Auszug aus dem Prüfbericht
„Vermessung einer GE Generator Schutzeinheit des Typs P346811H1M0380M entsprechend FGW TR 3 Rev. 24"
Extract from the test report "Measurement of the GE generator protection unit type P346811H1M0380M according to to FGW TR 3 Rev. 24"
Teil 3: Schutzsystem / Part 3: Protection system
Auszug Nr. / Extract No.: **GLGH-4280 16 13712 294-S-0001-C** **Seite 1/5**
„Technische Richtlinie für Erzeugungseinheiten Teil 3"
Revision 24 / Version 24 vom / dated 2016-03-01 Page 1/5

Anlagentyp / PGU type:	GE P346811H1M0380M	**Herstellerangaben /** Manufacturer´s specifications:	
Hersteller / Manufacturer:	GE Jenbacher GmbH & Co. OG Achenseestr. 1-3 6200 Jenbach Austria	**Anlagenart /** Generic type of installation:	Generator protection unit
		Netznennfrequenz / Nominal grid frequency, f_g:	50 Hz
		Nennleistung / Rated power, P_n:	-
		Scheinleistung / Rated apparent power, S_n:	-
Prüfbericht / Test Report:	GLGH-4280 16 13712 294-A-0001-B	**Nennstrom /** Rated current, I_n:	-
Messzeitraum / Period of measurement:	2016-03-02	**Nennspannung (Aussenleiter) /** Nominal phase-to-phase voltage, U_n:	100 V

Spannungssteigerungsschutz / Overvoltage protection **U>**

Setting	Measured phases	3-phase	U_1	U_2	U_3
Min. threshold/max. time	Set value in p.u. of U_n	1.000	1.000	1.000	1.000
	Trip value in p.u. of U_n	1.005	1.005	1.005	1.005
	Deviation in p.u. of U_n	0.005	0.005	0.005	0.005
	Time set value in ms	100	100	100	100
	Turn off time in ms	136.2	129.3	128.0	136.4
	Deviation in ms	36.2	29.3	28.0	36.4
Max. threshold/min. time	Set value in p.u. of U_n	1.300	1.300	1.300	1.300
	Trip value in p.u. of U_n	1.305	1.305	1.305	1.305
	Deviation in p.u. of U_n	0.005	0.005	0.005	0.005
	Time set value in ms	0	0	0	0
	Turn off time in ms	27.9	31.5	33.6	38.5
	Deviation in ms	27.9	31.5	33.6	38.5

Spannungssteigerungsschutz / Overvoltage protection **U>>**

Setting	Measured phases	3-phase	U_1	U_2	U_3
Min. threshold/max. time	Set value in p.u. of U_n	1.000	1.000	1.000	1.000
	Trip value in p.u. of U_n	1.005	1.005	1.005	1.005
	Deviation in p.u. of U_n	0.005	0.005	0.005	0.005
	Time set value in ms	60000	60000	60000	60000
	Turn off time in ms	60040	60040	60040	60050
	Deviation in ms	40	40	40	50
Max. threshold/min. time	Set value in p.u. of U_n	1.300	1.300	1.300	1.300
	Trip value in p.u. of U_n	1.305	1.305	1.305	1.305
	Deviation in p.u. of U_n	0.005	0.005	0.005	0.005
	Time set value in ms	0	0	0	0
	Turn off time in ms	32.9	35.9	29.5	32.6
	Deviation in ms	32.9	35.9	29.5	32.6

Spannungsrückgangsschutz / Undervoltage protection **U<**

Setting	Measured phases	3-phase	U_1	U_2	U_3
Min. threshold/min. time	Set value in p.u. of U_n	0.100	0.100	0.100	0.100
	Trip value in p.u. of U_n	0.100	0.100	0.100	0.100
	Deviation in p.u. of U_n	0.00	0.00	0.00	0.00
	Time set value in ms	0	0	0	0
	Turn off time in ms	27.8	34.2	35.4	35.4
	Deviation in ms	27.8	34.2	35.4	35.4
Max. threshold/max. time	Set value in p.u. of U_n	1.000	1.000	1.000	1.000
	Trip value in p.u. of U_n	1.000	1.000	1.000	1.000
	Deviation in p.u. of U_n	0.00	0.00	0.00	0.00
	Time set value in ms	2400	2400	2400	2400
	Turn off time in ms	2428	2428	2426	2434
	Deviation in ms	28	28	26	34

Spannungsrückgangsschutz / Undervoltage protection **U<<**

Setting	Measured phases	3-phase	U_1	U_2	U_3
Min. threshold/min. time	Set value in p.u. of U_n	0.100	0.100	0.100	0.100
	Trip value in p.u. of U_n	0.100	0.100	0.100	0.100
	Deviation in p.u. of U_n	0.000	0.000	0.000	0.000
	Time set value in ms	0	0	0	0
	Turn off time in ms	35.3	28.2	32.8	31.9
	Deviation in ms	35.3	28.2	32.8	31.9
Max. threshold/max. time	Set value in p.u. of U_n	1.000	1.000	1.000	1.000
	Trip value in p.u. of U_n	1.000	1.000	1.000	1.000
	Deviation in p.u. of U_n	0.00	0.00	0.00	0.00
	Time set value in ms	800	800	800	800
	Turn off time in ms	828.9	829.0	829.6	829.2
	Deviation in ms	28.9	29.0	29.6	29.2

Frequenzrückgangsschutz / Underfrequency protection **f<**

Setting	Measured phases	3-phase
Min. threshold/min. time	**Set value** in Hz	47.5
	Trip value in Hz	47.5
	Deviation in Hz	0.0
	Time set value in ms	0
	Turn off time in ms	32.8
	Deviation in ms	32.8
Min. threshold/max. time	**Set value** in Hz	47.5
	Trip value in Hz	47.5
	Deviation in Hz	0.0
	Time set value in ms	100
	Turn off time in ms	145.3
	Deviation in ms	45.3
Max. threshold/min. time	**Set value** in Hz	50.0
	Trip value in Hz	50.0
	Deviation in Hz	0.0
	Time set value in ms	0
	Turn off time in ms	33.5
	Deviation in ms	33.5
Max. threshold/max. time	**Set value** in Hz	50.0
	Trip value in Hz	50.0
	Deviation in Hz	0.0
	Time set value in ms	100
	Turn off time in ms	137.7
	Deviation in ms	37.7

Frequenzsteigerungsschutz / Overfrequency protection **f>**

Setting	Measured phases	3-phase
Min. threshold/min. time	**Set value** in Hz	50.0
	Trip value in Hz	50.0
	Deviation in Hz	0.0
	Time set value in ms	0
	Turn off time in ms	38.8
	Deviation in ms	38.8
Min. threshold/max. time	**Set value** in Hz	50.0
	Trip value in Hz	50.0
	Deviation in Hz	0.0
	Time set value in ms	100
	Turn off time in ms	148.5
	Deviation in ms	48.5
Max. threshold/min. time	**Set value** in Hz	52.0
	Trip value in Hz	52.0
	Deviation in Hz	0.0
	Time set value in ms	0
	Turn off time in ms	51.2
	Deviation in ms	51.2
Max. threshold/max. time	**Set value** in Hz	52.0
	Trip value in Hz	52.0
	Deviation in Hz	0.0
	Time set value in ms	100
	Turn off time in ms	159.5
	Deviation in ms	59.5

Rückfallverhältnis / Disengaging ratio

Measured phases	Requirement	Result
Spannungssteigerungsschutz / Voltage increase protection	>0.98	>0.98
Spannungsrückgangsschutz / Voltage decrease protection	<1.02	<1.02

Zuschaltbedingungen BDEW / Cut-in conditions

Unterspannung / Under voltage		**Unterfrequenz /** Under frequency		**Überfrequenz /** Over frequency	
Steps in % of U_n	Ready to connect	Steps in Hz	Ready to connect	Steps in Hz	Ready to connect
90	No	47.0	No	50.15	No
91	No	47.1	No	50.13	No
92	No	47.2	No	50.11	No
93	No	47.3	No	50.09	No
94	No	47.4	No	50.07	No
95	Yes	47.5	Yes	50.05	Yes

Zuschaltbedingungen TAB-HS / Cut-in conditions

Unterfrequenz / Under frequency	
Steps in Hz	Ready to connect
48.0	No
48.1	No
48.2	No
48.3	No
48.4	No
48.5	Yes

Dieser Auszug ist eine Zusammenfassung der Ergebnisse aus dem Prüfbericht GLGH-4280 16 13712 294-A-0001-B.
This extract summaries the results of test report GLGH-4280 16 13712 294-A-0001-B.

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