



## VDE-AR-N 4105:2011 F.4

### F.4 Requirements for the test reports for the NS protection

Extract from test report for unit certificate  
"Determination of electrical properties"

No. 3AXD10000050458

NS Protection as integrated NS protection

Type of NS protection:	Other manufacturer's data
Software version: CSSIA006_0061; SSMA0400	Assigned to PGU type:
Manufacturer: ABB Oy Hiomotie 13 FI-00380 Helsinki Finland	Integrated interface switch
	Type 1: Relay
	Type 2: Relay

Type of system: PVS300-TL-XX00W-2	Manufacturer's data
System manufacturer ABB Oy Hiomotie 13 FI-0030 Helsinki Finland	Type of system
	Active power (nominal) 3,3...8,0 kW
	Rated voltage 230 V

Measuring period: from 2011-10-31 to 2011-12-16

Protection function	Setting value	Tripping value	Tripping time NS protection
Voltage drop protection $U <$	0.8*Un	182.2 V	184 ms
		182.2 V	182 ms
		182.2 V	184 ms
Rise-in-voltage protection $>>$	1.15*Un	263.4 V	184 ms
		263.4 V	184 ms
		263.4 V	186 ms
Frequency decrease protection $f <$	47.5 Hz	47.47 Hz	156 ms
		47.48 Hz	164 ms
		47.48 Hz	160 ms
Frequency increase protection $f >$	51.5 Hz	51.50 Hz	172 ms
		51.50 Hz	168 ms
		51.50 Hz	166 ms