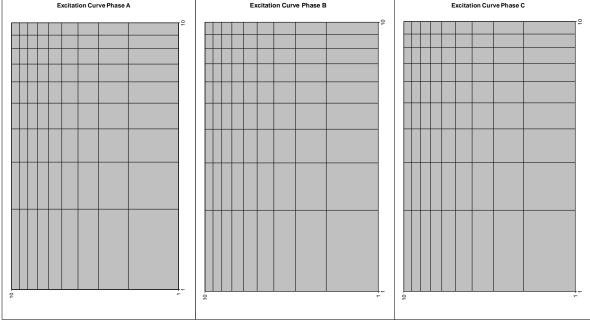
CT Test Report

Template: C Version: 1

CT Test Report 1.40 SR2



Site name:	Substation Sa	mple 1			Date:	#REF!
#REF!	#REF!		#RE	F!	#REF!	
#REF!	#REF!		#REF!		#REF!	
#REF!	#REF!		#REF!		#REF!	
#REF!	#	REF!	#RE	F!	#RE	F!
#REF!	#	REF!	#RE	F!	#RE	F!
1. Polarity:	#	REF!	#RE	F!	#RE	F!
2. Ratio + Accuracy	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
3. Angle [°]		REF!	#RE		#RE	
4. Burden [VA/cosφ]	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
5. Rs CT [Ohm]		REF!	#RE		#RE	
6. Knee Point [V/mA]	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!
7. Excit. Curve No. 1	#REF		#REF!	#REF!	#REF!	#REF!
2	#REF		#REF!	#REF!	#REF!	#REF!
3	#REF		#REF!	#REF!	#REF!	#REF!
4	#REF		#REF!	#REF!	#REF!	#REF!
5	#REF		#REF!	#REF!	#REF!	#REF!
6	#REF		#REF!	#REF!	#REF!	#REF!
7	#REF		#REF!	#REF!	#REF!	#REF!
8	#REF		#REF!	#REF!	#REF!	#REF!
9	#REF		#REF!	#REF!	#REF!	#REF!
10	#REF		#REF!	#REF!	#REF!	#REF!
11	#REF		#REF!	#REF!	#REF!	#REF!
12	#REF		#REF!	#REF!	#REF!	#REF!
13	#REF		#REF! #REF!	#REF! #REF!	#REF!	#REF!
14 15	#REF				#REF!	#REF!
16	#REF		#REF! #REF!	#REF! #REF!	#REF! #REF!	#REF! #REF!
17	#REF #REF		#REF!	#REF!	#REF!	#REF!
18	#REF		#REF!	#REF!	#REF!	#REF!
19	#REF		#REF!	#REF!	#REF!	#REF!
20	#REF		#REF!	#REF!	#REF!	#REF!
21	#REF		#REF!	#REF!	#REF!	#REF!
22	#REF		#REF!	#REF!	#REF!	#REF!
23	#REF		#REF!	#REF!	#REF!	#REF!
24	#REF		#REF!	#REF!	#REF!	#REF!
25	#REF		#REF!	#REF!	#REF!	#REF!
26	#REF		#REF!	#REF!	#REF!	#REF!
27	#REF		#REF!	#REF!	#REF!	#REF!
28	#REF		#REF!	#REF!	#REF!	#REF!
29	#REF		#REF!	#REF!	#REF!	#REF!
30	#REF		#REF!	#REF!	#REF!	#REF!
31	#REF			#REF!	#REF!	#REF!
32	#REF		#REF!	#REF!	#REF!	#REF!
33	#REF	! #REF!	#REF!	#REF!	#REF!	#REF!
34	#REF	! #REF!	#REF!	#REF!	#REF!	#REF!
35	#REF	! #REF!	#REF!	#REF!	#REF!	#REF!
36	#REF		#REF!	#REF!	#REF!	#REF!
37	#REF	! #REF!	#REF!	#REF!	#REF!	#REF!
Excitation Curve Phase	A	Excitation	Curve Phase B		Excitation Curve Phase	С



OverView: Device:	EN971D (V1)					
Test Cards Overview:		l				
Test Card	Type	Date/Time	Results	Assessment	Overload	Filepath
No Data	No Data	No Data	No Data	No Data	No Data	No Data
Nameplate	Comment	6/7/2023 11:27	NO	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
A Bushing	Comment	6/7/2023 11:27	NO	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
Ratio A-1	CTRatio	6/12/2023 10:07	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
Ratio A-2	CTRatio	6/12/2023 7:30	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
Ratio A-3	CTRatio	6/12/2023 7:34	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
Ratio A-4	CTRatio CTRatio	6/12/2023 7:36 6/12/2023 10:05	YES YES	n/a	NO NO	C:\Users\DC0134\Desktop\8721147.xml
Ratio A-5 RWinding A-1	RWinding	6/12/2023 10:03	YES	n/a n/a	YES	C:\Users\DC0134\Desktop\8721147.xml C:\Users\DC0134\Desktop\8721147.xml
RWinding A-2	RWinding	6/12/2023 10:31	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
RWinding A-3	RWinding	6/12/2023 10:33	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
RWinding A-4	RWinding	6/12/2023 10:36	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
RWinding A-5	RWinding	6/12/2023 10:39	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
Excitation A-1	CTExcitation	6/12/2023 11:58	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
Excitation A-2	CTExcitation	6/12/2023 12:06	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
Excitation A-3	CTExcitation	6/12/2023 12:18 6/12/2023 12:21	YES	n/a	NO NO	C:\Users\DC0134\Desktop\8721147.xml
Excitation A-4 Excitation A-5	CTExcitation CTExcitation	6/12/2023 12:21	YES YES	n/a n/a	NO NO	C:\Users\DC0134\Desktop\8721147.xml C:\Users\DC0134\Desktop\8721147.xml
B1 Bushing	Comment	6/7/2023 11:27	NO NO	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml C:\Users\DC0134\Desktop\8721147.xml
Ratio B1-1	CTRatio	6/12/2023 10:13	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
Ratio B1-2	CTRatio	6/12/2023 10:13	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
RWinding B1-1	RWinding	6/12/2023 10:21	YES	n/a	YES	C:\Users\DC0134\Desktop\8721147.xml
RWinding B1-2	RWinding	6/12/2023 10:22	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
Excitation B1-1	CTExcitation	6/12/2023 11:40	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
Excitation B1-2	CTExcitation	6/12/2023 11:43	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
B2 Bushing	Comment	6/7/2023 11:27	NO	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
Ratio B2-1	CTRatio	6/12/2023 7:47	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
Ratio B2-2 RWinding B2-1	CTRatio RWinding	6/12/2023 7:48 6/12/2023 10:24	YES YES	n/a	NO YES	C:\Users\DC0134\Desktop\8721147.xml C:\Users\DC0134\Desktop\8721147.xml
RWinding B2-1 RWinding B2-2	RWinding	6/12/2023 10:24	YES	n/a n/a	NO NO	C:\Users\DC0134\Desktop\8721147.xml C:\Users\DC0134\Desktop\8721147.xml
Excitation B2-1	CTExcitation	6/12/2023 11:48	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
Excitation B2-1	CTExcitation	6/12/2023 11:51	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
2a Bushing	Comment	6/7/2023 11:27	NO	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
Ratio 2a-1	CTRatio	6/12/2023 8:00	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
Ratio 2a-2	CTRatio	6/12/2023 8:04	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
Ratio 2a-3	CTRatio	6/12/2023 8:05	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
Ratio 2a-4	CTRatio	6/12/2023 8:06	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
Ratio 2a-5 RWinding 2a-1	CTRatio RWinding	6/12/2023 9:52 6/12/2023 10:54	YES YES	n/a	NO NO	C:\Users\DC0134\Desktop\8721147.xml C:\Users\DC0134\Desktop\8721147.xml
RWinding 2a-1 RWinding 2a-2	RWinding	6/12/2023 10:56	YES	n/a n/a	NO	C:\Users\DC0134\Desktop\8721147.xml C:\Users\DC0134\Desktop\8721147.xml
RWinding 2a-3	RWinding	6/12/2023 10:59	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
RWinding 2a-4	RWinding	6/12/2023 11:01	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
RWinding 2a-5	RWinding	6/12/2023 11:05	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
Excitation 2a-1	CTExcitation	6/12/2023 11:17	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
Excitation 2a-2	CTExcitation	6/12/2023 11:21	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
Excitation 2a-3	CTExcitation	6/12/2023 11:25	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
Excitation 2a-4	CTExcitation	6/12/2023 11:29	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
Excitation 2a-5 3a Bushing	CTExcitation Comment	6/12/2023 11:33 6/7/2023 11:27	YES NO	n/a n/a	NO NO	C:\Users\DC0134\Desktop\8721147.xml C:\Users\DC0134\Desktop\8721147.xml
Sa Bushing Ratio 3a-1	CTRatio	6/9/2023 6:21	YES	n/a n/a	NO	C:\Users\DC0134\Desktop\8721147.xml C:\Users\DC0134\Desktop\8721147.xml
Ratio 3a-1 Ratio 3a-2	CTRatio	6/9/2023 6:21	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml C:\Users\DC0134\Desktop\8721147.xml
Ratio 3a-2	CTRatio	6/9/2023 6:23	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
Ratio 3a-4	CTRatio	6/9/2023 6:24	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
RWinding 3a-1	RWinding	6/9/2023 6:40	YES	n/a	YES	C:\Users\DC0134\Desktop\8721147.xml
RWinding 3a-2	RWinding	6/9/2023 6:43	YES	n/a	YES	C:\Users\DC0134\Desktop\8721147.xml
RWinding 3a-3	RWinding	6/9/2023 6:45	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
RWinding 3a-4	RWinding	6/9/2023 6:47	YES	n/a	YES	C:\Users\DC0134\Desktop\8721147.xml
Excitation 3a-1	CTExcitation	6/9/2023 7:00	YES	n/a	NO NO	C:\Users\DC0134\Desktop\8721147.xml
Excitation 3a-2	CTExcitation	6/9/2023 7:03 6/9/2023 7:06	YES YES	n/a	NO NO	C:\Users\DC0134\Desktop\8721147.xml C:\Users\DC0134\Desktop\8721147.xml
Excitation 3a-3 Excitation 3a-4	CTExcitation CTExcitation	6/9/2023 7:06	YES	n/a n/a	NO	C:\Users\DC0134\Desktop\8721147.xml C:\Users\DC0134\Desktop\8721147.xml
3b Bushing	Comment	6/7/2023 11:27	NO	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
Ratio 3b-1	CTRatio	6/9/2023 6:32	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
Ratio 3b-2	CTRatio	6/9/2023 6:33	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
Ratio 3b-3	CTRatio	6/9/2023 6:34	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
RWinding 3b-1	RWinding	6/9/2023 6:50	YES	n/a	YES	C:\Users\DC0134\Desktop\8721147.xml
RWinding 3b-2	RWinding	6/9/2023 6:51	YES	n/a	YES	C:\Users\DC0134\Desktop\8721147.xml
RWinding 3b-3	RWinding	6/9/2023 6:54	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
		6/9/2023 7:13	YES	n/a	NO	C:\Users\DC0134\Desktop\8721147.xml
Excitation 3b-1	CTExcitation					
Excitation 3b-1 Excitation 3b-2 Excitation 3b-3	CTExcitation CTExcitation	6/9/2023 7:20 6/9/2023 7:26	YES YES	n/a n/a	NO NO	C:\Users\DC0134\Desktop\8721147.xml C:\Users\DC0134\Desktop\8721147.xml

Comment:	Nameplate	
Date/Time:	6/7/23 11:27	
Fieldname:	Fieldvalue:	
Transformer 8721147 TB2.TA.TB1.L2		
A Bushing CT S/N D190900496-10/1		
B1 Bushing CT S/N D190900496-20/1		
B2 Bushing CT S/N D190900496-20/2		
2a Bushing CT S/N D190900496-50/1		
3a Bushing CT S/N D190900496-30/1		
3b Bushing CT S/N D190900496-40/1		

Comment:	A Bushing	
Date/Time:	6/7/23 11:27	
Fieldname:	Fieldvalue:	
A Bushing CT		
S/N D190900496-10/1		
1s1-1s2		
1500:1		
5VA		
Class: TPY		
2s1-2s2		
1500:1		
5VA		
Class: TPY		
3s1-3s2		
1500:1		
10VA		
Class: 0.2		
4s1-4s2		
1500:1		
10VA		
Class: 0.2		
5s1-5s2		
1033:1.5		
10VA		
Class: 5		

CTRatio:	Ratio A-1		
Date/Time:	6/12/2023 10:07		
Overload:	NO		
Assessment:	n/a		
Range:	AC 800A		
Nominal values:			
I prim.:	1500.0A		
I sec.:	1.0A		
Frequency:	50.0Hz		
I test:	300.0A		
Automatic:	YES		
I sec. Manual	NO		
I sec. measured with current clamp	NO		
Results:			
I prim.:	299.96A	I prim Phase:	0.0°
I sec.:	0.20013A	I sec Phase:	-0.05°
Ratio:	1500.0A:	1.0008A	0.08%
Polarity:	OK		
measured with Burden:	NO		

CTRatio:	Ratio A-2		
Date/Time:	6/12/2023 7:30		
Overload:	NO		
Assessment:	n/a		
Range:	AC 800A		
Nominal values:			
I prim.:	1500.0A		
I sec.:	1.0A		
Frequency:	50.0Hz		
I test:	300.0A		
Automatic:	YES		
I sec. Manual	NO		
I sec. measured with current clamp	NO		
Results:			
I prim.:	299.91A	I prim Phase:	0.0°
I sec.:	0.19969A	I sec Phase:	0.06°
Ratio:	1500.04	A: 0.9987A	-0.13%
Polarity:	OK		
measured with Burden:	NO		

CTRatio:	Ratio A-3		
Date/Time:	6/12/2023 7:34		
Overload:	NO		
Assessment:	n/a		
Range:	AC 800A		
Nominal values:			
I prim.:	1500.0A		
I sec.:	1.0A		
Frequency:	50.0Hz		
I test:	300.0A		
Automatic:	YES		
I sec. Manual	NO		
I sec. measured with current clamp	NO		
Results:			
I prim.:	299.95A	I prim Phase:	0.0°
I sec.:	0.19981A	I sec Phase:	-0.07°
Ratio:	1500.04	A: 0.9992A	-0.08%
Polarity:	OK		
measured with Burden:	NO		

CTRatio:	Ratio A-4		
Date/Time:	6/12/2023 7:36		
Overload:	NO		
Assessment:	n/a		
Range:	AC 800A		
Nominal values:			
I prim.:	1500.0A		
I sec.:	1.0A		
Frequency:	50.0Hz		
I test:	300.0A		
Automatic:	YES		
I sec. Manual	NO		
I sec. measured with current clamp	NO		
Results:			
I prim.:	299.46A	I prim Phase:	0.0°
I sec.:	0.19961A	I sec Phase:	-0.08°
Ratio:	1500.04	A: 0.9998A	-0.02%
Polarity:	OK		
measured with Burden:	NO		

CTRatio:	Ratio A-5		
Date/Time:	6/12/2023 10:05		
Overload:	NO		
Assessment:	n/a		
Range:	AC 800A		
Nominal values:			
I prim.:	1033.0A		
I sec.:	1.5A		
Frequency:	50.0Hz		
I test:	206.0A		
Automatic:	YES		
I sec. Manual	NO		
I sec. measured with current clamp	NO		
Results:			
I prim.:	205.93A	I prim Phase:	0.0°
I sec.:	0.29908A	I sec Phase:	0.2°
Ratio:	1033.0A:	1.5003A	0.02%
Polarity:	OK		
measured with Burden:	NO		

RWinding:	RWinding A-1		
Date/Time:	6/12/2023 10:29		
Overload:	YES		
Assessment:	n/a		
Range:	DC 6A		
I Test:	1.0A		
R min:	0.0002Ω		
R max:	10.0Ω		
Results:			
I DC:	0.99993A		
V DC:	2.970231V		
R meas:	2.97043793Ω		
Deviation:	0.03%		
Time:	29.0s		
Temperature compensation:			
T meas.:	40.0°C		
T ref.:	75.0°C		
R ref.:	3.34849367Ω		

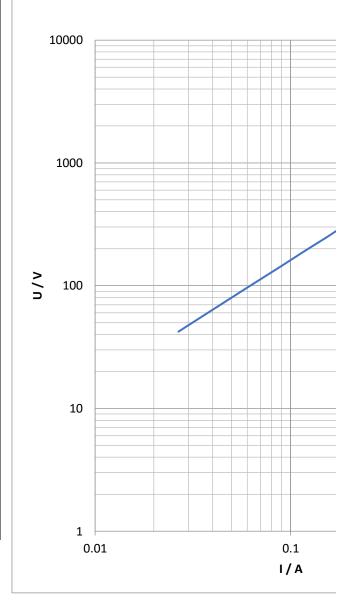
RWinding:	RWinding A-2		
Date/Time:	6/12/2023 10:31		
Overload:	NO		
Assessment:	n/a		
Range:	DC 6A		
I Test:	1.0A		
R min:	0.0002Ω		
R max:	10.0Ω		
Results:			
I DC:	0.99997A		
V DC:	2.965076V		
R meas:	2.96516395Ω		
Deviation:	0.02%		
Time:	26.0s		
Temperature compensation:			
T meas.:	40.0°C		
T ref.:	75.0°C		
R ref.:	3.34254845Ω		

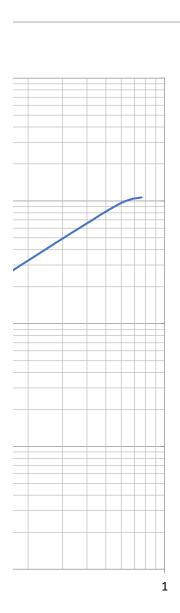
RWinding:	RWinding A-3
Date/Time:	6/12/2023 10:33
Overload:	NO
Assessment:	n/a
Range:	DC 6A
I Test:	1.0A
R min:	0.0002Ω
R max:	10.0Ω
Results:	
I DC:	0.94559A
V DC:	5.888422V
R meas:	6.22724437Ω
Deviation:	0.01%
Time:	28.0s
Temperature compensa	tion:
T meas.:	40.0°C
T ref.:	75.0°C
R ref.:	7.01980274Ω

RWinding:	RWinding A-4		
Date/Time:	6/12/2023 10:36		
Overload:	NO		
Assessment:	n/a		
Range:	DC 6A		
I Test:	1.0A		
R min:	0.0002Ω		
R max:	10.0Ω		
Results:			
I DC:	0.95093A		
V DC:	5.780666V		
R meas:	6.07895954Ω		
Deviation:	0.01%		
Time:	28.0s		
Temperature compensa	tion:		
T meas.:	40.0°C		
T ref.:	75.0°C		
R ref.:	6.8526453Ω		

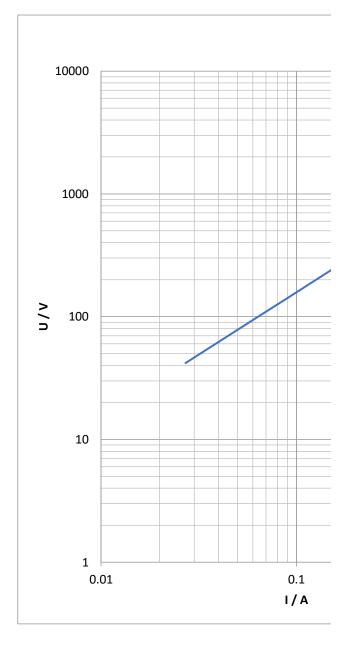
RWinding:	RWinding A-5		
Date/Time:	6/12/2023 10:39		
Overload:	NO		
Assessment:	n/a		
Range:	DC 6A		
I Test:	1.0A		
R min:	0.0002Ω		
R max:	10.0Ω		
Results:			
I DC:	1.00001A		
V DC:	2.848356V		
R meas:	2.84832652Ω		
Deviation:	0.0%		
Time:	27.0s		
Temperature compensa	tion:		
T meas.:	40.0°C		
T ref.:	75.0°C		
R ref.:	3.2108408Ω		

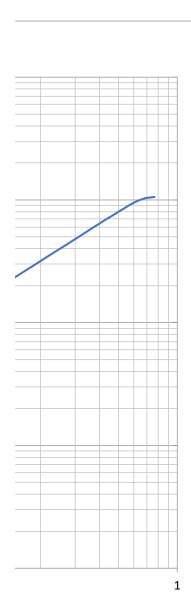
CTExcitation:	Excitation A-1		
Date/Time:	6/12/2023 11:58		
Overload:	NO		
Assessment:	n/a		
V max:	1110.0V		
I max:	2.0A		
Frequency:	50.0Hz		
Noise suppression:	NO		
Automatic:	YES		
V	I		
1067.03V	0.761163A		
1041.96V	0.686517A		
1000.47V	0.631666A		
952.72V	0.591186A		
903.54V	0.555883A		
853.58V	0.522638A		
803.49V	0.490542A		
753.01V	0.459021A		
702.52V	0.427866A		
651.89V	0.396956A		
601.18V	0.366125A		
550.45V	0.335423A		
499.72V	0.304739A		
448.94V	0.27412A		
398.11V	0.243375A		
347.3V	0.212719A		
296.36V	0.181914A		
245.58V	0.151161A		
194.62V	0.120183A		
143.95V	0.089319A		
92.98V	0.05796A		
42.25V	0.026704A		
Vnoonoint oclassication	IEC/BS		
Kneepoint calculation: V knee:			
	0.0		
I knee:	0.0		



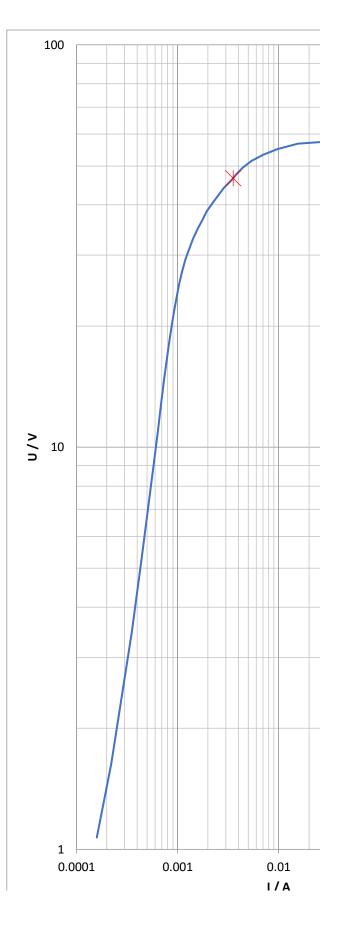


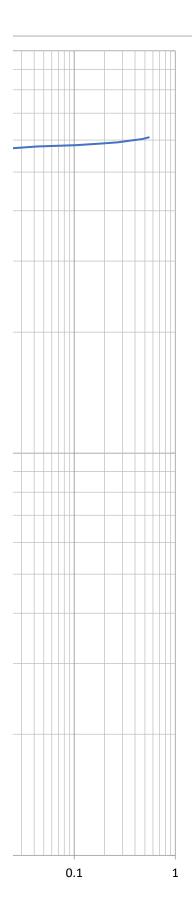
CTExcitation:	Excitation A-2		
Date/Time:	6/12/2023 12:06		
Overload:	NO		
Assessment:	n/a		
V max:	1100.0V		
I max:	2.0A		
Frequency:	50.0Hz		
Noise suppression:	NO		
Automatic:	YES		
V	I		
1057.32V	0.764796A		
1033.12V	0.690257A		
992.26V	0.635812A		
944.89V	0.596019A		
896.08V	0.561162A		
846.27V	0.528176A		
796.56V	0.4962A		
746.48V	0.464645A		
696.5V	0.433415A		
646.16V	0.402252A		
595.99V	0.371159A		
545.61V	0.34013A		
495.33V	0.309112A		
444.91V	0.278085A		
394.69V	0.246984A		
344.2V	0.215883A		
293.89V	0.184664A		
243.39V	0.153432A		
193.0V	0.122029A		
142.65V	0.090674A		
92.24V	0.058842A		
41.9V	0.027107A		
T7	TEC/PG		
Kneepoint calculation:	IEC/BS		
V knee:	0.0		
I knee:	0.0		



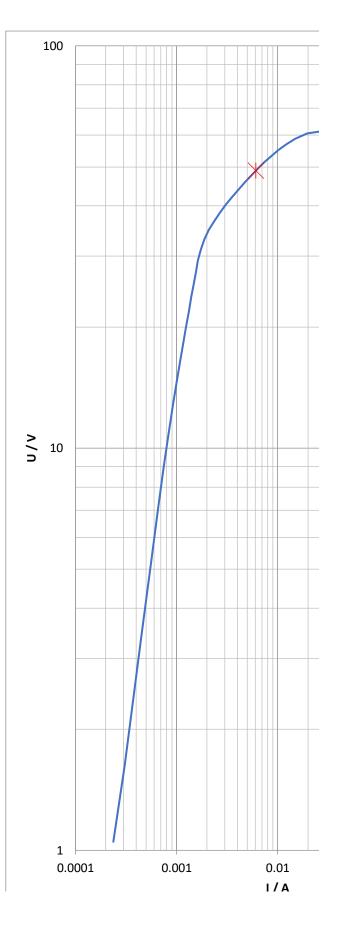


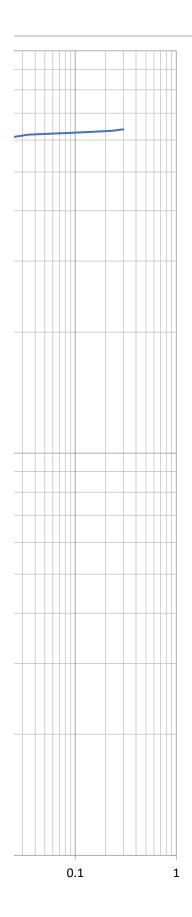
CTExcitation:	Excitation A-3		
Date/Time:	6/12/2023 12:18		
Overload:	NO		
Assessment:	n/a		
V max:	70.0V		
I max:	2.0A		
Frequency:	50.0Hz		
	NO NO		
Noise suppression: Automatic:	YES		
V	I		
60.93V	0.54657A		
60.33V	0.468299A		
59.87V	0.408299A 0.371442A		
59.26V	0.272333A		
58.77V	0.183374A		
58.29V	0.103433A		
57.87V	0.043288A		
56.78V	0.015561A		
55.06V	0.009762A		
53.26V	0.007007A		
51.44V	0.005406A		
49.6V	0.004448A		
47.76V	0.003822A		
45.91V	0.003388A		
44.08V	0.002882A		
42.23V	0.002525A		
40.38V	0.002222A		
38.54V	0.001942A		
36.69V	0.001767A		
34.85V	0.001582A		
32.99V	0.001428A		
31.14V	0.001306A		
29.3V	0.0012A		
27.44V	0.001117A		
25.6V	0.001045A		
23.75V	0.000982A		
21.91V	0.000928A		
20.06V	0.000879A		
18.21V	0.00083A		
16.37V	0.000781A		
14.51V	0.000733A		
12.67V	0.000686A		
10.81V	0.000635A		
8.97V	0.000577A		
7.13V	0.000515A		
5.28V	0.000442A		
3.45V	0.000353A		
1.63V	0.000221A		
1.07V	0.000159A		
Kneepoint calculation:	IEC/BS		
V knee:	46.63V		
I knee:	0.003552A		
	0.003332A		



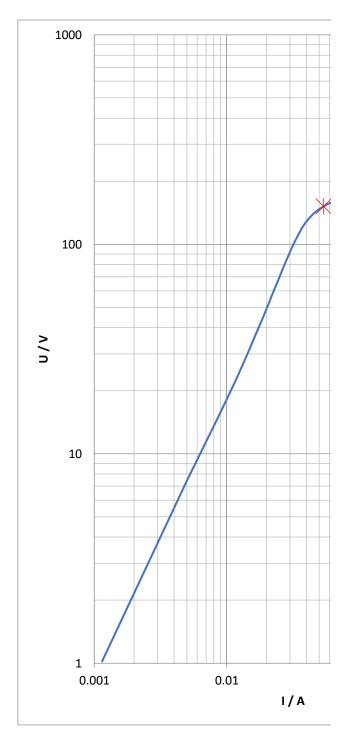


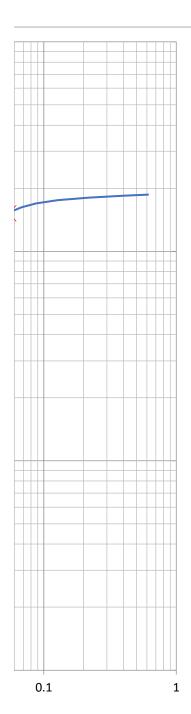
CTExcitation:	Excitation A-4		
Date/Time:	6/12/2023 12:21		
Overload:	NO		
Assessment:	n/a		
V max:	70.0V		
I max:	1.6A		
Frequency:	50.0Hz		
	NO NO		
Noise suppression: Automatic:	YES		
V	I		
(2 OV	0.200292.4		
63.8V 63.33V	0.299283A 0.233027A		
62.96V	0.253027A 0.154434A		
62.47V	0.082604A		
61.94V	0.034682A		
60.5V	0.019625A		
58.74V	0.014898A		
56.93V	0.012175A		
55.1V	0.010212A		
53.27V	0.008704A		
51.43V	0.007457A		
49.6V	0.00642A		
47.74V	0.005556A		
45.9V	0.0048A		
44.06V	0.004155A		
42.22V	0.003582A		
40.37V	0.003096A		
38.53V	0.002691A		
36.68V	0.002368A		
34.85V	0.002095A		
32.99V	0.00189A		
31.14V	0.001737A		
29.3V	0.001634A		
27.45V	0.001557A		
25.59V	0.00148A		
23.75V	0.001404A		
21.91V	0.001327A		
20.07V	0.001248A		
18.21V	0.001165A		
16.36V	0.001081A		
14.51V	0.000999A		
12.67V	0.000916A		
10.82V	0.000834A		
8.97V	0.000748A		
7.12V	0.000661A		
5.29V	0.000564A		
3.44V	0.000453A		
1.62V	0.000306A		
1.05V	0.000237A		
Kneepoint calculation:	IEC/BS		
V knee:	48.98V		
I knee:	0.006123A		
I MIKE.	0.000123A		





CTExcitation:	Excitation A-5	
Date/Time:	6/12/2023 12:23	
Overload:	NO	
Assessment:	n/a	
V max:	200.0V	
I max:	2.0A	
Frequency:	50.0Hz	
Noise suppression:	NO	
Automatic:	YES	
V	I	
·		
186.46V	0.612081A	
184.11V	0.398439A	
180.57V	0.218641A	
175.51V	0.126038A	
169.17V	0.08732A	
162.24V	0.06803A	
155.08V	0.057006A	
147.8V	0.050148A	
140.51V	0.045425A	
133.18V	0.041906A	
125.82V	0.039114A	
118.45V	0.0368A	
111.06V	0.034802A	
103.68V	0.032942A	
96.28V	0.031115A	
88.9V	0.029369A	
81.49V	0.027692A	
74.1V	0.026012A	
66.69V	0.024287A	
59.3V	0.022504A	
51.9V	0.020652A	
44.5V	0.018685A	
37.09V	0.016576A	
29.67V	0.014262A	
22.28V	0.011653A	
14.88V	0.008607A	
7.48V	0.005026A	
1.02V	0.001146A	
**	HEG/PG	
Kneepoint calculation:	IEC/BS	
V knee:	151.79V	
I knee:	0.053844A	





Comment:	B1 Bushing	
Date/Time:	6/7/23 11:27	
Fieldname:	Fieldvalue:	
P4 Bushing CT		
B1 Bushing CT		
S/N D190900496-20/1		
1s1-1s2		
1500:1		
5VA		
Class: TPY		
2s1-2s2		
1500:1		
5VA		
Class: TPY		

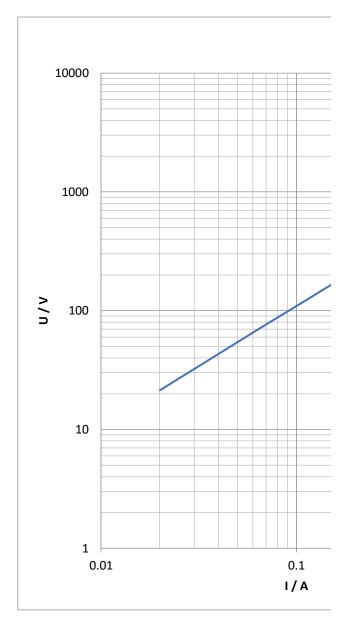
CTRatio:	Ratio B1-1		
Date/Time:	6/12/2023 10:13		
Overload:	NO		
Assessment:	n/a		
Range:	AC 800A		
Nominal values:			
I prim.:	1500.0A		
I sec.:	1.0A		
Frequency:	50.0Hz		
I test:	300.0A		
Automatic:	YES		
I sec. Manual	NO		
I sec. measured with current clamp	NO		
Results:			
I prim.:	299.9A	I prim Phase:	0.0°
I sec.:	0.20074A	I sec Phase:	0.11°
Ratio:	1500.0A:	1.004A	0.4%
Polarity:	OK		
measured with Burden:	NO		

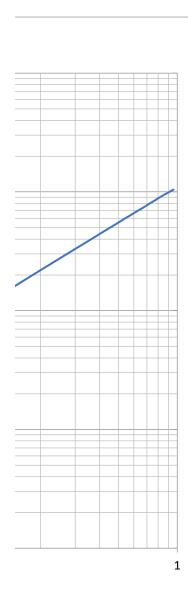
CTRatio:	Ratio B1-2		
Date/Time:	6/12/2023 10:13		
Overload:	NO		
Assessment:	n/a		
Range:	AC 800A		
Nominal values:			
I prim.:	1500.0A		
I sec.:	1.0A		
Frequency:	50.0Hz		
I test:	300.0A		
Automatic:	YES		
I sec. Manual	NO		
I sec. measured with current clamp	NO		
Results:			
I prim.:	299.9A	I prim Phase:	0.0°
I sec.:	0.19979A	I sec Phase:	0.08°
Ratio:	1500.0A	: 0.9993A	-0.07%
Polarity:	OK		
measured with Burden:	NO		

RWinding:	RWinding B1-1	
Date/Time:	6/12/2023 10:21	
Overload:	YES	
Assessment:	n/a	
Range:	DC 6A	
I Test:	1.0A	
R min:	0.0002Ω	
R max:	10.0Ω	
Results:		
I DC:	1.00001A	
V DC:	3.022361V	
R meas:	3.02232978Ω	
Deviation:	0.08%	
Time:	28.0s	
Temperature compensation:		
T meas.:	40.0°C	
T ref.:	75.0°C	
R ref.:	3.40698993Ω	

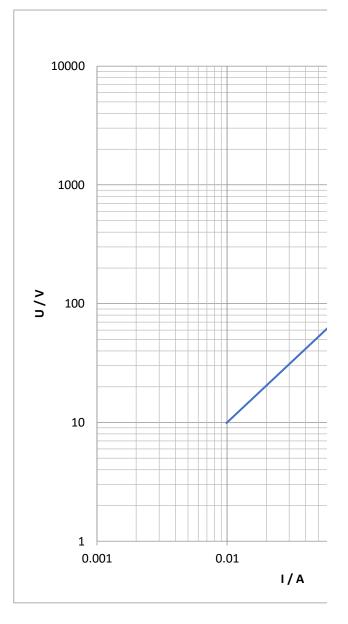
RWinding:	RWinding B1-2	
Date/Time:	6/12/2023 10:22	
Overload:	NO	
Assessment:	n/a	
Range:	DC 6A	
I Test:	1.0A	
R min:	0.0002Ω	
R max:	10.0Ω	
Results:		
I DC:	0.99993A	
V DC:	2.887944V	
R meas:	2.88814717Ω	
Deviation:	0.02%	
Time:	28.0s	
Temperature compensation:		
T meas.:	40.0°C	
T ref.:	75.0°C	
R ref.:	3.25572954Ω	

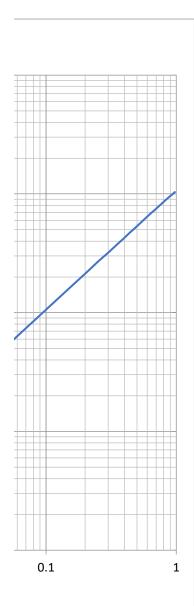
CTExcitation:	Excitation B1-1
Date/Time:	6/12/2023 11:40
Overload:	NO
Assessment:	n/a
V max:	1050.0V
I max:	2.38095A
Frequency:	50.0Hz
Noise suppression:	NO
Automatic:	YES
V	I
1046.19V	0.957258A
996.17V	0.907565A
945.52V	0.858967A
894.58V	0.8112A
843.33V	0.763918A
792.16V	0.717005A
741.0V	0.670383A
689.78V	0.623884A
638.3V	0.577431A
586.78V	0.531028A
535.52V	0.484715A
484.3V	0.438482A
432.83V	0.392111A
381.21V	0.345684A
329.75V	0.299332A
278.57V	0.253033A
227.03V	0.206591A
175.34V	0.159974A
123.97V	0.113412A
72.82V	0.066746A
21.39V	0.020045A
Vnoonoint colculations	IEC/BS
Kneepoint calculation: V knee:	0.0
I knee:	0.0
1 Kilee:	0.0





CTExcitation:	Excitation B1-2
Date/Time:	6/12/2023 11:43
Overload:	NO
Assessment:	n/a
V max:	1040.0V
I max:	2.40385A
Frequency:	50.0Hz
Noise suppression:	NO
Automatic:	YES
V	I
1036.55V	0.975861A
986.24V	0.925241A
935.49V	0.875451A
884.48V	0.82639A
833.34V	0.777803A
782.37V	0.729525A
731.33V	0.681466A
680.0V	0.633529A
628.66V	0.585704A
577.38V	0.537964A
526.27V	0.490332A
475.0V	0.442727A
423.57V	0.395055A
372.12V	0.347356A
320.77V	0.299724A
269.65V	0.252136A
218.22V	0.204408A
166.67V	0.156567A
115.35V	0.108714A
64.17V	0.060658A
9.89V	0.009885A
Kneepoint calculation:	IEC/BS
V knee:	0.0
I knee:	0.0





Comment:	B2 Bushing	
Date/Time:	6/7/23 11:27	
Fieldname:	Fieldvalue:	
P2 Buching CT		
B2 Bushing CT S/N D190900496-20/2		
5/N D190900496-20/2		
1s1-1s2		
1500:1		
5VA		
Class: TPY		
2s1-2s2		
1500:1		
5VA		
Class: TPY		

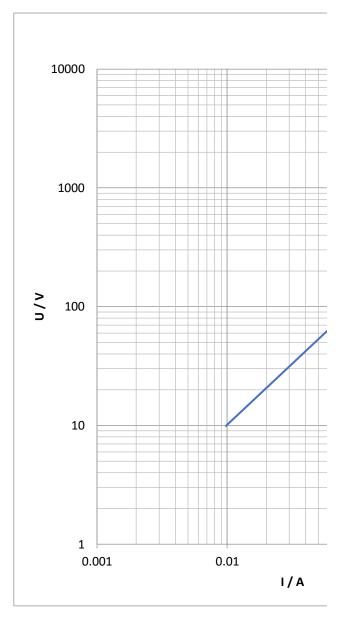
CTRatio:	Ratio B2-1		
Date/Time:	6/12/2023 7:47		
Overload:	NO		
Assessment:	n/a		
Range:	AC 800A		
Nominal values:			
I prim.:	1500.0A		
I sec.:	1.0A		
Frequency:	50.0Hz		
I test:	300.0A		
Automatic:	YES		
I sec. Manual	NO		
I sec. measured with current clamp	NO		
Results:			
I prim.:	299.93A	I prim Phase:	0.0°
I sec.:	0.2011A	I sec Phase:	0.09°
Ratio:	1500.0A:	1.0057A	0.57%
Polarity:	OK		
measured with Burden:	NO		

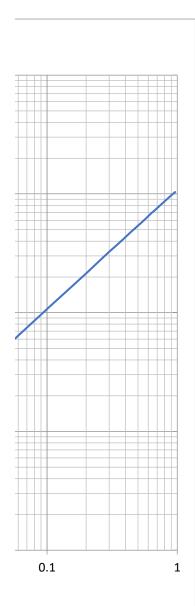
CTRatio:	Ratio B2-2		
Date/Time:	6/12/2023 7:48		
Overload:	NO		
Assessment:	n/a		
Range:	AC 800A		
Nominal values:			
I prim.:	1500.0A		
I sec.:	1.0A		
Frequency:	50.0Hz		
I test:	300.0A		
Automatic:	YES		
I sec. Manual	NO		
I sec. measured with current clamp	NO		
Results:			
I prim.:	299.93A	I prim Phase:	0.0°
I sec.:	0.20084A	I sec Phase:	0.09°
Ratio:	1500.0A:	1.0044A	0.44%
Polarity:	OK		
measured with Burden:	NO		

RWinding:	RWinding B2-1		
Date/Time:	6/12/2023 10:24		
Overload:	YES		
Assessment:	n/a		
Range:	DC 6A		
I Test:	1.0A		
R min:	0.0002Ω		
R max:	10.0Ω		
Results:			
I DC:	1.00001A		
V DC:	2.90547V		
R meas:	2.90544095Ω		
Deviation:	0.01%		
Time:	29.0s		
Temperature compensa	tion:		
T meas.:	40.0°C		
T ref.:	75.0°C		
R ref.:	3.27522434Ω		

RWinding:	RWinding B2-2		
Date/Time:	6/12/2023 10:27		
Overload:	NO		
Assessment:	n/a		
Range:	DC 6A		
I Test:	1.0A		
R min:	0.0002Ω		
R max:	10.0Ω		
Results:			
I DC:	0.99995A		
V DC:	2.864869V		
R meas:	2.86501325Ω		
Deviation:	0.01%		
Time:	29.0s		
Temperature compensation:			
T meas.:	40.0°C		
T ref.:	75.0°C		
R ref.:	3.2296513Ω		

CTExcitation: Excitation B2-1 Date/Time: 6/12/2023 11:51 Overload: NO Assessment: n/a V max: 1040.0V I max: 2.39808A Frequency: 50.0Hz Noise suppression: NO Automatic: YES	
Assessment: n/a V max: 1040.0V I max: 2.39808A Frequency: 50.0Hz Noise suppression: NO Automatic: YES	
V max: 1040.0V I max: 2.39808A Frequency: 50.0Hz Noise suppression: NO Automatic: YES	
I max: 2.39808A Frequency: 50.0Hz Noise suppression: NO Automatic: YES	
Frequency: 50.0Hz Noise suppression: NO Automatic: YES	
Noise suppression: NO Automatic: YES	
Automatic: YES	
V	
1036.88V 0.964578A	
986.73V 0.914799A	
935.93V 0.865891A	
884.72V 0.81764A	
833.56V 0.76982A	
782.45V 0.722261A	
731.34V 0.674922A	
680.14V 0.627618A	
628.71V 0.580359A	
577.37V 0.533169A	
526.17V 0.486037A	
475.06V 0.438937A	
423.73V 0.391753A	
372.16V 0.344477A	
320.85V 0.297245A	
269.68V 0.250027A	
218.23V 0.20269A	
166.71V 0.155217A	
115.37V 0.107716A	
64.2V 0.060045A	
9.92V 0.009794A	
Kneepoint calculation: IEC/BS	
	0.0
I knee:	





Comment:	2a Bushing
Date/Time:	6/7/23 11:27
Fieldname:	Fieldvalue:
2a Bushing CT	
S/N D190900496-50/2	
1s1-1s2	
1500:1	
5VA	
Class: TPY	
2s1-2s2	
1500:1	
5VA	
Class: TPY	
3s1-3s2	
1500:1	
10VA	
Class: 0.2	
4s1-4s2	
1500:1	
10VA	
Class: 0.2	
Fo.1 Fo.2	
5s1-5s2 1158:1.5	
10VA	
Class: 5	

CTRatio:	Ratio 2a-1		
Date/Time:	6/12/2023 8:00		
Overload:	NO		
Assessment:	n/a		
Range:	AC 800A		
Nominal values:			
I prim.:	1500.0A		
I sec.:	1.0A		
Frequency:	50.0Hz		
I test:	300.0A		
Automatic:	YES		
I sec. Manual	NO		
I sec. measured with current clamp	NO		
Results:			
I prim.:	299.95A	I prim Phase:	0.0°
I sec.:	0.199A	I sec Phase:	0.0°
Ratio:	1500.0A	: 0.9952A	-0.48%
Polarity:	OK		
measured with Burden:	NO		

CTRatio:	Ratio 2a-2		
Date/Time:	6/12/2023 8:04		
Overload:	NO		
Assessment:	n/a		
Range:	AC 800A		
Nominal values:			
I prim.:	1500.0A		
I sec.:	1.0A		
Frequency:	50.0Hz		
I test:	300.0A		
Automatic:	YES		
I sec. Manual	NO		
I sec. measured with current clamp	NO		
Results:			
I prim.:	299.93A	I prim Phase:	0.0°
I sec.:	0.19938A	I sec Phase:	0.03°
Ratio:	1500.04	A: 0.9971A	-0.29%
Polarity:	OK		
measured with Burden:	NO		

CTRatio:	Ratio 2a-3		
Date/Time:	6/12/2023 8:05		
Overload:	NO		
Assessment:	n/a		
Range:	AC 800A		
Nominal values:			
I prim.:	1500.0A		
I sec.:	1.0A		
Frequency:	50.0Hz		
I test:	300.0A		
Automatic:	YES		
I sec. Manual	NO		
I sec. measured with current clamp	NO		
Results:			
I prim.:	299.92A	I prim Phase:	0.0°
I sec.:	0.19971A	I sec Phase:	-0.03°
Ratio:	1500.0A:	0.9988A	-0.12%
Polarity:	OK		
measured with Burden:	NO		

CTRatio:	Ratio 2a-4		
Date/Time:	6/12/2023 8:06		
Overload:	NO		
Assessment:	n/a		
Range:	AC 800A		
Nominal values:			
I prim.:	1500.0A		
I sec.:	1.0A		
Frequency:	50.0Hz		
I test:	300.0A		
Automatic:	YES		
I sec. Manual	NO		
I sec. measured with current clamp	NO		
Results:			
I prim.:	300.02A	I prim Phase:	0.0°
I sec.:	0.19972A	I sec Phase:	-0.04°
Ratio:	1500.0A:	0.9985A	-0.15%
Polarity:	OK		
measured with Burden:	NO		

CTRatio:	Ratio 2a-5		
Date/Time:	6/12/2023 9:52		
Overload:	NO		
Assessment:	n/a		
Range:	AC 800A		
Nominal values:			
I prim.:	1158.0A		
I sec.:	1.5A		
Frequency:	50.0Hz		
I test:	235.0A		
Automatic:	YES		
I sec. Manual	NO		
I sec. measured with current clamp	NO		
Results:			
I prim.:	234.95A	I prim Phase:	0.0°
I sec.:	0.30268A	I sec Phase:	0.22°
Ratio:	1158.04	A: 1.4918A	-0.55%
Polarity:	OK		
measured with Burden:	NO		

RWinding:	RWinding 2a-1		
Date/Time:	6/12/2023 10:54		
Overload:	NO		
Assessment:	n/a		
Range:	DC 6A		
I Test:	1.0A		
R min:	0.0002Ω		
R max:	10.0Ω		
Results:			
I DC:	0.99999A		
V DC:	3.127912V		
R meas:	3.12794128Ω		
Deviation:	0.01%		
Time:	29.0s		
Temperature compensation:			
T meas.:	40.0°C		
T ref.:	75.0°C		
R ref.:	3.5260429Ω		

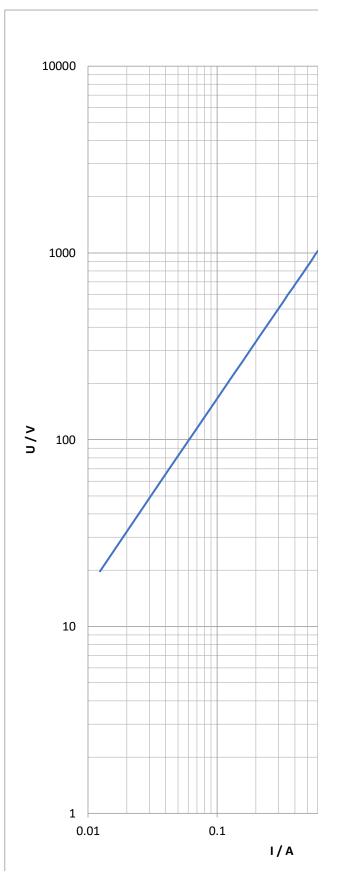
RWinding:	RWinding 2a-2		
Date/Time:	6/12/2023 10:56		
Overload:	NO		
Assessment:	n/a		
Range:	DC 6A		
I Test:	1.0A		
R min:	0.0002Ω		
R max:	10.0Ω		
Results:			
I DC:	0.99995A		
V DC:	3.068192V		
R meas:	3.06834342Ω		
Deviation:	0.03%		
Time:	26.0s		
Temperature compensation:			
T meas.:	40.0°C		
T ref.:	75.0°C		
R ref.:	3.45885986Ω		

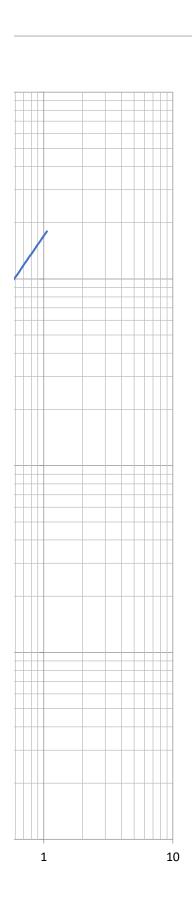
RWinding:	RWinding 2a-3		
Date/Time:	6/12/2023 10:59		
Overload:	NO		
Assessment:	n/a		
Range:	DC 6A		
I Test:	1.0A		
R min:	0.0002Ω		
R max:	10.0Ω		
Results:			
I DC:	0.88308A		
V DC:	6.745249V		
R meas:	7.63832269Ω		
Deviation:	0.04%		
Time:	37.0s		
Temperature compensation:			
T meas.:	40.0°C		
T ref.:	75.0°C		
R ref.:	8.61047285Ω		

RWinding:	RWinding 2a-4		
Date/Time:	6/12/2023 11:01		
Overload:	NO		
Assessment:	n/a		
Range:	DC 6A		
I Test:	1.0A		
R min:	0.0002Ω		
R max:	10.0Ω		
Results:			
I DC:	0.88535A		
V DC:	6.585806V		
R meas:	7.43864573Ω		
Deviation:	0.01%		
Time:	28.0s		
Temperature compensation:			
T meas.:	40.0°C		
T ref.:	75.0°C		
R ref.:	8.38538246Ω		

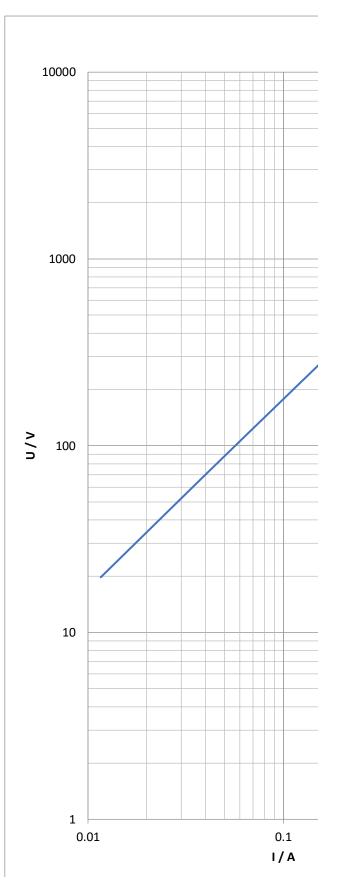
RWinding:	RWinding 2a-5		
Date/Time:	6/12/2023 11:05		
Overload:	NO		
Assessment:	n/a		
Range:	DC 6A		
I Test:	1.0A		
R min:	0.0002Ω		
R max:	10.0Ω		
Results:			
I DC:	1.00001A		
V DC:	1.855045V		
R meas:	1.85502645Ω		
Deviation:	0.03%		
Time:	27.0s		
Temperature compensation:			
T meas.:	40.0°C		
T ref.:	75.0°C		
R ref.:	2.09112073Ω		

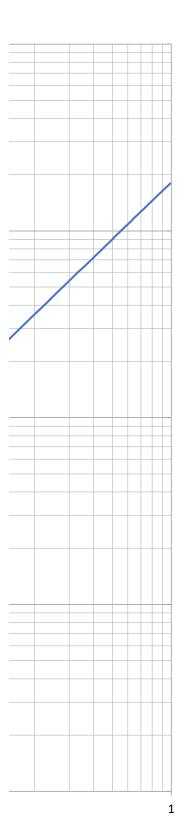
CTExcitation:	Excitation 2a-1
Date/Time:	6/12/2023 11:17
Overload:	NO
Assessment:	n/a
V max:	1800.0V
I max:	1.38889A
Frequency:	50.0Hz
Noise suppression:	NO
Automatic:	YES
V	I
V	1
1798.06V	1.057829A
1749.89V	1.029238A
1702.03V	1.00088A
1654.12V	0.972629A
1606.33V	0.944455A
1558.51V	0.916307A
1510.43V	0.888067A
1462.44V	0.85999A
1414.48V	0.831923A
1366.45V	0.803899A
1318.17V	0.775823A
1270.25V	0.74783A
1222.11V	0.74763A 0.719766A
1174.24V	0.691772A
1174.24 V 1126.03 V	0.663686A
1078.19V	0.635688A
1030.06V	0.607613A
981.97V	0.579551A
933.83V	0.551445A
885.77V	0.523334A
837.71V	0.495242A
789.54V	0.467097A
741.63V	0.438974A
693.42V	0.410769A
645.51V	0.382601A
597.15V	0.354329A
549.23V	0.326188A
500.85V	0.297876A
452.95V	0.269679A
404.72V	0.241265A
356.59V	0.212937A
308.46V	0.184478A
260.16V	0.156003A
212.18V	0.127438A
163.91V	0.098805A
116.02V	0.070096A
67.65V	0.041206A
19.75V	0.01239A
Kneepoint calculation:	IEC/BS
V knee:	0.0
I knee:	0.0



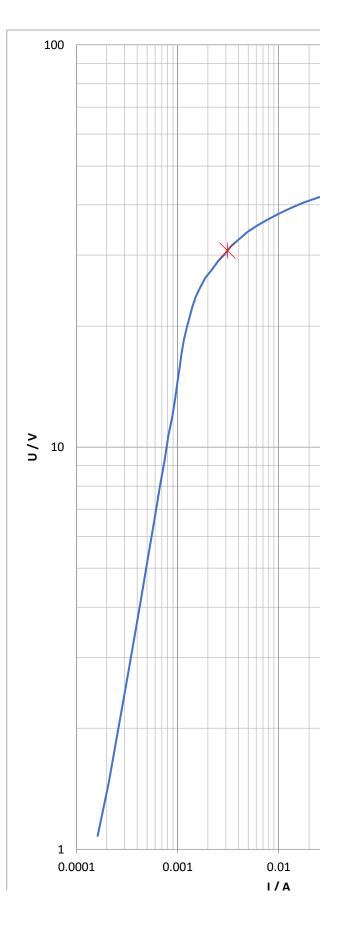


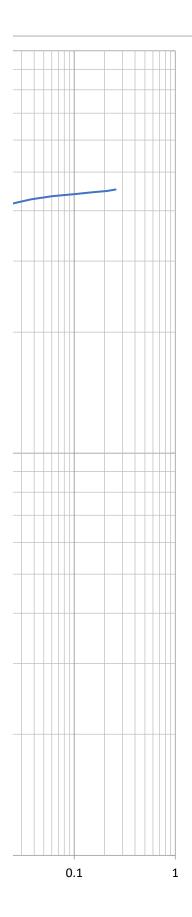
CTExcitation:	Excitation 2a-2		
Date/Time:	6/12/2023 11:21		
Overload:	NO		
Assessment:	n/a		
V max:	1800.0V		
I max:	1.38889A		
Frequency:	50.0Hz		
Noise suppression:	NO		
Automatic:	YES		
V	I		
•	1		
1797.92V	0.989892A		
1749.83V	0.963208A		
1749.83 V 1702.06 V	0.936704A		
1654.05V	0.910258A		
1606.1V	0.88388A		
1558.13V	0.857553A		
1538.13V 1510.11V	0.831242A		
1462.2V	0.804995A		
1402.2 V 1414.08V	0.778696A		
1366.15V	0.752475A		
1318.07V	0.726206A		
1270.1V	0.699995A		
1222.0V	0.673755A		
1173.98V	0.647527A		
1175.98V 1125.93V	0.6213A		
1077.82V	0.595016A		
1029.94V	0.568801A		
981.75V	0.542503A		
933.86V	0.516264A		
885.66V	0.489948A		
837.59V	0.463649A		
789.61V	0.437332A		
741.39V	0.41097A		
693.51V	0.384639A		
645.19V	0.358188A		
597.31V	0.331843A		
549.07V	0.305376A		
500.93V	0.278968A		
452.96V	0.252494A		
404.61V	0.225945A		
356.64V	0.199412A		
308.36V	0.172743A		
260.36V	0.146149A		
212.0V	0.119309A		
163.96V	0.092618A		
115.92V	0.065625A		
67.65V	0.038625A		
19.76V	0.011626A		
Kneepoint calculation:	IEC/BS		
V knee:	0.0		
I knee:	0.0		



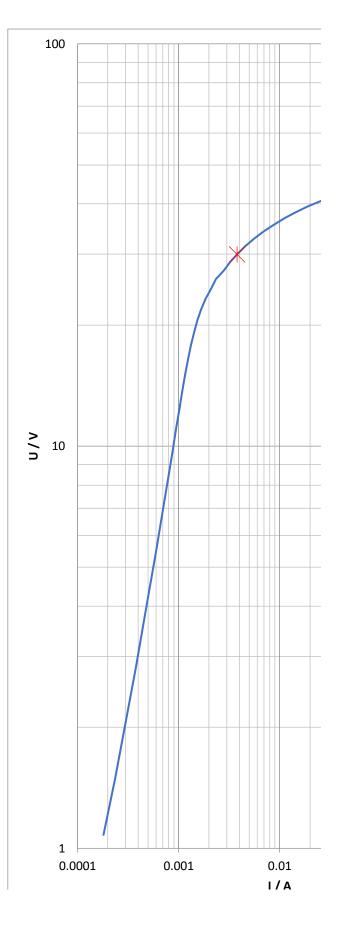


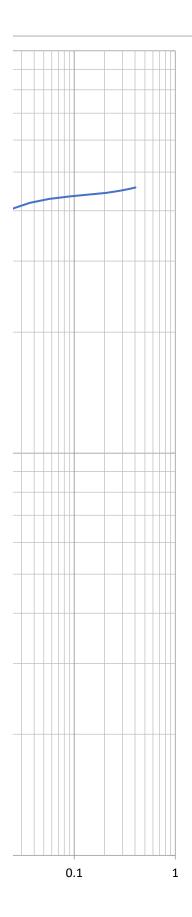
CTExcitation:	Excitation 2a-3		
Date/Time:	6/12/2023 11:25		
Overload:	NO		
Assessment:	n/a		
V max:	50.0V		
I max:	1.6A		
Frequency:	50.0Hz		
Noise suppression:	NO		
Automatic:	YES		
V	I		
•	1		
45.21V	0.256486A		
44.85V	0.21142A		
44.47V	0.152642A		
44.04V	0.10005A		
43.54V	0.061706A		
42.78V	0.037511A		
41.72V	0.024832A		
40.52V	0.017744A		
39.29V	0.013275A		
38.02V	0.010031A		
36.75V	0.007706A		
35.45V	0.00607A		
34.17V	0.00489A		
32.87V	0.004088A		
31.55V	0.003366A		
30.26V	0.00297A		
28.94V	0.002508A		
27.63V	0.002196A		
26.34V	0.001886A		
25.03V	0.001697A		
23.72V	0.001529A		
22.4V	0.001414A		
21.09V	0.001317A		
19.79V	0.001233A		
18.48V	0.001161A		
17.16V	0.001103A		
15.84V	0.001051A		
14.53V	0.001001A		
13.23V	0.00095A		
11.91V	0.000888A		
10.61V	0.000812A		
9.29V	0.000747A		
7.98V	0.000671A		
6.67V	0.000596A		
5.38V	0.000515A		
4.05V	0.000426A		
2.74V	0.000325A		
1.46V 1.08V	0.000208A 0.000162A		
1.U8 V	U.UUU102A		
Kneepoint calculation:	IEC/BS		
V knee:	30.79V		
I knee:	0.003126A		



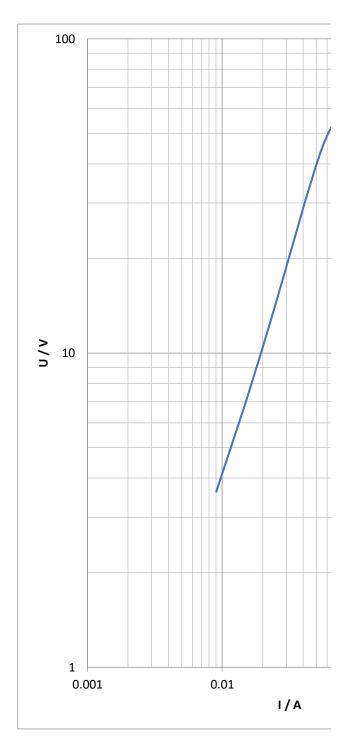


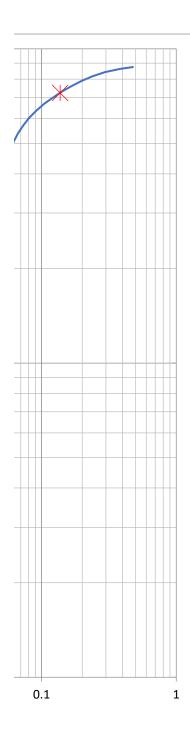
CTExcitation:	Excitation 2a-4		
Date/Time:	6/12/2023 11:29		
Overload:	NO		
Assessment:	n/a		
V max:	52.0V		
I max:	1.6A		
Frequency:	50.0Hz		
Noise suppression:	NO		
Automatic:	YES		
V	I		
V	1		
45.74V	0.403714A		
45.3V	0.347353A		
44.8V	0.275607A		
44.32V	0.207139A		
43.91V	0.142287A		
43.43V	0.090517A		
42.85V	0.056106A		
41.88V	0.036497A		
40.7V	0.025764A		
39.45V	0.01911A		
38.14V	0.01457A		
36.82V	0.011228A		
35.48V	0.008728A		
34.13V	0.006899A		
32.79V	0.005578A		
31.42V	0.004599A		
30.07V	0.003869A		
28.72V	0.003254A		
27.36V	0.002819A		
26.01V	0.002352A		
24.64V	0.002104A		
23.27V	0.001866A		
21.91V	0.001683A		
20.55V	0.001539A		
19.19V	0.001425A		
17.83V	0.001327A		
16.46V	0.001242A		
15.09V	0.001167A		
13.73V	0.001094A		
12.36V	0.001022A		
11.0V	0.000946A		
9.63V	0.000868A		
8.25V	0.000785A		
6.91V	0.0007A		
5.53V	0.000604A		
4.17V	0.000498A		
2.82V	0.000378A		
1.49V	0.000235A		
1.08V	0.000181A		
Unconcint color-lations	IEC/DC		
Kneepoint calculation:	IEC/BS		
V knee:	29.94V 0.003807A		
I knee:	U.00380/A		





CTExcitation:	Excitation 2a-5		
Date/Time:	6/12/2023 11:33		
Overload:	NO		
Assessment:	n/a		
V max:	95.0V		
I max:	1.6A		
Frequency:	50.0Hz		
Noise suppression:	NO		
Automatic:	YES		
V	I		
·	_		
87.5V	0.476478A		
86.26V	0.381876A		
84.26V	0.296025A		
81.82V	0.238667A		
79.04V	0.19765A		
76.05V	0.166349A		
73.0V	0.141448A		
69.94V	0.121146A		
66.83V	0.104774A		
63.68V	0.091644A		
60.45V	0.081422A		
57.22V	0.073469A		
53.95V	0.06718A		
50.66V	0.06211A		
47.37V	0.057879A		
44.05V	0.054259A		
40.7V	0.05097A		
37.36V	0.047804A		
34.0V	0.044683A		
30.62V	0.04151A		
27.24V	0.038351A		
23.89V	0.035098A		
20.51V	0.031688A		
17.12V	0.028117A		
13.74V	0.02424A		
10.36V	0.019941A		
6.98V	0.014977A		
3.62V	0.009045A		
Kneepoint calculation:	IEC/BS		
V knee:	72.38V		
I knee:	0.137123A		





Comment:	3a Bushing	
Date/Time:	6/7/23 11:27	
Fieldname:	Fieldvalue:	
3a Bushing CT		
S/N D190900496-30/1		
1s1-1s2		
1000:1		
5VA		
Class: TPY		
2s1-2s2		
1000:1		
5VA		
Class: TPY		
3s1-3s2		
1000:1		
10VA		
Class: 0.2		
4s1-4s2		
668:1.5		
10VA		
Class: 5		

CTRatio:	Ratio 3a-1		
Date/Time:	6/9/2023 6:21		
Overload:	NO		
Assessment:	n/a		
Range:	AC 800A		
Nominal values:			
I prim.:	1000.0A		
I sec.:	1.0A		
Frequency:	50.0Hz		
I test:	200.0A		
Automatic:	YES		
I sec. Manual	NO		
I sec. measured with current clamp	NO		
Results:			
I prim.:	199.96A	I prim Phase:	0.0°
I sec.:	0.19972A	I sec Phase:	0.11°
Ratio:	1000.04	: 0.9988A	-0.12%
Polarity:	OK		
measured with Burden:	NO		

CTRatio:	Ratio 3a-2		
Date/Time:	6/9/2023 6:22		
Overload:	NO		
Assessment:	n/a		
Range:	AC 800A		
Nominal values:			
I prim.:	1000.0A		
I sec.:	1.0A		
Frequency:	50.0Hz		
I test:	200.0A		
Automatic:	YES		
I sec. Manual	NO		
I sec. measured with current clamp	NO		
Results:			
I prim.:	199.95A	I prim Phase:	0.0°
I sec.:	0.19962A	I sec Phase:	0.1°
Ratio:	1000.04	A: 0.9983A	-0.17%
Polarity:	OK		
measured with Burden:	NO		

CTRatio:	Ratio 3a-3		
Date/Time:	6/9/2023 6:23		
Overload:	NO		
Assessment:	n/a		
Range:	AC 800A		
Nominal values:			
I prim.:	1000.0A		
I sec.:	1.0A		
Frequency:	50.0Hz		
I test:	200.0A		
Automatic:	YES		
I sec. Manual	NO		
I sec. measured with current clamp	NO		
Results:			
I prim.:	199.95A	I prim Phase:	0.0°
I sec.:	0.19978A	I sec Phase:	0.01°
Ratio:	1000.0	0A: 0.9991A	-0.09%
Polarity:	OK		
measured with Burden:	NO		

CTRatio:	Ratio 3a-4		
Date/Time:	6/9/2023 6:24		
Overload:	NO		
Assessment:	n/a		
Range:	AC 800A		
Nominal values:			
I prim.:	668.0A		
I sec.:	1.5A		
Frequency:	50.0Hz		
I test:	135.0A		
Automatic:	YES		
I sec. Manual	NO		
I sec. measured with current clamp	NO		
Results:			
I prim.:	134.95A	I prim Phase:	0.0°
I sec.:	0.30171A	I sec Phase:	-179.4°
Ratio:	668.0A	: 1.4935A	-0.44%
Polarity:	Failed		
measured with Burden:	NO		

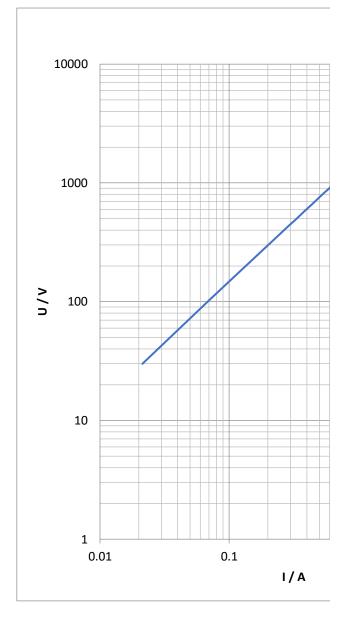
RWinding:	RWinding 3a-1	
Date/Time:	6/9/2023 6:40	
Overload:	YES	
Assessment:	n/a	
Range:	DC 6A	
I Test:	1.0A	
R min:	0.0002Ω	
R max:	10.0Ω	
Results:		
I DC:	0.99996A	
V DC:	2.864316V	
R meas:	2.86442958Ω	
Deviation:	0.02%	
Time:	29.0s	
Temperature compensation:		
T meas.:	38.0°C	
T ref.:	75.0°C	
R ref.:	3.25264897Ω	

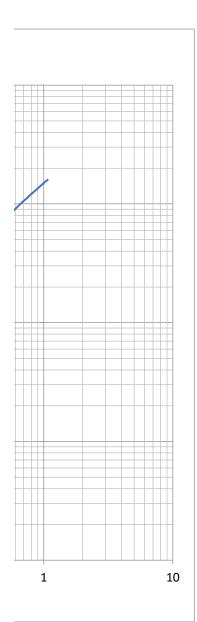
RWinding:	RWinding 3a-2	
Date/Time:	6/9/2023 6:43	
Overload:	YES	
Assessment:	n/a	
Range:	DC 6A	
I Test:	1.0A	
R min:	0.0002Ω	
R max:	10.0Ω	
Results:		
I DC:	1.00003A	
V DC:	2.824886V	
R meas:	2.82480026Ω	
Deviation:	0.02%	
Time:	29.0s	
Temperature compensation:		
T meas.:	34.0°C	
T ref.:	75.0°C	
R ref.:	3.25534602Ω	

RWinding:	RWinding 3a-3	
Date/Time:	6/9/2023 6:45	
Overload:	NO	
Assessment:	n/a	
Range:	DC 6A	
I Test:	1.0A	
R min:	0.0002Ω	
R max:	10.0Ω	
Results:		
I DC:	1.01677A	
V DC:	4.289821V	
R meas:	4.21906626Ω	
Deviation:	0.0%	
Time:	28.0s	
Temperature compensation:		
T meas.:	38.0°C	
T ref.:	75.0°C	
R ref.:	4.7908811Ω	

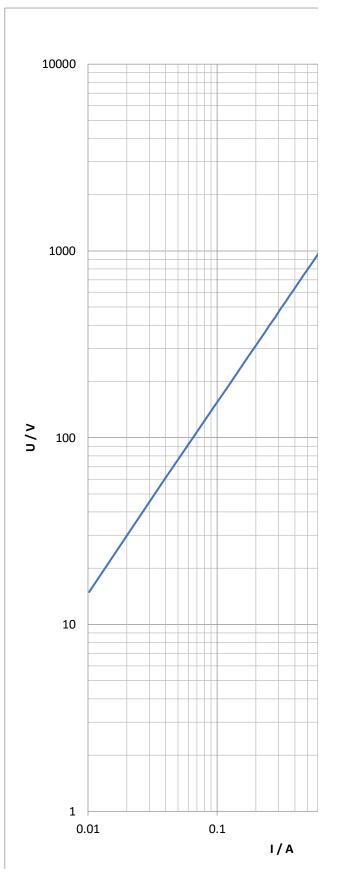
RWinding:	RWinding 3a-4	
Date/Time:	6/9/2023 6:47	
Overload:	YES	
Assessment:	n/a	
Range:	DC 6A	
I Test:	1.0A	
R min:	0.0002Ω	
R max:	10.0Ω	
Results:		
I DC:	1.00009A	
V DC:	1.360044V	
R meas:	1.35992261Ω	
Deviation:	0.04%	
Time:	31.0s	
Temperature compensation:		
T meas.:	35.0°C	
T ref.:	75.0°C	
R ref.:	1.56139263Ω	

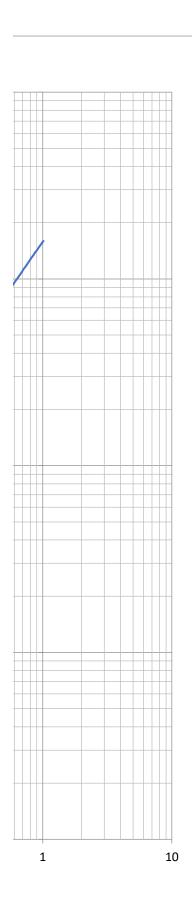
Date/Time: 6/9/2023 7:00 Overload: NO Assessment: n/a V max: 1600.0V I max: 1.38889A Frequency: 50.0Hz Noise suppression: NO Automatic: YES V I 1593.63V 1.07067A 1516.96V 1.013683A 1439.68V 0.958334A 1361.92V 0.904206A 1284.1V 0.850918A 1206.14V 0.798253A 1128.06V 0.745988A 1049.93V 0.694025A
Assessment: n/a V max: 1600.0V I max: 1.38889A Frequency: 50.0Hz Noise suppression: NO Automatic: YES V I 1593.63V 1.07067A 1516.96V 1.013683A 1439.68V 0.958334A 1361.92V 0.904206A 1284.1V 0.850918A 1206.14V 0.798253A 1128.06V 0.745988A
V max: 1600.0V I max: 1.38889A Frequency: 50.0Hz Noise suppression: NO Automatic: YES V I 1593.63V 1.07067A 1516.96V 1.013683A 1439.68V 0.958334A 1361.92V 0.904206A 1284.1V 0.850918A 1206.14V 0.798253A 1128.06V 0.745988A
I max: 1.38889A Frequency: 50.0Hz Noise suppression: NO Automatic: YES V I 1593.63V 1.07067A 1516.96V 1.013683A 1439.68V 0.958334A 1361.92V 0.904206A 1284.1V 0.850918A 1206.14V 0.798253A 1128.06V 0.745988A
Frequency: 50.0Hz Noise suppression: NO Automatic: YES V I 1593.63V 1.07067A 1516.96V 1.013683A 1439.68V 0.958334A 1361.92V 0.904206A 1284.1V 0.850918A 1206.14V 0.798253A 1128.06V 0.745988A
Noise suppression: NO Automatic: YES V I 1593.63V 1.07067A 1516.96V 1.013683A 1439.68V 0.958334A 1361.92V 0.904206A 1284.1V 0.850918A 1206.14V 0.798253A 1128.06V 0.745988A
V I 1593.63V 1.07067A 1516.96V 1.013683A 1439.68V 0.958334A 1361.92V 0.904206A 1284.1V 0.850918A 1206.14V 0.798253A 1128.06V 0.745988A
V I 1593.63V 1.07067A 1516.96V 1.013683A 1439.68V 0.958334A 1361.92V 0.904206A 1284.1V 0.850918A 1206.14V 0.798253A 1128.06V 0.745988A
1593.63V 1.07067A 1516.96V 1.013683A 1439.68V 0.958334A 1361.92V 0.904206A 1284.1V 0.850918A 1206.14V 0.798253A 1128.06V 0.745988A
1516.96V 1.013683A 1439.68V 0.958334A 1361.92V 0.904206A 1284.1V 0.850918A 1206.14V 0.798253A 1128.06V 0.745988A
1516.96V 1.013683A 1439.68V 0.958334A 1361.92V 0.904206A 1284.1V 0.850918A 1206.14V 0.798253A 1128.06V 0.745988A
1439.68V 0.958334A 1361.92V 0.904206A 1284.1V 0.850918A 1206.14V 0.798253A 1128.06V 0.745988A
1361.92V 0.904206A 1284.1V 0.850918A 1206.14V 0.798253A 1128.06V 0.745988A
1284.1V 0.850918A 1206.14V 0.798253A 1128.06V 0.745988A
1206.14V 0.798253A 1128.06V 0.745988A
1128.06V 0.745988A
1049 93V 0 694025 A
971.47V 0.642268A
893.23V 0.590612A
814.85V 0.539076A
736.43V 0.487597A
658.26V 0.436162A
579.76V 0.384684A
501.22V 0.333173A
422.47V 0.281617A
343.96V 0.229986A
265.45V 0.178213A
186.97V 0.126271A
108.49V 0.074038A
29.98V 0.02131A
Kneepoint calculation: IEC/BS
V knee: 0.0
I knee: 0.0



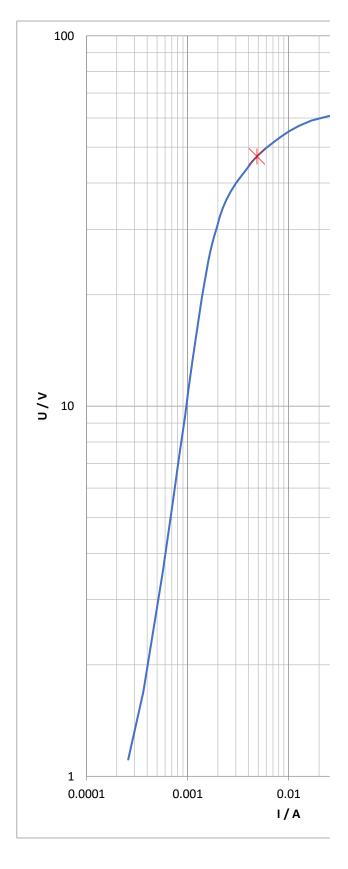


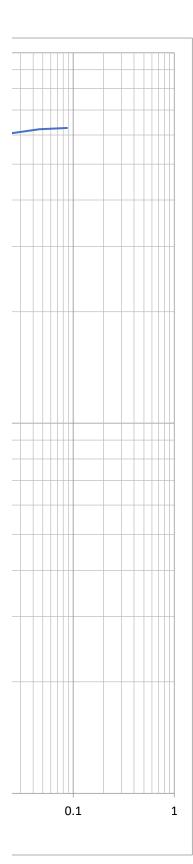
CTExcitation:	Excitation 3a-2
Date/Time:	6/9/2023 7:03
Overload:	NO
Assessment:	n/a
V max:	1600.0V
I max:	1.5625A
Frequency:	50.0Hz
Noise suppression:	NO
Automatic:	YES
V	I
,	1
1596.4V	1.011489A
1554.32V	0.983506A
1511.69V	0.955583A
1469.78V	0.928205A
1427.27V	0.920203A 0.900899A
1384.85V	0.873545A
1342.18V	0.846394A
1299.66V	0.819396A
1256.95V	0.792494A
1214.38V	0.765632A
1171.92V	0.738815A
1171.92 V 1129.23 V	0.738813A 0.712017A
1086.8V	0.685305A
1044.02V	0.658536A
1001.56V	0.631908A
958.7V	0.605166A
915.96V	0.578475A
873.16V	0.551769A
830.37V	0.525056A
787.77V	0.498396A
744.83V	0.471629A
702.32V	0.444952A
659.47V	0.418142A
616.91V	0.39142A
573.97V	0.364537A
531.27V	0.337784A
488.73V	0.310988A
445.8V	0.284128A
403.28V	0.257279A
360.18V	0.230311A
317.49V	0.203386A
274.48V	0.176251A
231.9V	0.14924A
188.93V	0.121955A
146.18V	0.094764A
103.66V	0.067336A
60.69V	0.039769A
14.94V	0.010215A
Kneepoint calculation:	IEC/BS
V knee:	0.0
I knee:	0.0



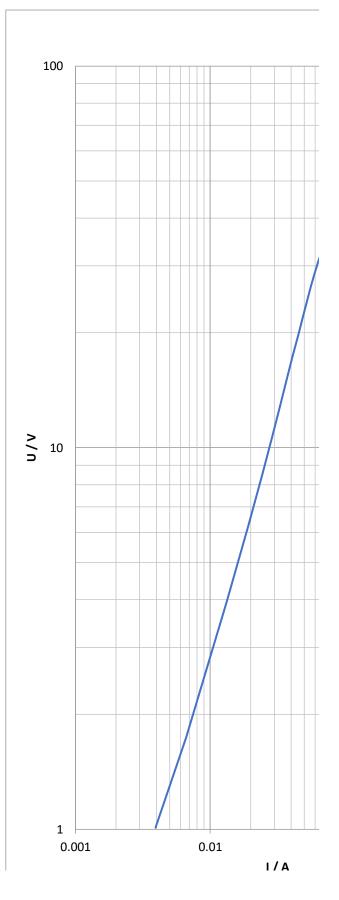


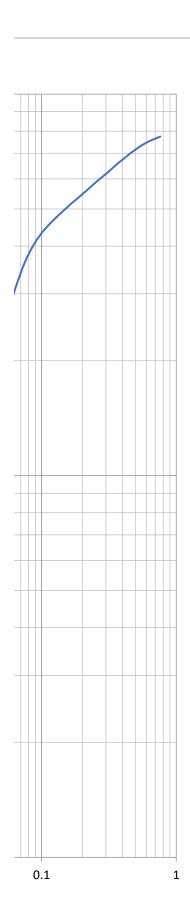
CTExcitation:	Excitation 3a-3
Date/Time:	6/9/2023 7:06
Overload:	NO
Assessment:	n/a
V max:	65.0V
I max:	2.0A
Frequency:	50.0Hz
Noise suppression:	NO
Automatic:	YES
V	I
•	1
62.67V	0.086781A
62.13V	0.045986A
60.73V	0.025051A
58.98V	0.016845A
57.13V	0.010786A
55.25V	0.010202A
53.25 V 53.36V	0.010202A 0.008358A
51.46V	0.006993A
49.55V	0.005877A
47.65V	0.00503A
45.72V	0.00438A
43.81V	0.003875A
41.9V	0.003424A
39.98V	0.003121A 0.003019A
38.06V	0.002707A
36.15V	0.002444A
34.24V	0.002235A
32.32V	0.002079A
30.4V	0.001954A
28.48V	0.001817A
26.56V	0.001707A
24.64V	0.001609A
22.73V	0.001529A
20.83V	0.001445A
18.91V	0.001363A
16.99V	0.001283A
15.07V	0.001199A
13.16V	0.001119A
11.24V	0.00103A
9.32V	0.000942A
7.41V	0.000836A
5.49V	0.000717A
3.57V	0.00057A
1.69V	0.000364A
1.11V	0.000259A
Kneepoint calculation:	IEC/BS
V knee:	47.22V
I knee:	0.00488A





CTExcitation:	Excitation 3a-4
Date/Time:	6/9/2023 7:08
Overload:	NO
Assessment:	n/a
V max:	85.0V
I max:	2.0A
Frequency:	50.0Hz
Noise suppression:	NO
Automatic:	YES
V	I
<u> </u>	
77.4V	0.762176A
76.42V	0.691845A
75.1V	0.618878A
73.45V	0.554817A
71.68V	0.500977A
69.84V	0.453331A
67.91V	0.409878A
65.93V	0.370432A
63.93V	0.334616A
61.91V	0.301659A
59.95V	0.271035A
57.89V	0.242104A
55.84V	0.21535A
53.79V	0.190482A
51.74V	0.167648A
49.71V	0.147273A
47.69V	0.129471A
45.7V	0.114589A
43.66V	0.102255A
41.58V	0.09236A
39.45V	0.084397A
37.31V	0.077932A
35.14V	0.072482A
32.97V	0.067747A
30.77V	0.063495A
28.56V	0.059595A
26.35V	0.055861A 0.052196A
24.11V 21.89V	0.032190A 0.048561A
19.66V	0.04898A
17.41V	0.041099A
15.18V	0.041099A 0.037221A
12.92V	0.0372211A 0.033151A
10.68V	0.02887A
8.44V	0.024251A
6.19V	0.019099A
3.95V	0.013301A
1.74V	0.006644A
1.01V	0.00393A
Kneepoint calculation:	IEC/BS
V knee:	0.0
I knee:	0.0





Comment:	3b Bushing	
Date/Time:	6/7/23 11:27	
Fieldname:	Fieldvalue:	
3b Bushing CT		
S/N D190900496-40/1		
1s1-1s2		
1000:1		
5VA		
Class: TPY		
2s1-2s2		
1000:1		
5VA		
Class: TPY		
3s1-3s2		
1000:1		
10VA		
Class: 0.2		

CTRatio:	Ratio 3b-1		
Date/Time:	6/9/2023 6:32		
Overload:	NO		
Assessment:	n/a		
Range:	AC 800A		
Nominal values:			
I prim.:	1000.0A		
I sec.:	1.0A		
Frequency:	50.0Hz		
I test:	200.0A		
Automatic:	YES		
I sec. Manual	NO		
I sec. measured with current clamp	NO		
Results:			
I prim.:	199.95A	I prim Phase:	0.0°
I sec.:	0.20002A	I sec Phase:	0.08°
Ratio:	1000.0A:	1.0004A	0.04%
Polarity:	OK		
measured with Burden:	NO		

CTRatio:	Ratio 3b-2		
Date/Time:	6/9/2023 6:33		
Overload:	NO		
Assessment:	n/a		
Range:	AC 800A		
Nominal values:			
I prim.:	1000.0A		
I sec.:	1.0A		
Frequency:	50.0Hz		
I test:	200.0A		
Automatic:	YES		
I sec. Manual	NO		
I sec. measured with current clamp	NO		
Results:			
I prim.:	199.96A	I prim Phase:	0.0°
I sec.:	0.1995A	I sec Phase:	0.11°
Ratio:	1000.0A	: 0.9977A	-0.23%
Polarity:	OK		
measured with Burden:	NO		

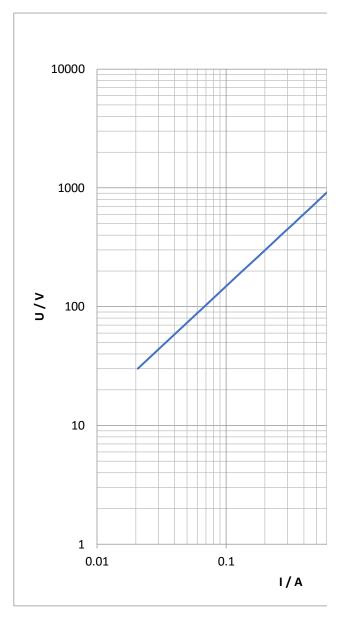
CTRatio:	Ratio 3b-3		
Date/Time:	6/9/2023 6:34		
Overload:	NO		
Assessment:	n/a		
Range:	AC 800A		
Nominal values:			
I prim.:	1000.0A		
I sec.:	1.0A		
Frequency:	50.0Hz		
I test:	200.0A		
Automatic:	YES		
I sec. Manual	NO		
I sec. measured with current clamp	NO		
Results:			
I prim.:	199.95A	I prim Phase:	0.0°
I sec.:	0.19964A	I sec Phase:	0.04°
Ratio:	1000.0A:	0.9984A	-0.16%
Polarity:	OK		
measured with Burden:	NO		

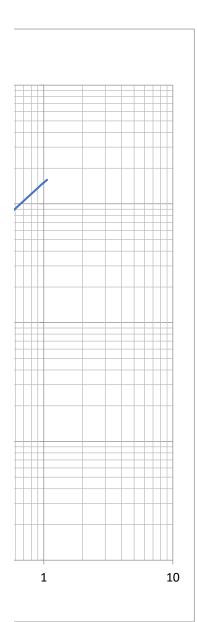
RWinding:	RWinding 3b-1	
Date/Time:	6/9/2023 6:50	
Overload:	YES	
Assessment:	n/a	
Range:	DC 6A	
I Test:	1.0A	
R min:	0.0002Ω	
R max:	10.0Ω	
Results:		
I DC:	1.00001A	
V DC:	2.882797V	
R meas:	2.88276617Ω	
Deviation:	0.06%	
Time:	29.0s	
Temperature compensation:		
T meas.:	38.0°C	
T ref.:	75.0°C	
R ref.:	3.27347074Ω	

RWinding:	RWinding 3b-2	
Date/Time:	6/9/2023 6:51	
Overload:	YES	
Assessment:	n/a	
Range:	DC 6A	
I Test:	1.0A	
R min:	0.0002Ω	
R max:	10.0Ω	
Results:		
I DC:	0.99997A	
V DC:	3.024795V	
R meas:	3.02488575Ω	
Deviation:	0.04%	
Time:	33.0s	
Temperature compensation:		
T meas.:	38.0°C	
T ref.:	75.0°C	
R ref.:	3.43485195Ω	

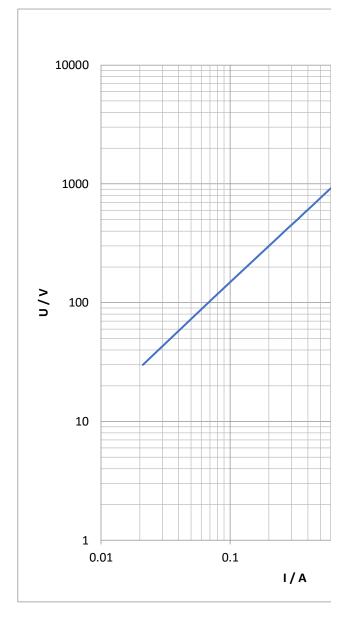
RWinding:	RWinding 3b-3	
Date/Time:	6/9/2023 6:54	
Overload:	NO	
Assessment:	n/a	
Range:	DC 6A	
I Test:	1.0A	
R min:	0.0002Ω	
R max:	10.0Ω	
Results:		
I DC:	1.04053A	
V DC:	4.489514V	
R meas:	4.31464254Ω	
Deviation:	0.02%	
Time:	28.0s	
Temperature compensation:		
T meas.:	38.0°C	
T ref.:	75.0°C	
R ref.:	4.89941094Ω	

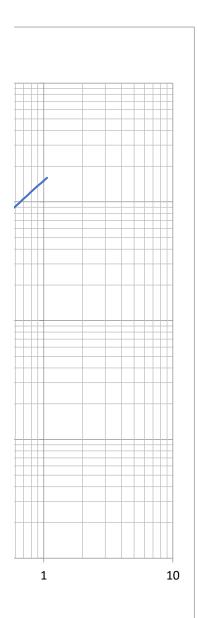
CTExcitation:	Excitation 3b-1
Date/Time:	6/9/2023 7:13
Overload:	NO
Assessment:	n/a
V max:	1600.0V
I max:	1.38889A
Frequency:	50.0Hz
Noise suppression:	NO
Automatic:	YES
V	I
1595.89V	1.060283A
1518.55V	1.005842A
1441.23V	0.952807A
1363.42V	0.90056A
1285.28V	0.848482A
1206.9V	0.796728A
1128.68V	0.7452A
1050.4V	0.693754A
972.15V	0.64236A
893.7V	0.59097A
815.13V	0.539628A
736.78V	0.488255A
658.37V	0.436808A
579.86V	0.385309A
501.34V	0.333733A
422.53V	0.282017A
344.09V	0.23022A
265.56V	0.178236A
187.07V	0.126055A
108.6V	0.073548A
30.08V	0.020717A
Kneepoint calculation:	IEC/BS
V knee:	0.0
I knee:	0.0
I KHEE.	0.0





CTExcitation:	Excitation 3b-2			
Date/Time:	6/9/2023 7:20			
Overload:	NO			
Assessment:	n/a			
V max:	1600.0V			
I max:	1.38735A			
Frequency:	50.0Hz			
Noise suppression:	NO			
Automatic:	YES			
V	I			
1594.72V	1.060038A			
1517.87V	1.004581A			
1440.36V	0.950485A			
1362.66V	0.897459A			
1284.58V	0.845129A			
1206.62V	0.793252A			
1128.45V	0.741651A			
1050.18V	0.690261A			
971.87V	0.638975A			
893.28V	0.587742A			
814.9V	0.536521A			
736.5V	0.485341A			
658.15V	0.434166A			
579.73V	0.382943A			
501.15V	0.331675A			
422.46V	0.280324A			
343.9V	0.228909A			
265.36V	0.17735A			
186.94V	0.125596A			
108.46V	0.073557A			
29.97V	0.02111A			
Kneepoint calculation:	IEC/BS			
V knee:	0.0			
I knee:	0.0			





CTExcitation:	Excitation 3b-3		
Date/Time:	6/9/2023 7:26		
Overload:	NO		
Assessment:	n/a		
V max:	65.0V		
I max:	2.0A		
Frequency:	50.0Hz		
Noise suppression:	NO		
Automatic:	YES		
V	I		
Y	1		
60.02V	0.253926A		
59.68V	0.198263A		
59.09V	0.136739A		
58.28V	0.091795A		
57.17V	0.063263A		
55.78V	0.045588A		
54.25V	0.03464A		
52.64V	0.027303A		
51.02V	0.022019A		
49.34V	0.01797A		
47.66V	0.01797A 0.014764A		
45.97V	0.014704A 0.012186A		
44.28V	0.012180A 0.010142A		
42.59V	0.010142A 0.008497A		
42.39 V 40.9 V	0.006437A 0.007178A		
39.19V	0.007178A 0.006137A		
37.48V	0.005263A		
35.77V	0.003203A 0.004555A		
34.06V	0.004051A		
32.35V	0.00362A		
30.64V	0.00302A 0.003244A		
28.94V	0.003244A 0.002927A		
27.22V	0.002927A 0.002635A		
25.5V	0.002446A		
23.8V	0.002245A		
22.08V	0.002223A 0.002051A		
20.37V	0.002031A 0.001897A		
18.67V	0.001077A		
16.95V	0.0017711 0.001646A		
15.25V	0.001549A		
13.54V	0.001929A 0.001416A		
11.82V	0.001307A		
10.12V	0.001307A 0.001192A		
8.4V	0.0011721A 0.001071A		
6.68V	0.000946A		
4.97V	0.000814A		
3.27V	0.000665A		
1.53V	0.00047A		
1.04V	0.000391A		
Kneepoint calculation:	IEC/BS		
V knee:	40.31V		
I knee:	0.006805A		
	0.0000JA		

