

TECHNICAL QUESTIONNAIRE 9.101/5

Transformer Test System



quotation number: _____
(will be filled in by HIGHVOLT)

PERSONAL DATA

name: * _____
 company / institution: * _____
 phone: _____
 e-mail: * _____
 fax: _____

* mandatory fields

APPLICATION

test shop research institute mobile on-site

TEST OF

distribution transformers up to MVA
 power transformers up to MVA
 special transformers up to MVA
 application: _____

PLANNED TESTS

routine tests type tests special tests

	should be part of offer		remarks
	YES	NO	
routine tests			
measurement of winding resistance			
measurement of transformer ratio			
measurement of no load current and no load losses			
measurement of short circuit impedance and load losses			
applied voltage test			
induced voltage test (ACSD)			
induced voltage test (ACLD) with partial discharge measurement			
tap-changer test under load			
type tests			
temperature-rise test			
lightning impulse test (LI)			
switching impulse test (SI)			
special tests			
noise level measurement			
zero-sequence test			
other:			

Please turn over!

GENERAL DATA OF THE TEST OBJECTS

			single-phase object		three-phase object	
			minimum	maximum	minimum	maximum
AC test voltage range	kV					
rated power range	MVA					
HV Voltage (Um) range	kV					
LV Voltage (Um) range	kV					
TV Voltage (Um)	range	kV				
	other TV Voltages					

DATA OF THE LARGEST TEST OBJECTS

			single-phase "largest" transformer		three-phase "largest" transformer	
			minimum	maximum	minimum	maximum
AC test voltage	kV					
rated power	MVA					
weight of iron core	kg					
			minimum	maximum	minimum	maximum
HV Voltage (Um)	kV					
LV Voltage (Um)	kV					
TV Voltage (Um)	kV					
frequency	Hz					
short-circuit impedance	%		(HV)	(LV)	(HV)	(LV)
load losses	kW					
temperature-rise test	kW					
OLTC test according to IEC 60076-1 item 10.8	u _k variation over 4 steps (± 2)	%				
	power variation over 4 steps (± 2)	kVA				
no-load test	test voltage	kV				
	current	A				
	losses	kW				
	3rd harmonics	A				
	5rd harmonics	A				
	7rd harmonics	A				
winding capacitance	HV	nF				
	LV					
	TV					
	HV LV					
through put: transformers per week						

Please provide a selection of test reports and data sheets of planned test objects

CONTROL

basic control computer-aided control and measuring

POWER MEASURING SYSTEM

yes no

HVC (CAPACITIVE COMPENSATION) IS REQUIRED

yes no

manual disconnectors automatic disconnectors
 capacitors with intern fuse capacitors without intern fuse
 bank with unbalance protection bank without unbalance protection

REQUIREMENTS CONCERNING THE PD BEHAVIOR OF THE AC TEST SYSTEM

PD measuring system is required

yes no PD level < pC up to kV
 PD level < pC up to kV

shielded test field exists yes no

shielded test field is required yes no

SUPPLY CONDITIONS

		low-voltage mains	medium-voltage mains
mains voltage	 / V kV
frequency	Hz	
available power:			
▪ single-phase	kVA
▪ three-phase	kVA
star point earthed		yes <input type="checkbox"/> no <input type="checkbox"/>	yes <input type="checkbox"/> no <input type="checkbox"/>

TEST FIELD

layout (L x W x H), if application for test shop* ¹⁾	test field	m x m x m	
	HV capacitor-bank	m x m x m	
ambient conditions	altitude above sea level	m	
	min. ambient temperature	°C	
	max. ambient temperature	°C	
	relative humidity	%	

*¹⁾ a drawing about the layout of the test field is favored

SPECIAL MAINS CONDITIONS / RESTRICTIONS BY BUILDINGS:

ERECTION OF THE TRANSFORMER TEST SYSTEM ON-SITE

supervision required yes no

For further information please contact:

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