Short-Circuit Summary Report

3-Phase Fault Currents

Bus		Device		Device Capacity (kA)				Short-Circuit Current (kA)					
				Making									
ID	kV	ID	Type	Peak	Ib sym	Ib asym	Idc	I"k	ip	Ib sym	Ib asym	Idc	Ik
FPSBB1	11.000	FPSBB1	SwtchGear	80.000				32.512	70.392				19.005
	11.000	FPSCB101	CB	80.000	31.500	33.618	11.743	32.512	70.392	28.411	28.585	3.152	
	11.000	FPSCB102	CB	80.000	31.500	33.618	11.743	32.512	70.392	28.411	28.585	3.152	
	11.000	FPSCB103	CB	80.000	31.500	33.618	11.743	32.512	70.392	28.411	28.585	3.152	
	11.000	FPSCB104	CB	80.000	31.500	33.618	11.743	32.512	70.392	28.411	28.585	3.152	
FPSBB2	11.000	FPSBB2	SwtchGear	80.000				32.452	70.017				19.005
	11.000	FPSCB108	CB	80.000	31.500	33.618	11.743	32.452	70.017	28.395	28.556	3.028	
	11.000	FPSCB107	CB	80.000	31.500	33.618	11.743	32.452	70.017	28.395	28.556	3.028	
	11.000	FPSCB106	CB	80.000	31.500	33.618	11.743	32.452	70.017	28.395	28.556	3.028	
	11.000	FPSCB110	CB	80.000	31.500	33.618	11.743	32.452	70.017	28.395	28.556	3.028	
HT01BB	11.000	HT01BB	SwtchGear	63.000				30.317	59.358				18.287
	11.000	HT01CB28	CB	63.000	25.000	26.681	9.320	30.317	59.358	27.000*	27.003*	0.396	
	11.000	HT01CB27	CB	63.000	25.000	26.681	9.320	30.317	59.358	27.000*	27.003*	0.396	
	11.000	HT01CB1	CB	63.000	25.000	26.681	9.320	30.317	59.358	27.000*	27.003*	0.396	
	11.000	HT01CB2	CB	63.000	25.000	26.681	9.320	30.317	59.358	27.000*	27.003*	0.396	
	11.000	HT01CB3	CB	63.000	25.000	26.681	9.320	30.317	59.358	27.000*	27.003*	0.396	
	11.000	HT01CB4	CB	63.000	25.000	26.681	9.320	30.317	59.358	27.000*	27.003*	0.396	
	11.000	HT01CB5	CB	63.000	25.000	26.681	9.320	30.317	59.358	27.000*	27.003*	0.396	
	11.000	HT01CB6	CB	63.000	25.000	26.681	9.320	30.317	59.358	27.000*	27.003*	0.396	
	11.000	HT01CB7	CB	63.000	25.000	26.681	9.320	30.317	59.358	27.000*	27.003*	0.396	
	11.000	HT01CB8	CB	63.000	25.000	26.681	9.320	30.317	59.358	27.000*	27.003*	0.396	
	11.000	HT01CB9	CB	63.000	25.000	26.681	9.320	30.317	59.358	27.000*	27.003*	0.396	
	11.000	HT01CB10	CB	63.000	25.000	26.681	9.320	30.317	59.358	27.000*	27.003*	0.396	
	11.000	HT01CB12	CB	63.000	25.000	26.681	9.320	30.317	59.358	27.000*	27.003*	0.396	
HT02BB	11.000	HT02BB	SwtchGear	63.000				30.390	59.771				18.287
	11.000	HT02CB14	CB	63.000	25.000	26.681	9.320	30.390	59.771	27.001*	27.004*	0.432	
	11.000	HT02CB16	CB	63.000	25.000	26.681	9.320	30.390	59.771	27.001*	27.004*	0.432	
	11.000	HT02CB17	CB	63.000	25.000	26.681	9.320	30.390	59.771	27.001*	27.004*	0.432	
	11.000	HT02CB18	CB	63.000	25.000	26.681	9.320	30.390	59.771	27.001*	27.004*	0.432	
	11.000	HT02CB19	CB	63.000	25.000	26.681	9.320	30.390	59.771	27.001*	27.004*	0.432	
	11.000	HT02CB20	CB	63.000	25.000	26.681	9.320	30.390	59.771	27.001*	27.004*	0.432	
	11.000	HT02CB21	CB	63.000	25.000	26.681	9.320	30.390	59.771	27.001*	27.004*	0.432	
	11.000	HT02CB22	CB	63.000	25.000	26.681	9.320	30.390	59.771	27.001*	27.004*	0.432	
	11.000	HT02CB23	CB	63.000	25.000	26.681	9.320	30.390	59.771	27.001*	27.004*	0.432	
	11.000	HT02CB24	CB	63.000	25.000	26.681	9.320	30.390	59.771	27.001*	27.004*	0.432	

3-Phase Fault Currents

Bus		Device		Device Capacity (kA)				Short-Circuit Current (kA)					
				Making									
ID	kV	ID	Type	Peak	Ib sym	Ib asym	Idc	I"k	ip	Ib sym	Ib asym	Idc	Ik
HT02BB	11.000	HT02CB25	CB	63.000	25.000	26.681	9.320	30.390	59.771	27.001*	27.004*	0.432	
	11.000	HT02CB26	CB	63.000	25.000	26.681	9.320	30.390	59.771	27.001*	27.004*	0.432	
HT03BB1	11.000	HT03BB1	SwtchGear	80.000				30.062	59.273				18.287
	11.000	HT03CBL1	CB	80.000	31.500	33.618	11.743	30.062	59.273	26.843	26.852	0.689	
	11.000	HT03CB1	CB	80.000	31.500	33.618	11.743	30.062	59.273	26.843	26.852	0.689	
	11.000	HT03CB3	CB	80.000	31.500	33.618	11.743	30.062	59.273	26.843	26.852	0.689	
HT03BB2	11.000	HT03BB2	SwtchGear	80.000				30.062	59.273				18.287
	11.000	HT03CB6	CB	80.000	31.500	33.618	11.743	30.062	59.273	26.843	26.852	0.689	
	11.000	HT03CB7	CB	80.000	31.500	33.618	11.743	30.062	59.273	26.843	26.852	0.689	
	11.000	HT03CB8	CB	80.000	31.500	33.618	11.743	30.062	59.273	26.843	26.852	0.689	
MD12345BB	11.000	MD12345BB	SwtchGear	63.000				34.422	82.848*				19.538
	11.000	MD5CB501	CB	80.000	31.500	35.508	16.388	34.422	82.848*	29.587	33.842	16.429*	
	11.000	MD4CB403	CB	80.000	31.500	35.508	16.388	34.422	82.848*	29.587	33.842	16.429*	
	11.000	MD2CB214	CB	63.000	25.000	26.681	9.320	34.422	82.848*	29.587*	33.842*	16.429*	
	11.000	MD2CB212	CB	63.000	25.000	26.681	9.320	34.422	82.848*	29.587*	33.842*	16.429*	
	11.000	MD3CB310	CB	80.000	31.500	33.618	11.743	34.422	82.848*	29.587	33.842*	16.429*	
	11.000	MD3CB312	CB	80.000	31.500	33.618	11.743	34.422	82.848*	29.587	33.842*	16.429*	
	11.000	MD2CB213	CB	63.000	25.000	26.681	9.320	34.422	82.848*	29.587*	33.842*	16.429*	
	11.000	MD3CB306	CB	80.000	31.500	33.618	11.743	34.422	82.848*	29.587	33.842*	16.429*	
	11.000	MD3CB307	CB	80.000	31.500	33.618	11.743	34.422	82.848*	29.587	33.842*	16.429*	
	11.000	MD2CB206	CB	63.000	25.000	26.681	9.320	34.422	82.848*	29.587*	33.842*	16.429*	
	11.000	MD1CB107	CB	63.000	25.000	26.681	9.320	34.422	82.848*	29.587*	33.842*	16.429*	
	11.000	MD2CB210	CB	63.000	25.000	26.681	9.320	34.422	82.848*	29.587*	33.842*	16.429*	
	11.000	MD2CB211	CB	63.000	25.000	26.681	9.320	34.422	82.848*	29.587*	33.842*	16.429*	
	11.000	MD4CB404	CB	80.000	31.500	35.508	16.388	34.422	82.848*	29.587	33.842	16.429*	
	11.000	MD4CB405	CB	80.000	31.500	35.508	16.388	34.422	82.848*	29.587	33.842	16.429*	
	11.000	MD4CB4	CB	80.000	31.500	35.508	16.388	34.422	82.848*	29.587	33.842	16.429*	
SSCOMPBB	11.000	SSCOMPBB	SwtchGear	63.000				7.676	16.382				5.428
VS94LBB1	11.000	VS94LBB1	SwtchGear	63.000				16.352	28.388				11.773
	11.000	VS94LCB202	CB	63.000	25.000	26.681	9.320	16.352	28.388	15.197	15.204	0.457	
	11.000	VS94LCB203	CB	63.000	25.000	26.681	9.320	16.352	28.388	15.197	15.204	0.457	
	11.000	VS94LCB206	CB	63.000	25.000	26.681	9.320	16.352	28.388	15.197	15.204	0.457	
	11.000	VS94LCB207	CB	63.000	25.000	26.681	9.320	16.352	28.388	15.197	15.204	0.457	
	11.000	VS94LCB208	CB	63.000	25.000	26.681	9.320	16.352	28.388	15.197	15.204	0.457	
	11.000	VS94LCB209	CB	63.000	25.000	26.681	9.320	16.352	28.388	15.197	15.204	0.457	
	11.000	VS94LCB210	CB	63.000	25.000	26.681	9.320	16.352	28.388	15.197	15.204	0.457	
VS94LBB2	11.000	VS94LBB2	SwtchGear	63.000				16.352	28.388				11.773

3-Phase Fault Currents

Bus		Device		Device Capacity (kA)				Short-Circuit Current (kA)					
				Making									
ID	kV	ID	Type	Peak	Ib sym	Ib asym	Idc	I"k	ip	Ib sym	Ib asym	Idc	Ik
VS94LBB2	11.000	VS94LCB210	CB	63.000	25.000	26.681	9.320	16.352	28.388	15.197	15.204	0.457	
	11.000	VS94LCB211	CB	63.000	25.000	26.681	9.320	16.352	28.388	15.197	15.204	0.457	
	11.000	VS94LCB212	CB	63.000	25.000	26.681	9.320	16.352	28.388	15.197	15.204	0.457	
	11.000	VS94LCB216	CB	63.000	25.000	26.681	9.320	16.352	28.388	15.197	15.204	0.457	
	11.000	VS94LCB217	CB	63.000	25.000	26.681	9.320	16.352	28.388	15.197	15.204	0.457	
	11.000	VS94LCB215	CB	63.000	25.000	26.681	9.320	16.352	28.388	15.197	15.204	0.457	
VS94LBB3	11.000	VS94LBB3	SwtchGear	63.000				16.352	28.388				11.773
	11.000	VS94LCB217	CB	63.000	25.000	26.681	9.320	16.352	28.388	15.197	15.204	0.457	
	11.000	VS94LCB218	CB	63.000	25.000	26.681	9.320	16.352	28.388	15.197	15.204	0.457	
	11.000	VS94LCB219	CB	63.000	25.000	26.681	9.320	16.352	28.388	15.197	15.204	0.457	
	11.000	VS94LCB220	CB	63.000	25.000	26.681	9.320	16.352	28.388	15.197	15.204	0.457	
	11.000	VS94LCB221	CB	63.000	25.000	26.681	9.320	16.352	28.388	15.197	15.204	0.457	
VSSBB1	11.000	VSSBB1	SwtchGear	63.000				30.154	59.759				18.287
	11.000	VSSCB103	CB	63.000	25.000	26.681	9.320	30.154	59.759	26.856*	26.868*	0.781	
	11.000	VSSCB104	CB	63.000	25.000	26.681	9.320	30.154	59.759	26.856*	26.868*	0.781	
	11.000	VSSCB102	CB	63.000	25.000	26.681	9.320	30.154	59.759	26.856*	26.868*	0.781	
VSSBB2	11.000	VSSBB2	SwtchGear	63.000				30.154	59.759				18.287
	11.000	VSSCB107	CB	63.000	25.000	26.681	9.320	30.154	59.759	26.856*	26.868*	0.781	
	11.000	VSSCB106	CB	63.000	25.000	26.681	9.320	30.154	59.759	26.856*	26.868*	0.781	
	11.000	VSSCB108	CB	63.000	25.000	26.681	9.320	30.154	59.759	26.856*	26.868*	0.781	

ip is calculated using method C
Ib does not include decay of non-terminal faulted induction motors
Ik is the maximum steady state fault current
Idc is based on X/R from Method C and Ib as specified above

LV CB duty determined based on service rating.
Total through current is used for device duty.

* Indicates a device with calculated duty exceeding the device capability.

# Indicates a device with calculated duty exceeding the device marginal limit. (95 % times device capability)

Short-Circuit Summary Report

		Device Capacity			3-Phase Short-Circuit Duty Results			
Bus ID	Device ID	Ithr (kA)	Tkr (sec.)	Rated Thermal Energy (MJ)	Ith (kA)	Tkr (sec.)	Thermal Energy (MJ)	
HT01BB	HT01CB28	25.000	3.00	1875.00	23.012	3.00	1588.65	
HT01BB	HT01CB27	25.000	3.00	1875.00	23.012	3.00	1588.65	
HT01BB	HT01CB1	25.000	3.00	1875.00	23.012	3.00	1588.65	
HT01BB	HT01CB2	25.000	3.00	1875.00	23.012	3.00	1588.65	
HT01BB	HT01CB3	25.000	3.00	1875.00	23.012	3.00	1588.65	
HT01BB	HT01CB4	25.000	3.00	1875.00	23.012	3.00	1588.65	
HT01BB	HT01CB5	25.000	3.00	1875.00	23.012	3.00	1588.65	
HT01BB	HT01CB6	25.000	3.00	1875.00	23.012	3.00	1588.65	
HT01BB	HT01CB7	25.000	3.00	1875.00	23.012	3.00	1588.65	
HT01BB	HT01CB8	25.000	3.00	1875.00	23.012	3.00	1588.65	
HT01BB	HT01CB9	25.000	3.00	1875.00	23.012	3.00	1588.65	
HT01BB	HT01CB10	25.000	3.00	1875.00	23.012	3.00	1588.65	
HT01BB	HT01CB12	25.000	3.00	1875.00	23.012	3.00	1588.65	
HT02BB	HT02CB14	25.000	3.00	1875.00	23.038	3.00	1592.24	
HT02BB	HT02CB16	25.000	3.00	1875.00	23.038	3.00	1592.24	
HT02BB	HT02CB17	25.000	3.00	1875.00	23.038	3.00	1592.24	
HT02BB	HT02CB18	25.000	3.00	1875.00	23.038	3.00	1592.24	
HT02BB	HT02CB19	25.000	3.00	1875.00	23.038	3.00	1592.24	
HT02BB	HT02CB20	25.000	3.00	1875.00	23.038	3.00	1592.24	
HT02BB	HT02CB21	25.000	3.00	1875.00	23.038	3.00	1592.24	
HT02BB	HT02CB22	25.000	3.00	1875.00	23.038	3.00	1592.24	
HT02BB	HT02CB23	25.000	3.00	1875.00	23.038	3.00	1592.24	
HT02BB	HT02CB24	25.000	3.00	1875.00	23.038	3.00	1592.24	
HT02BB	HT02CB25	25.000	3.00	1875.00	23.038	3.00	1592.24	
HT02BB	HT02CB26	25.000	3.00	1875.00	23.038	3.00	1592.24	
HT03BB1	HT03CBL1	31.500	3.00	2976.75	22.928	3.00	1577.09	
HT03BB1	HT03CB1	31.500	3.00	2976.75	22.928	3.00	1577.09	
HT03BB1	HT03CB3	31.500	3.00	2976.75	22.928	3.00	1577.09	
HT03BB2	HT03CB6	31.500	3.00	2976.75	22.928	3.00	1577.09	
HT03BB2	HT03CB7	31.500	3.00	2976.75	22.928	3.00	1577.09	
HT03BB2	HT03CB8	31.500	3.00	2976.75	22.928	3.00	1577.09	
MD12345BB	MD5CB501	31.500	3.00	2976.75	25.443	3.00	1942.11	
MD12345BB	MD4CB403	31.500	3.00	2976.75	25.443	3.00	1942.11	
MD12345BB	MD2CB214	25.000	3.00	1875.00	25.443	3.00	1942.11	*
MD12345BB	MD2CB212	25.000	3.00	1875.00	25.443	3.00	1942.11	*
MD12345BB	MD3CB310	31.500	3.00	2976.75	25.443	3.00	1942.11	

		Device Capacity			3-Phase Short-Circuit Duty Results			
Bus ID	Device ID	Ithr (kA)	Tkr (sec.)	Rated Thermal Energy (MJ)	Ith (kA)	Tkr (sec.)	Thermal Energy (MJ)	
MD12345BB	MD3CB312	31.500	3.00	2976.75	25.443	3.00	1942.11	
MD12345BB	MD2CB213	25.000	3.00	1875.00	25.443	3.00	1942.11	*
MD12345BB	MD3CB306	31.500	3.00	2976.75	25.443	3.00	1942.11	
MD12345BB	MD3CB307	31.500	3.00	2976.75	25.443	3.00	1942.11	
MD12345BB	MD2CB206	25.000	3.00	1875.00	25.443	3.00	1942.11	*
MD12345BB	MD1CB107	25.000	3.00	1875.00	25.443	3.00	1942.11	*
MD12345BB	MD2CB210	25.000	3.00	1875.00	25.443	3.00	1942.11	*
MD12345BB	MD2CB211	25.000	3.00	1875.00	25.443	3.00	1942.11	*
MD12345BB	MD4CB404	31.500	3.00	2976.75	25.443	3.00	1942.11	
MD12345BB	MD4CB405	31.500	3.00	2976.75	25.443	3.00	1942.11	

Ithr = Rated short-time withstand current (Icw for low voltage circuit breaker)
Tkr = Rated short-time
Ith = Thermal equivalent short-time current

* Indicates a device with calculated duty exceeding the device capability.

# Indicates a device with calculated duty exceeding the device marginal limit. (95 % times device capability)