

General Inspection plan Title Power electronics [UPS-units]	Document KBE IP – 120.1
	Issue 2
	Date 2020-04-20
	Supersedes Issue 1

Inspection according to codes below					
<u>Inspection Specification</u> (1st letter)	<u>Inspection performed and documented by</u> (2nd letter)	<u>Inspection supervised by</u> (3rd letter)	<u>Documentation</u> (4th letter)		
A: Routine 100% Insp. S: Sample Inspection T: Type Inspection	E: Manufacturer D: Supplier B: Purchaser	B: Purchaser C: Inspector engaged by purchaser D: Supplier	R: Technical Report P: Inspection Record I: Certificate		
Examination Procedures	Codes	Inspection Procedure	Inspection Record	Deviation Report/Remark	
Type Inspection					
T1	Power efficiency Note 1	TE-R			
T2	Temperature rise test Note 1	TE-R			
T3	Unbalance load test Note 1	TE-R			
T4	Output voltage unbalance Note 1	TE-R			
T5	Current division in parallel Note 1	TE-R			
T6	Rated stored energy time, battery test Note 1	TE-R			
T7	Rated restored energy time Note 1	TE-R			
T8	Battery ripple current Note 1	TE-R			
T9	Overload capability test Note 1	TE-R			
T10	Short-Circuit current capability Note 1	TE-R			
T11	Short-Circuit test Note 1	TE-R			
T12	Output overvoltage Note 1	TE-R			
T13					
T14					
Notes					
1. Test according to applicable IEC 62040 standard.					

Examination Procedures		Codes	Inspection Procedure	Inspection Record	Deviation Report/Remark
Type Inspection					
T16	Periodic output voltage modulation Note 1	TE-R			
T17	Frequency modulation Note 1	TE-R			
T18	Harmonic components Note 1	TE-R			
T19	Audible noise Note 1	TE-R			
T20	Vibration and shock test Note 1	TE-R			
T21	Seismic qualification KBE EP-147	TE-R			
T22	EMC verification KBE EP-153	TE-R			
T23	Type Inspection certification KBE EP-180	TE-I			
T24	Protective earth continuity KBE EP-150	TE-R			
T25					
Notes					
1. Test according to applicable IEC 62040 standard.					

Examination Procedures		Codes	Inspection Procedure	Inspection Record	Deviation Report/Remark
Routine Inspection					
R1	Visual Inspection KBE EP-101	AEBP			
R2	Visual inspection KBE EP-190	AE-P			
R3	Protective earth continuity KBE EP-150	AEBP			
R4	Interconnection cable check Note 1	AEBR			
R5	Voltage test KBE EP-102	AEBR			
R6	Insulation test KBE EP-114	AEBR			
R7	Light load test Note 1	AEBR			
R8	Checking of auxiliary devices Note 1	AEBR			
R9	Synchronization test Note 1	AEBR			
R10	AC input failure test Note 1	AEBR			
R11	AC input return test Note 1	AEBR			
R12	Simulation of parallel redundant UPS-fault Note 1	AEBR			
R13	Transfer test Note 1	AEBR			
R14	Full load test Note 1	AEBR			
R15	Restart Note 1	AEBR			
R16	Earth fault test Note 1	AEBR			
R17	Quality and Identity certification KBE EP-180	AE-I			
R18	Delivery Release Inspection / FAT Note 2, 3	AEBR			
R19	Site Acceptance Test (SAT) Note 3	AEBR			
R20					
Notes					
<ol style="list-style-type: none"> 1. Test according to applicable IEC 62040 standard. 2. Inspection witnessed by Purchaser before Delivery (Shipping) Release in accordance with KBE 100. 3. FAT and SAT performed according to procedures subject to prior review and approval by the Purchaser. 					