.1: <i>”At least IP 65 for equipment in severity E according to TBE 101”</i>. - Smaller linguistic changes throughout the document. 	6	22-11-17
TBE 100:2	<p>Update:</p> <ul style="list-style-type: none"> - Rev. 13 consists of two documents: TBE 100:1 and TBE 100:2 TBE 100:1 will be issue 1. - IT-security added in Chapter 3, the case of programmable electronics. - Based on the ISO 27000 series of standards and requirements is partly taken over from previous TBE 106 package. 	1 (E)	15-10-07

Document	Description of Revisions	Issue	Date
	Update: <ul style="list-style-type: none"> - Linguistic changes in the whole document - Chapter 1 revised text - Chapter 2 definitions is updated and in alphabetic order - Chapter 3.1 Authentication control levels removed - Chapter 4 "Nuclear specific requirements" added - Checklist revised. 	2 (E)	17-05-22
	<ul style="list-style-type: none"> - Titles changed to correspond to rules in British English - Text in Swedish has been removed in the checklist 	3 (E)	17-10-17
	Update: <ul style="list-style-type: none"> - Linguistic changes in the whole document 	4 (E)	18-10-03
	<ul style="list-style-type: none"> - New title: Cybersecurity. - referred standard IEC 62645 in chapter 6 Section 3.1 added, requirements according to IEC 62645 as well as additions in chapters 2 related to cyber security. - Example of areas that should be defined, verified, and documented before delivery in chapter 5. - Smaller linguistic changes throughout the document. 	5	22-11-17
TBE 101	Update	4 (E)	07-04-20
	Update: <ul style="list-style-type: none"> - Severity D, applicable to equipment installed at non-weather protected locations - Updating of standard EN 60529 to IEC 60529. 	5 (E)	09-10-07
	Definition of severity A has been reformulated.	6 (E)	-
	Update	7 (E)	13-08-20
	Update: <ul style="list-style-type: none"> - Table 6 is removed. - Inaccuracies have been corrected. 	8 (E)	15-10-07
	Update: <ul style="list-style-type: none"> - Linguistic changes - Table 3 has been revised - Table D vibration class changed and Mechanically active - substances level changed 	9 (E)	17-05-22
	Update: <ul style="list-style-type: none"> - Chapter 3.1 note 1: Updated to standard "IEC 60255-26" 	10	20-04-20

Document	Description of Revisions	Issue	Date
	<ul style="list-style-type: none"> - A new severity E added including table specifically for equipment installed in underground locations. - Tables 1, 2, and 3 updated according to the new standards added. - Standards added; IEC 60721-3 och IEC 60721-3 (normal operation), IEC 61000-6-2 (EMC), in a few cases the original values are kept if the new standard value deviate and a note is added. - Smaller linguistic changes throughout the document. 	11	22-11-17
	<ul style="list-style-type: none"> - Harmonise table 5 & 6 towards the applicable standard. 	12	24-05-07
TBE 102:1	Update	2 (E)	06-05-17
	Update: <ul style="list-style-type: none"> - General values concerning ionizing radiation deleted from the table 1. 	3 (E)	07-10-02
	Update	4 (E)	13-08-20
	Update: <ul style="list-style-type: none"> - Chapter 1 Introduction, Reworked. 	5 (E)	15-10-07
	Update: <ul style="list-style-type: none"> - Linguistic changes - Standard references have been updated - Definitions has been updated and arranged in alphabetic order. - Tables have been revised 	6 (E)	17-05-22
	Update: <ul style="list-style-type: none"> - Note 1 in table 1 takes off 	6 (E)	17-05-22
	Update: <ul style="list-style-type: none"> - Chapter 2: changed definition for “Qualified life”. Changed reference for “Condition based qualification. Changed definition for “Service condition”. Removed OKG 1 and 2 for profile 1, 2, 3 and BWR 1. - Chapter 4.2: Removed OKG 1 and 2. BWR/PWR revised temperature. Removed note 1. - Chapter 5.5 and 5.6 removed OKG 1 and 2. - Chapter 5.7 removed note 1. 	7 (E)	18-10-03
	<ul style="list-style-type: none"> - Smaller linguistic changes. 	8	22-11-17
	<ul style="list-style-type: none"> - Smaller adjustments to PWR tables 	9	24-12-06
TBE 102:2	New	1 (E)	99-08
	Update	2 (E)	99-08
	Update: <ul style="list-style-type: none"> - Barsebäck has been deleted - SKI changed to SSM 	3 (E)	-
	Update: <ul style="list-style-type: none"> - Table with 5% attenuation added. 	4 (E)	13-08-20

Document	Description of Revisions	Issue	Date
	Update: <ul style="list-style-type: none"> - 1.1 Background, first and last paragraph deleted - 1.2 "Overall goals for earthquake resistance" and 1.3 "New construction or replacement of equipment" removed. - Chapter 2 half "response spectrum" text removed, "Time history ZPA" removed. Deleted text has been moved to HI. - Chapter 3 Environmental Conditions reworked. - Linguistic changes. 	5 (E)	15-10-07
	<ul style="list-style-type: none"> - Clarification in table 2 and section 3.2 regarding standard IEEE 344 - Added standard including date, IEC/IEEE 980-344. - Section 4.1.2 rewritten to clarify requirements. - Smaller linguistic changes throughout the document 	6	22-11-17
TBE 103	Reworked	3 (E)	-
	Update: <ul style="list-style-type: none"> - Starting currents, item 3.2.1 and EMC requirements, item 3.1.1. 	4 (E)	09-10-07
	Update: <ul style="list-style-type: none"> - Specific design requirements for manufacturing are removed. - ISO 1940-1 changed to ISO 8821 - EN 60034-4 Class "R" changed to EN 60034-34 Class B. 	5 (E)	-
	Update: <ul style="list-style-type: none"> - Valid referred standards. 	6 (E)	13-08-20
	Update: <ul style="list-style-type: none"> - Standard IEC 60034-26 has been added to chapter 3.1 standardisation list 	7 (E)	15-10-07
	Update: <ul style="list-style-type: none"> - Linguistic changes - Reference to TBY changed to reference to TBM - Chapter 4.3 "The requirement is not applicable for motors >6kV." Added - "Numbers of starts in succession and recovery time" added in the checklist 	8 (E)	17-05-22
	<ul style="list-style-type: none"> - New section 3.2.6 "mechanical vibrations and balancing" is added. - Added standards: IEC 60072-1 & -2, ISO 21940-11 	9	24-05-07
TBE 104		1 (E)	-
Expired	Update: <ul style="list-style-type: none"> - 2.4 supplemented - Editorial Update. 	2 (E)	-
	Update.	3 (E)	-

Document	Description of Revisions	Issue	Date
	Replaced by TBE 104:1 and TBE 104:2.	-	03-12
TBE 104:1		1 (E)	-
	Update of standard: - IEC 60297 to IEC 60297-3 - EN 61812-1 to IEC 61812-1.	2 (E)	09-10-07
	Requirements for components with simple microprocessor-based components have been added.	3 (E)	11-06-15
	Update: - Standard IEC 61508 has been added to the default list. - In 3.2 under the heading "Reliability" supplemented. "Components" are composed of "components". - Linguistic changes. - "Fault signalling systems" removed. - Chapter 4 reworked. - SIL classification requirements changed from SIL 3 to SIL 2.	4 (E)	15-10-07
	Update: - Linguistic changes - Titles of IEC 60947-5-1 and IEC 60447 has been corrected - definition of E/E/PE added	5 (E)	17-05-22
	Update: - Chapter 1. New picture and text "How to use combination of TBE 104:1 and TBE 106:x" - Chapter 2. Definition of "HDL-Programmed Device, HPD" - Chapter 3.1. Added standards regarding printed circuits boards and components - Chapter 3.3.6: Added "Marking" - Chapter 3.3.7: Added "Packaging and Handling" - 4.3.1 section added: "Components including custom designed HDL" - Chapter 6 added row regarding printed circuits boards, components including HDL and networks	6	20-04-20
TBE 104:2	Update of standard: - SSM 1562 to EN 472	2 (E)	06-05-17
	Update of standard: - SS EN 837 to EN 837 - SS EN 472 to EN 472 - SMS 1562 to EN 472.	3 (E)	09-10-07
	Requirements for components with simple microprocessor-based components have been added.	4 (E)	06-05-17

Document	Description of Revisions	Issue	Date
	Update: <ul style="list-style-type: none"> - Standards IEC 60880, IEC 60947-5-1 deleted. - 3.2 General Requirements, supplemented. - Linguistic changes. - Chapter 4, Additional Requirements recast. - Chapter 6 paragraph 10.16 to 19 and 32-33 deleted. 	5 (E)	15-10-07
	Update: <ul style="list-style-type: none"> - Chapter 1. New picture and text “How to use combination of TBE 104:1 and TBE 106:x” - Chapter 2. Definition of “HDL-Programmed Device, HPD” - Chapter 3.1. Added standards regarding printed circuits boards and components - Chapter 3.3.5: Added “Packaging and Handling” - 4.3.1 section added: “Components including custom designed HDL” - Chapter 6 added row regarding printed circuits boards, components including HDL and networks 	6	20-04-20
	<ul style="list-style-type: none"> - Figure updated - Added standard: IEC 61340-5-X 	7	24-05-07
TBE 105 Expired	Update on standard references.	2 (E)	06-05-17
	Update of standard: <ul style="list-style-type: none"> - IEC 60255-3 to IEC 60255-151 - SS EN 62326-1 to EN 62326-1 - SS EN 60603-2 to IEC 60603-2. 	3 (E)	09-10-07
	IEC 60255-151 Electrical Relays, removed.	4 (E)	06-05-17
	Update: <ul style="list-style-type: none"> - Linguistic changes - Chapter 3.1 has been reworked - Chapter 3.2 3.2 Requirements according to nuclear guides, has been moved to Chapter 5 - Update of standards - Chapter 3.4 Components for Printed Boards Assemblies, has been reworked - Chapter Documentation has been reworked - Chapter 7 Agreement between Manufacturer/Supplier and Purchaser, is added 	5 (E)	17-05-22
	Abolished. Requirements regarding printed circuits boards will be handled by TBE 104:x and TBE 106:x	-	20-04-20
TBE 106:1 Expired		1 (E)	
	Reworked after OKG comments. Editorial Update.	2 (E)	97-06

Document	Description of Revisions	Issue	Date
	Abolished	-	
TBE 106:1-1 Expired and reused	New	1 (E)	
	Update of standard: - ISO 9000-3 to ISO/IEC 90003:2004.	2 (E)	07-04-20
	Abolished will be handled by TBE 106:1-2.	-	15-10-07
	The document replaces the previous doc TBE 106:1-3.	1 (E)	15-10-07
	Update: - Linguistic changes - Definition for "Basic essential" software has competed - Definitions for PROM, RAM, ROM has been added - Chapter 3.2.4 has been supplemented with new information - Power Supply is introduced in the checklist	2 (E)	17-05-22
	- Chapter 1. New picture and text "How to use TBE 106:1-1" - Chapter 2. Definition of "HDL-Programmed Device, HPD" - Chapter 3.1. Added standards regarding printed circuits boards and components - Chapter 3.3.6: Added "Components" - Chapter 3.3.7: Added "Marking" - Chapter 3.3.8: Added "Packaging and Handling" - 4.3.1 section added: "Components including custom designed HDL" - Chapter 6 added row regarding printed circuits boards, components including HDL and networks	3	20-04-20
TBE 106:1-2	New	1 (E)	-
	Update of standard: - ISO 9000-3 to ISO/IEC 90003:2004.	2 (E)	07-04-20
	Standards IEC 61508 and IEC 62138 have been added.	3 (E)	11-06-15

Document	Description of Revisions	Issue	Date
	Update: <ul style="list-style-type: none"> - Linguistic changes - 3.4.2 "Access Control" new information. - 3.4.3 Partially deleted text, new title "IT security" - 3.4.9 "Self-monitoring" new information - SIL classification requirements 	4 (E)	15-10-07
	Update: <ul style="list-style-type: none"> - Linguistic changes - Definition for PROM has been added - Chapter 3.2.4 has been supplemented with new information - Chapter 4.1 "The Supplier/Manufacturer shall present the equipment's all implemented barriers concerning Cyber Security." removed - Power Supply is introduced in the checklist 	5 (E)	17-05-22
	<ul style="list-style-type: none"> - Chapter 1. New picture and text "How to use TBE 106:1-2" - Chapter 2. Definition of "HDL-Programmed Device, HPD" - Chapter 3.1. Added standards regarding printed circuits boards and components - Chapter 3.3.6: Added "Components" - Chapter 3.3.7: Added "Marking" - Chapter 3.3.8: Added "Packaging and Handling" - 4.3.1 section added: "Components including custom designed HDL" - Chapter 6 added rows regarding printed circuits boards, components including HDL and networks 	6	20-04-20
TBE 106:1-3	New	1 (E)	-
	Update of standard: <ul style="list-style-type: none"> - IEC 987 to IEC 60987. 	2 (E)	07-04-20
	Standards IEC 61508 have been added.	3 (E)	11-06-15
	Moved to TBE 106:1-1		15-10-07
TBE 106:2 Expired		1 (E)	
	Update: <ul style="list-style-type: none"> - Reworked after OKG comments. - Editorial Update. 	2 (E)	97-06
	Abolished.	-	
TBE 106:2-1 Expired and reused	New	1 (E)	-
	Update of standard: <ul style="list-style-type: none"> - ISO 9000-3 to ISO/IEC 90003:2004. 	2 (E)	07-04-20
	Abolished will be handled by TBE 106:2-2.	-	-

Document	Description of Revisions	Issue	Date
	Update: <ul style="list-style-type: none"> - The document replaces the previous doc TBE 106:2-3. - The issue will be 1. - SIL classification requirements. 	1 (E)	15-10-07
	Update: <ul style="list-style-type: none"> - Linguistic changes - Chapter 3.4.2 The content has been clarified - Chapter 3.4.3 The content has been clarified - Chapter 3.4.9 The content has been clarified - Chapter 4.1 “The Supplier/Manufacturer shall present the equipment’s all implemented barriers concerning Cyber Security.” Removed - Power Supply is introduced in the checklist 	2 (E)	17-05-22
	<ul style="list-style-type: none"> - Chapter 1. New picture and text “How to use TBE 106:2-1” - Chapter 2. Definition of “HDL-Programmed Device, HPD” - Chapter 3.1. Added standards regarding printed circuits boards and components - Chapter 3.3.4: Added “Components” - Chapter 3.3.5: Added “Marking” - Chapter 3.3.6: Added “Packaging and Handling” - 4.3.1 section added: “Components including custom designed HDL” - Chapter 6 added row regarding printed circuits boards, components including HDL and networks 	3	20-04-20
TBE 106:2-2	New	1 (E)	-
	Update of the standard: <ul style="list-style-type: none"> - ISO 9000-3 to ISO/IEC 90003:2004 SIL classification requirements	2 (E)	07-04-20
	Standards IEC 61508 have been added	3 (E)	11-06-15
	Update: <ul style="list-style-type: none"> - Linguistic changes - In 3.1, adds reference to KBE 100 - 4.1 sentence about IT-security - SIL classification requirements. - IT requirements that have been raised to 100:2. 	4 (E)	15-10-07
	Update: <ul style="list-style-type: none"> - Document title changed: - Programmable electronics with a fixed application - Linguistic changes - Chapter 4.1 Requirement for barrier concerning Cyber Security removed. 	5 (E)	17-05-22

Document	Description of Revisions	Issue	Date
	<ul style="list-style-type: none"> - Chapter 1. New picture and text “How to use TBE 106:2-2” - Chapter 2. Definition of “HDL-Programmed Device, HPD” - Chapter 3.1. Added standards regarding printed circuits boards and components - Chapter 3.3.3: Added “Components” - Chapter 3.3.4: Added “Marking” - Chapter 3.3.5: Added “Packaging and Handling” - 4.3.1 section added: “Components including custom designed HDL” - Chapter 6 added row regarding printed circuits boards, components including HDL and networks 	6	20-04-20
TBE 106:2-3 Expired	New	1 (E)	
	Update of standard: - IEC 987 to IEC 60987	2 (E)	07-04-20
	Standards IEC 61508 have been added.	3 (E)	11-06-15
	Moved to TBE 106:2-1.	-	-
TBE 106:3-1 Expired	New	1 (E)	-
	Update of standard: - ISO 9000-3 to ISO/IEC 90003:2004.	2 (E)	07-04-20
	Abolished, will be handled by TBE 104:1-1 and 104:1-2.	-	-
TBE 106:3-2 Expired	New.	1 (E)	-
	Update of standard: - ISO 9000-3 to ISO/IEC 90003:2004.	2 (E)	07-04-20
	Abolished, will be handled by TBE 106:2-2	-	-
TBE 106:3-3 Expired	New	1 (E)	-
	Update of standard: - IEC 987 to IEC 60987	2 (E)	07-04-20
	Abolished, will be handled by TBE 106:2-3	-	-
TBE 106:3	New, HDL-programmed integrated circuits	1	20-04-20
TBE 107 Expired	New, network components.	1 (E)	09-10-07
	Update: <ul style="list-style-type: none"> - Chapter 2 "Definitions" is replaced by "Scope". - The text of all the chapters emphasized in the "Scope" and is replaced by a bulleted list. - 3.2 The text of "signal transmission" should be removed. - Linguistic changes. - 4.6 analyses are removed. 	2 (E)	15-10-07
	Abolished. Requirements regarding networks will be handled by TBE 104:x and TBE 106:x	-	20-04-20

Document	Description of Revisions	Issue	Date
TBE 108	New	1 (E)	-
	Update	2 (E)	00-10-03
	Update: <ul style="list-style-type: none"> - Chapter 1 "General" requirements removed. - Chapter 2 "Definitions" security-classified IE removed. - Linguistic changes. - 3.8.3 The new heading "Limit switches". 	3 (E)	15-10-07
	Update: <ul style="list-style-type: none"> - Linguistic changes - Reference to standard IEEE 382 updated - Reference to standard DIN 3210 supplied - Chapter 3.8.3 “. Adjusted values shall be stable.” Added - Two new points added in the checklist: “19”. Which calculation model has been used for rating the actuator “20” Centre of gravity and assembly weight” 	4 (E)	17-05-22
	<ul style="list-style-type: none"> - ISO 22153 added in section 3.1 and 3.7 - Section 3.14, last sentence rewritten. 	5	22-11-17
TBE 110		1 (E)	-
	Update: <ul style="list-style-type: none"> - Standard references updated. - Editorial Update. 	2 (E)	-
	Update: <ul style="list-style-type: none"> - The document is updated to more modern image requirements. - H5 incident is also included. 	3 (E)	11-06-15
	Update: <ul style="list-style-type: none"> - Chapter 2, "Definitions" under the heading unchanged and lyrics about "Rama events" removed. - Linguistic changes. - Heading Chapter 6 corrected. - Chapter 6 supplemented 	4 (E)	15-10-07
TBE 111		1 (E)	-
	Update: <ul style="list-style-type: none"> - Item 3.5 updated. - Editorial Update. 	2 (E)	-
	Update of standard: <ul style="list-style-type: none"> - IEC 216 is to IEC 60216-3. 	3 (E)	-
	Reworked of definitions of cables installed in process areas and the reactor containment.	4 (E)	13-08-20
	Update <ul style="list-style-type: none"> - Chapter 3.3 “Flame spread”: Text reworked due to new standard EN 13501-6 - Chapter 6 supplemented with bending radius and batch identity marking 	5	20-04-20

Document	Description of Revisions	Issue	Date
	- Section 3.6 updated on identification of cores as well as smaller linguistic changes.	6	22-11-17
TBE 112		1 (E)	
	Update of standard: - IEC 780 to IEC 60780	2 (E)	07-04-20
	- Reference to SKI removed. - Minor linguistic changes.	3	
TBE 113		1 (E)	
	Update TBE 113 to TBE 113:1, and TBE 113:2.	2 (E)	
TBE 113:1	Technical Requirements for stationary batteries of the vented types.	1 (E)	06-05-17
	Update: - with requirements regarding Calculation margin - Ageing margin - Required cycling before capacity and profile test.	2 (E)	09-10-07
	-----	3	17-05-22
TBE 113:2	Technical Requirements for stationary batteries type valve regulated types (AGM).	1 (E)	06-05-17
	Update: - Updating with requirements regarding Calculation margin - Ageing margin and required cycling before capacity and profile test. - The permitted cell voltage spread, at float charge and with a fully charged battery, will be changed from $\pm 0,8V$ to $\pm 0,08V$ of the average cell voltage.	2 (E)	09-10-07
	- Section 3.3.1 “cell voltage” rectified - smaller linguistic changes.	3	22-11-17
TBE 116		1 (E)	-
	Update	2 (E)	-
	Reworked	3 (E)	-
	Update of standard: - SS-4270129 to EN 60726	4 (E)	06-05-17
	Update: - Linguistic changes - Standard reference SS-EN 60726 replaced by IEC 60076-11	5 (E)	17-05-22
TBE 118		1 (E)	-
	Update: - 3.1 SS-EN 60439-1T1 Abolished. - IEC 947 applies. 3.4 supplemented. - Editorial Update	2 (E)	-
	Update	3 (E)	-
	Reworked	4 (E)	-

Document	Description of Revisions	Issue	Date
	Update: - Section 3.1 standard IEC 60298 u3 to IEC 62271-200 u1.	5 (E)	06-05-17
	Update: - EMC requirements.	6 (E)	09-10-07
	Update: - Linguistic changes - SS EN standard replaced with IEC standard reference	7 (E)	2015-10-07
		8	17-05-22
	Update: - Chapter 1. New picture and text “How to use TBE combinations of TBE 118 and TBE 106:x” - Chapter 2. Definition of “HDL-Programmed Device, HPD” - Chapter 3.1. Added standards regarding printed circuits boards and components - 4.3 section added: “Components including HDL” - Chapter 6 supplements regarding “Components including HDL”	9	20-04-20
TBE 120		1 (E)	-
	Update: - 3.1 IEC 947 applies - 3.4 supplemented - Editorial Update	2 (E)	-
	Update	3 (E)	-
	Update	4 (E)	03-04-01
	Update: - Chapter 3.2.2 "software" extended information SIL. - 3.2.3 The new standard EN 61071. 3.3.3 Added ripples current. - 3.8 new standards EN 62040-2. - Checklist corrected with numbers and new point (IT security).	5	15-10-07

Document	Description of Revisions	Issue	Date
	Update: <ul style="list-style-type: none"> - Chapter 1. New picture and text “How to use TBE combinations of TBE 120 and TBE 106:x” - Chapter 2. Definition of “HDL-Programmed Device, HPD” - Chapter 3.1. Added standards regarding printed circuits boards and components - Chapter 3.2.3. Added text regarding electrolytic capacitors - 4.1 section added: “Components including HDL” - Chapter 6 supplements regarding “Components including HDL” and printed circuits boards 	6	20-04-20
TBE 122		1 (E)	-
	Update	2 (E)	-
	Update: <ul style="list-style-type: none"> - New Chapter 6. - Standard IEC 793 to IEC 60793 	3 (E)	06-05-17
	- Editorial Update	4	13-08-20
	Update: <ul style="list-style-type: none"> - Chapter 3.7 “Flame spread”: Text reworked due to new standard EN 13501-6 - Chapter 6 supplemented with bending radius and batch identity marking 	5	20-04-20
	<ul style="list-style-type: none"> - Checklist updated - smaller linguistic changes. 	6	22-11-17
KBE 100 Expired		1 (E)	
	Replaced by KBE 100-1, -2 och -3.	-	03-12
KBE 100-1	The document replaces the previous doc KBE 100-3. The issue will be 1.	1 (E)	15-10-07
	Update	2 (E)	17-05-22
	Update: <ul style="list-style-type: none"> - Chapter 2.1 revised text - Chapter 3 revised text - Chapter 4.1 revised text - Chapter 4.2 revised text - Chapter 4.3 revised text 	3 (E)	
	<ul style="list-style-type: none"> - Section 2.2 reviewed - smaller linguistic changes. 	4	22-11-17
KBE 100-2		1 (E)	-
	Update of standard: <ul style="list-style-type: none"> - ISO 9000-3 to ISO/IEC 90003:2004. 	2 (E)	07-04-20
	Update: <ul style="list-style-type: none"> - With definitions of FAT, SAT and OAT and the reference to EP 190 series. 	3 (E)	11-06-15

Document	Description of Revisions	Issue	Date
	Linguistic changes.	4 (E)	15-10-07
	Update	5 (E)	17-05-22
	Update: - Chapter 2.1 revised text - Chapter 3 revised text - Chapter 4.1 revised text - Chapter 4.2 revised text - Chapter 4.3 revised text	6 (E)	18-10-03
	- smaller linguistic changes.	7	22-11-17
KBE 100-3	The document replaces the previous doc KBE 100-1. The issue will be 1.	1 (E)	15-10-07
	Update	2 (E)	17-05-22
	Update. - Chapter 2.1 revised text - Chapter 3 revised text - Chapter 4.1 revised text - Chapter 4.2 revised text	3 (E)	18-10-03
	Abolished		22-11-17
KBE IP-103 Expired		1 (E)	
	Update	2 (E)	13-08-20
	Replaced by IP103.1.....IP103.4	3 (E)	
KBE IP-103.1	Converted to the new templates for inspection plans.	1 (E)	06-05-17
	Updated with valid referred standards.	2 (E)	13-08-20
KBE IP-103.2	Converted to the new templates for inspection plans.	1 (E)	06-05-17
	Updated with valid referred standards.	2 (E)	13-08-20
KBE IP-103.3	Converted to the new templates for inspection plans.	1 (E)	06-05-17
	Updated with valid referred standards.	2 (E)	13-08-20
	Minor linguistic changes	3	24-05-07
KBE IP-103.4	Converted to the new templates for inspection plans.	1 (E)	06-05-17
	Updated with valid referred standards.	2 (E)	13-08-20
	Minor linguistic changes	3	24-05-07
KBE IP 104/1 Expired		1 (E)	-
	Update.	2 (E)	-
KBE IP 104/2 Expired		1 (E)	-
	Update.	2 (E)	-
	Update.	3 (E)	-
KBE IP-104/3 Expired		1 (E)	-
	Update: - IP 104/1, 104/2 and 104/3 replaced by IP 104:1.1 - IP 104:1.2, IP 104:2.1 and IP 104:2.2 according to below.	2 (E)	
	Converted to the new templates for inspection plans.	1 (E)	06-05-17

Document	Description of Revisions	Issue	Date
KBE IP 104:1.1	Removed reference to KBE IP 106:2 and KBE IP 106:3.	2 (E)	13-08-20
	R2: Added reference to KBE-EP 190	3	20-04-20
	<ul style="list-style-type: none"> - Notes reviewed - smaller linguistic changes. 	4	22-11-17
KBE IP 104:1.2	Converted to the new templates for inspection plans.	1 (E)	06-05-17
	Removed "Burn in test"	2 (E)	11-06-15
	Removed reference to KBE IP 106:2 and KBE IP 106:3.	3 (E)	13-08-20
	R2: Added reference to KBE-EP 190	4	20-04-20
KBE IP 104:2.1	Update: Converted to the new templates for inspection plans.	1 (E)	-
	<ul style="list-style-type: none"> - Examination procedure Burn in Test has been removed. - A reference to the manufacturer's standard procedures for calibration and functional verification has been added. - Removed reference to KBE IP 106:2 and KBE IP 106:3 	2 (E)	13-08-20
	R2: Added reference to KBE-EP 190	3	20-04-20
KBE IP 104:2.2	Update: Converted to the new templates for inspection plans.	1 (E)	06-05-17
	Update: <ul style="list-style-type: none"> - References to the manufacturer's standard procedures for calibration and functional verification have been added. 	2 (E)	-
	Removed reference to KBE IP 106:2 and KBE IP 106:3.	3 (E)	13-08-20
	R2: Added reference to KBE-EP 190	4	20-04-20
KBE IP-105	Converted to the new templates for inspection plans.	2 (E)	06-05-17
	Abolished, managed by KBE-IP 104:x	-	20-04-20
KBE IP-106:1 Expired		1 (E)	
	Reworked.	2 (E)	
	Abolished.	-	
KBE IP-106:1-1	The document replaces the previous doc KBE IP 106: 1-3. The issue will be 1.	1 (E)	15-10-07
	Update: <ul style="list-style-type: none"> - Linguistic changes - R8 reworked 	2 (E)	17-05-22
KBE IP-106:1-2	Update: <ul style="list-style-type: none"> - Converted to the new templates for inspection plans - Standard. ISO 9000-3 to ISO/IEC 90003:2004. 	2 (E)	06-05-17
	Standard IEC 62138 has been added.	3 (E)	11-06-15
	New standards IEC 61508, ISO 9001 and ISO 90003.	4 (E)	15-10-07

Document	Description of Revisions	Issue	Date
	Update: - Linguistic changes - R8 reworked	5 (E)	17-05-22
KBE IP-106:1-3 Expired	Converted to the new templates for inspection plans.	2 (E)	06-05-17
	Editorial change.	3 (E)	11-06-15
	IP-106:1-3 replaced by IP-106:1-1.	-	15-10-07
KBE IP-106:2 Expired		1 (E)	
	Reworked.	2 (E)	
	Abolished.	-	
KBE IP-106:2-1	Update: - The document replaces the previous doc KBE IP 106:2-3. - The issue will be 1.	1 (E)	15-10-07
	Editorial change	2 (E)	17-05-22
KBE IP-106:2-2	Update: - Converted to the new templates for inspection plans - ISO 9000-3 to ISO/IEC 90003:2004.	2 (E)	06-05-17
	Editorial change.	3 (E)	11-06-15
	New standard IEC 61508.	4 (E)	15-10-07
	Editorial change	5 (E)	17-05-22
KBE IP-106:2-3 Expired	Converted to the new templates for inspection plans.	2 (E)	06-05-17
	Editorial change.	3 (E)	11-06-15
	IP-106:2-3 replaced by IP-106:2-1.	-	15-10-07
KBE-IP 106:3-2 Expired	Update: - Converted to the new templates for inspection plans - ISO 9000-3 to ISO/IEC 90003:2004.	2 (E)	06-05-17
	Abolished, managed by KBE-IP 106:2-2.	3 (E)	
KBE-IP 106:3-3 Expired	Converted to the new templates for inspection plans.	2 (E)	06-05-17
	Abolished, managed by KBE-IP 106:2-3.	3 (E)	
KBE-IP 106-3	New, Equipment including HDL	1	20-04-20
KBE IP-107 Expired	New. Network Components	1 (E)	09-10-07
	Abolished, managed by KBE-IP 104:x	-	20-04-20
KBE IP-108	Converted to the new templates for inspection plans.	2 (E)	06-05-17
KBE IP-110	Converted to the new templates for inspection plans.	2 (E)	06-05-17
	Completed with H5 incident.	3 (E)	11-06-15
KBE IP-111.1	Converted to the new templates for inspection plans.	1 (E)	06-05-17
	Updated title.	2 (E)	13-08-20
	T4: Updated note 2 regarding “Flammability”	3	20-04-20
KBE IP-111.2	Converted to the new templates for inspection plans.	1 (E)	06-05-17
	Updated title.	2 (E)	13-08-20

Document	Description of Revisions	Issue	Date
	T4: Updated note 2 regarding “Flammability”	3	20-04-20
KBE IP-111.3	Converted to the new templates for inspection plans.	1 (E)	06-05-17
	Updated title.	2 (E)	13-08-20
	T4: Updated note 2 regarding “Flammability”	3	20-04-20
KBE IP-111.4	Converted to the new templates for inspection plans.	1 (E)	06-05-17
	Updated title.	2 (E)	13-08-20
KBE IP-112	Converted to the new templates for inspection plans.	1 (E)	96-12-12
	---	2	06-05-17
	Update: - The Reference in T3 #34-36, T4 #42-44 is removed - Minor linguistic changes	3 (E)	17-05-22
KBE IP-113	Update	2 (E)	06-05-17
	Update.	3 (E)	06-05-17
KBE IP-116 Expired		1 (E)	
KBE IP-116.1	Converted to the new templates for inspection plans.	1 (E)	06-05-17
	Update: - Notes updated - Minor linguistic changes	2 (E)	17-05-22
KBE IP-116.2	Converted to the new templates for inspection plans.	1 (E)	06-05-17
	Update: - Minor linguistic changes - Standard reference changed to IEC standard	2 (E)	17-05-22
KBE IP-118 Expired	IP 118 replaced by IP 118.1 ; IP 118.2 ; IP 118.3 and IP 118.4 according to below.	1 (E)	-
KBE IP-118.1	Update: - Converted to the new templates for inspection plans. - Standard SS-EN 60439 replaced by IEC/TR 61641.	1 (E)	06-05-17
	R2: Added reference to KBE-EP 190	2	20-04-20
KBE IP-118.2	Converted to the new templates for inspection plans.	1 (E)	06-05-17
	R2: Added reference to KBE-EP 190	2	20-04-20
KBE IP-118.3	Converted to the new templates for inspection plans.	1 (E)	06-05-17
	R2: Added reference to KBE-EP 190	2	20-04-20
KBE IP-118.4	Converted to the new templates for inspection plans. KBE EP-150 addition document.	1 (E)	06-05-17
	T2: Added reference to KBE-EP 190	2	20-04-20
KBE IP-120		1 (E)	-

Document	Description of Revisions	Issue	Date
Expired	KBE EP-150 addition document.	2 (E)	-
	Update.	3 (E)	-
	Update KBE IP-120 replace according to below.	4 (E)	-
KBE IP-120.1	Converted to the new templates for inspection plans.	1 (E)	06-05-17
	R2: Added reference to KBE-EP 190	2	20-04-20
KBE IP-120.2	Converted to the new templates for inspection plans.	1 (E)	06-05-17
	R2: Added reference to KBE-EP 190	2	20-04-20
KBE IP-120.3	Converted to the new templates for inspection plans.	1 (E)	06-05-17
	R2: Added reference to KBE-EP 190	2	20-04-20
KBE IP-120.4	Converted to the new templates for inspection plans.	1 (E)	06-05-17
	R2: Added reference to KBE-EP 190	2	20-04-20
KBE IP-122		1 (E)	-
	Converted to the new templates for inspection plans.	2 (E)	06-05-17
	T6: Updated note 3 regarding “Flammability”	3	20-04-20
KBE EP-101		1 (E)	-
	Editorial change.	2 (E)	11-06-15
	update	3	17-05-22
KBE EP-102		1 (E)	-
	Update of standard: - IEC 664 to IEC 60664.	2 (E)	07-04-20
KBE EP-104	SS-IEC 348 replaced by SS-EN 61010-1.	2 (E)	06-05-17
	- Type test section removed. - Standard reference changed from SS EN to IEC - smaller linguistic changes.	3	22-11-17
KBE EP-105		1 (E)	-
	Reworked.	2 (E)	03-04-01
	Minor linguistic changes	3	24-05-07
KBE EP-108		1 (E)	-
KBE EP-109		1 (E)	-
KBE EP-111		1 (E)	-
	Reworked	2 (E)	03-04-01
KBE EP-113		1 (E)	96-12-12
KBE EP-114		1 (E)	97-09-17
KBE EP-115		1 (E)	96-12-12
KBE EP-123		1 (E)	-
	Update	2 (E)	00-10-03
KBE EP-128 Expired		1 (E)	-
	Update: - KBE EP-128, replaced by KBE EP-128:1 and KBE EP-128:2.	2 (E)	-

Document	Description of Revisions	Issue	Date
KBE EP-128:1	Acceptance testing - Stationary batteries of the type vented.	1 (E)	06-05-17
KBE EP-128:2	Acceptance testing - Stationary batteries type valve regulated (AGM).	1 (E)	06-05-17
KBE EP-131 <i>Expired</i>		1 (E)	
KBE EP-132 <i>Expired</i>		1 (E)	96-12-12
KBE EP-133 <i>Expired</i>		1 (E)	96-12-12
KBE EP-134 <i>Expired</i>		1 (E)	96-12-12
KBE EP-135	Update of standard: - SS-IEC 216 to SS-EN 60216-3.	2 (E)	06-05-17
	Update: - Removed text in Chapter 3 - Reference to the KBE EP 154.	3 (E)	13-08-20
KBE EP-136		1 (E)	-
	Update	2 (E)	03-04-01
KBE EP-137		1 (E)	-
KBE EP-141 <i>Expired</i>		1 (E)	
	Replaced by EP-111.	-	03-12
KBE EP-143		1 (E)	96-12-12
KBE EP-146		1 (E)	-
	Update: - Addition sections (3.0 och 4.0). - Editorial Update.	2 (E)	-
	Reference to KBM has been added.	3 (E)	11-06-15
KBE EP-147		1 (E)	-
	Updating Connected with the issue of TBE 102:2.	2 (E)	99-03
	Update.	3 (E)	-
	Minor update.	4 (E)	13-08-20
	update	5 (E)	15-10-07
	Minor update	6 (E)	17-05-22
	- Chapter 6.1, requirement related to maximum displacement removed. - Minor linguistic changes.	7	22-11-17
- Qualification by experience added. - Minor linguistic changes.	8	24-05-07	
KBE EP-148		1 (E)	96-12-12
KBE EP-150		1 (E)	-
KBE EP-151		1 (E)	-
	Update.	2 (E)	-
	Reworked.	3 (E)	-

Document	Description of Revisions	Issue	Date
	Update: - Table with Severity D, applicable to equipment installed at non-weather protected location.	4 (E)	09-10-07
	Minor update.	5 (E)	13-08-20
	Linguistic changes.	6 (E)	15-10-07
	- Minor update.	7 (E)	17-05-22
	- Severity E added in section 4.2. - table 1 updated - Linguistic changes.	8	22-11-17
KBE EP-152		1 (E)	-
	Update.	2 (E)	03-04-01
KBE EP-153		1 (E)	-
	Update	2 (E)	-
	Reworked	3 (E)	04-04-20
	- Chapter 3 section 1 rewritten. - table 1 updated	4	22-11-17
	- Table 2 updated, wired network added - Added standard IEC 60255-26 - Removed Standard IEC 61000-4-5 & CISPR 11	5	24-05-07
KBE EP-154	Update	2 (E)	06-05-17
	Update: - Requirements profiles have been replaced by test-profiles.	3 (E)	13-08-20
	Update: - Linguistic changes - Reference to IEC 60780 standard changed to IEC/IEEE 60780-323:2016 - 5.3.2 fail in Arrhenius equation corrected - New note number 7 to BWR1, BWR2/BWR and PWR diagrams - Revised text in several notes	4 (E)	17-05-22

Document	Description of Revisions	Issue	Date
	Update: <ul style="list-style-type: none"> - Whole document: changed “DBE” to “LOCA”. - Chapter 3 removed ”design basis event” - Chapter 3 introduced definition for LOCA - Chapter 4.1 added paragraph 5 - Chapter 4.2 removed “acceptance criteria”. Moved to new chapter 4.2.1 - Chapter 5.1.1 revised text. - Chapter 5.1.2 revised text. - Chapter 5.1.3 revised text. - Chapter 5.3 added paragraph 3 and 4. - Chapter 5.3.1 added paragraph 4. Revised text about accident dose. - Chapter 5.4.3 revised text. - Chapter 5.4.5 revised text. - Chapter 5.5 removed paragraph 1. - Accident profiles: BWR1, BWR2, revised note 7 - Accident profile: Test profile 4, removed note 3 - Accident profile: Test profile 1, 2, 3, removed OKG 1 and 2. 	5 (E)	18-10-03
	Section 5.3.4: changed from 60Hz to 58,1Hz in accord with SS EN 600068-2-6.	6	22-11-17
	Smaller adjustments to PWR table	7	24-12-06
KBE EP-160 Expired	Abolished. Replaced by KBE EP-170.	1 (E)	96-12-12
KBE EP-161 Expired	Abolished. Replaced by KBE EP-170.	1 (E)	-
KBE EP-162 Expired	Abolished. Replaced by KBE EP-170.	1 (E)	-
KBE EP-163 Expired	Abolished. Replaced by KBE EP-170.	1 (E)	-
KBE EP-164 Expired	Abolished. Replaced by KBE EP-170.	1 (E)	-
KBE EP-165 Expired	Abolished. Replaced by KBE EP-170.	1 (E)	-
KBE EP-166 Expired	Abolished. Replaced by KBE EP-170.	1 (E)	-
KBE EP-167 Expired	Abolished. Replaced by KBE EP-170.	1 (E)	-
KBE EP-168 Expired	Abolished. Replaced by KBE EP-170.	1 (E)	-
KBE EP-169 Expired	Abolished. Replaced by KBE EP-170.	1 (E)	-
KBE EP-170	New. Replaced KBE EP-161 – 174.	1 (E)	-
	Update	2 (E)	-
	Updated with valid standards	3 (E)	13-08-20

Document	Description of Revisions	Issue	Date
	Update: - Linguistic changes - Chapter 3.19 completing information - Chapter 4 title changed	4 (E)	17-05-22
KBE EP-171 Expired	Abolished. Replaced by KBE EP-170.	1 (E)	
KBE EP-172 Expired	Abolished. Replaced by KBE EP-170.	1 (E)	
KBE EP-173 Expired	Abolished. Replaced by KBE EP-170.	1 (E)	
KBE EP-174 Expired	Abolished. Replaced by KBE EP-170.	1 (E)	
KBE EP-176 Expired	Abolished. Replaced by KBE EP-170.	1 (E)	96-12-12
KBE EP-180		1 (E)	-
	Update: - Updated with references to ISO/IEC 17050-1 and EN 10204. - Type inspection form Abolished. - New model form "Quality and identity certificate", easier to fill in information.	2 (E)	13-08-20
	- Removed references to "Type Inspection certificate"	3 (E)	20-04-20
	- Linguistic changes	4	22-11-17
KBE EP-182		1 (E)	-
	Reworked.	2 (E)	04-04-20
	Chapter 6, linguistic changes.	3 (E)	
		4 (E)	15-10-07
KBE EP-183 Expired	Abolished.	-	
KBE EP-183	In previous issues of TBE/KBE package was EP 183-2 and EP-183-3. Rev 13 merged them into one document. The new document will be issue 1.	1 (E)	15-10-07
KBE EP-183-2 Expired		1 (E)	
	Update of standard: - ISO 9000-3 to ISO/IEC 90003:2004.	2 (E)	07-04-20
	EP 183-2 and EP-183-3 replaced by KBE EP-183.	-	15-10-07
KBE EP-183-3 Expired		1 (E)	04-04-20
	EP 183-2 and EP-183-3 replaced by KBE EP-183.	-	15-10-07
KBE EP-184 Expired	Abolished.	-	-
KBE EP-184	Title changed. Contains unchanged.	1 (E)	15-10-07
KBE EP-185 Expired	Abolished.	-	-

Document	Description of Revisions	Issue	Date
KBE EP-185	In previous issues of TBE/KBE package was EP 185-2 and EP-185-3. Rev 13 merged them into one document. The issue will be 1.	1 (E)	15-10-07
KBE EP 185-2 Expired	New.	1 (E)	
	Update of standard: - ISO 9000-3 to ISO/IEC 90003:2004.	2 (E)	07-04-20
	Reworked, according to text in the KBE EP 192.	3 (E)	13-08-20
	EP 185-2 and EP 185-3 replaced by KBE EP-185.	-	15-10-07
KBE EP 185-3 Expired	New.	1 (E)	
	Reworked according to text in the KBE EP 192.	2 (E)	13-08-20
	EP 185-2 and EP 185-3 replaced by KBE EP-185.	-	15-10-07
KBE EP-186		1 (E)	-
	Reworked.	2 (E)	04-04-20
KBE EP-187		1 (E)	-
	Reworked.	2 (E)	-
	Updated. Valid for all types of equipment.	3 (E)	13-08-20
KBE EP-190		1 (E)	97-10-06
	Update: - Linguistic changes - Chapter 3 completed - Chapter 4 reference to IPC-A-610 or other equivalent standard added	2 (E)	17-05-22
KBE EP-191	New.	1 (E)	09-10-07
KBE EP-192	New.	1 (E)	09-10-07
	Updated text about documentation changes after FAT.	2 (E)	13-08-20
KBE EP-193	New.	1 (E)	09-10-07
KBE EP-194	New.	1 (E)	09-10-07