L(	<b>OVAG</b>	LOVAG DECISION SHEET (LDS)		N°[LDS0198]
				Pag. 1 of 1
References	Standard(s) (incl. year)	IEC 60947-2: 2016		Subclauses(s): 8.3.2.6.4.3
	Subject	Tests on four-pole circuit-breakers	Submitted by: ABB	Date: 2018-02-08
Question	Additional sequences of operations on one or more new samples, in accordance with Table 10, shall be made on the fourth pole and its adjacent pole, according to sequences III or $V$ , as applicable, and sequence IV if applicable. This requirement applies even when sequence III is replaced by sequence II ( $I_{cu} = I_{cs}$ ) or sequence IV is replaced by sequence VI ( $I_{cw} = I_{cs}$ )."  Question:  Do the above text mean that 4pole circuit-breaker declared as $I_{cu} = I_{cs}$ need to be tested in Sequence II but by an "O-CO" operation cycle only?			
	Taking into account the current LTI 60947-2 it seems not correct the above interpretation. 8.3.2.6.4.3 Test on four pole circuit breakers It's clarified that an additional sequence of operations on fourth pole is requested also if sequence III is replaced by sequence II.  However, IEC SC121A/MT9 (breakers experts) has modified the text paragraph for the next standard edition (121A/177/CDV document, red text):  "Additional sequences of operations on one or more new samples, in accordance with Table 10, shall be made on the fourth pole and its adjacent pole, according to sequences III or V, as applicable, and sequence IV if applicable. This requirement applies even when sequence III is replaced by sequence II (Icu = Ics) or sequence IV is replaced by sequence VI (Icw = Ics), i.e., additional tests according to sequence III or V, and sequence IV, as applicable, are required." Splitting the words "sequence of operation" and "additional tests" seems justify the original interpretation but not in a clear manner.  Further analysis was submitted to the Italian SC121A/MT9 experts that give the following indication:  -1st paragraph asks the sequence II requirements (O-CO operation cycle)  -2nd paragraph confirms the same requirements in case of different declaration (Icu=or ≠ Ics)  -the red text (121A/177/CDV) is a confirmation of 1st paragraph  (this text doesn't reach the aim proposed to clarify the meaning; the IT experts will propose its deletion)			
Analysis	8.3.2.6.4.3 Test It's clarified that III is replaced by However, IEC S standard edition "Additional seque shall be made of applicable, and replaced by seque additional tests Splitting the work interpretation but Further analysis -1st paragraph -2nd paragraph -the red text (1	on four pole circuit breakers an additional sequence of operations on a sequence II.  C121A/MT9 (breakers experts) has mod (121A/177/CDV document, red text): sences of operations on one or more new on the fourth pole and its adjacent pole, accepted to the fourth pole and its adjacent pole, accepted to the fourth pole and its adjacent pole, accepted to the fourth pole and its adjacent pole, accepted to the fourth pole and its adjacent pole, accepted to the fourth pole and its adjacent pole, accepted to the fourth of the fourth pole according to sequence III or V, and sequence it not in a clear manner.  Was submitted to the Italian SC121A/MT asks the sequence II requirements (O-Control confirms the same requirements in case 121A/177/CDV) is a confirmation of 1st pa	fourth pole is required the text paragraphs, in according to sequent applies even where the paragraph of the pole is a sequence of the paragraph is a sequence of the pole is a sequence of the paragraph is a se	graph for the next  dance with Table 10,  ces III or V, as  then sequence III is  e VI (Icw = Ics), i.e.,  ble, are required."  tify the original  e the following indication:  ration (Icu=or ≠ Ics)
Decision Analysis	8.3.2.6.4.3 Test It's clarified that III is replaced by However, IEC S standard edition "Additional sequence shall be made of applicable, and replaced by sequence additional tests. Splitting the work interpretation but a shall be replaced by sequence additional tests. Splitting the work interpretation but a shall be replaced by sequence additional tests. Splitting the work interpretation but a shall be replaced by sequence additional tests. Splitting the work interpretation but a shall be replaced by sequence additional tests. Splitting the work interpretation but a shall be replaced by sequence additional tests. Splitting the work interpretation but a shall be replaced by sequence additional tests. Splitting the work interpretation but a shall be replaced by sequence additional tests. Splitting the work interpretation but a shall be replaced by sequence additional tests. Splitting the work interpretation but a shall be replaced by sequence additional tests. Splitting the work interpretation but a shall be replaced by sequence additional tests. Splitting the work interpretation but a shall be replaced by sequence additional tests. Splitting the work interpretation but a shall be replaced by sequence additional tests. Splitting the work interpretation but a shall be replaced by sequence additional tests. Splitting the work interpretation but a shall be replaced by sequence additional tests. Splitting the work interpretation but a shall be replaced by sequence additional tests. Splitting the work interpretation but a shall be replaced by sequence and the shall be re	on four pole circuit breakers an additional sequence of operations on a sequence II.  C121A/MT9 (breakers experts) has mod (121A/177/CDV document, red text): sences of operations on one or more new on the fourth pole and its adjacent pole, accepted to the fourth pole and its adjacent pole, accepted to the fourth pole and its adjacent pole, accepted to the fourth pole and its adjacent pole, accepted to the fourth pole and its adjacent pole, accepted to the fourth pole and its adjacent pole, accepted to the fourth of the fourth pole according to sequence III or V, and sequence it not in a clear manner.  Was submitted to the Italian SC121A/MT asks the sequence II requirements (O-Control confirms the same requirements in case 121A/177/CDV) is a confirmation of 1st pa	fourth pole is required ified the text parages samples, in according to sequent applies even where the ence IV, as applicated by seems justice of different declar ragraphing; the IT experts and contains a second contains the ence IV.	ested also if sequence graph for the next  dance with Table 10, ces III or V, as then sequence III is e VI (Icw = Ics), i.e., ble, are required." tify the original  the following indication: eation (Icu=or ≠ Ics)  I propose its deletion)