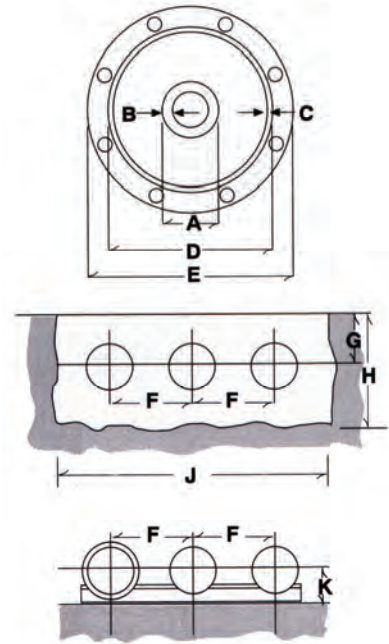


CGIT System Technical Data

Voltage Class	Typical CGIT Bus System Dimensions - millimeters									
	A	B	C	D	E	F	G	H	J	K
145 / 172 kV	89	15.2	7.6	241	343	368	914	1219	1270	241
242 / 300 kV	102	12.7	7.6	307	406	457	914	1219	1524	318
362 kV	127	12.7	6.4	375	483	559	914	1219	1829	356
420 / 550 kV	178	12.7	6.4	508	648	711	914	1321	2286	457
800 kV	178	12.7	7.9	676	775	1000	1067	1524	2921	533
1200 kV	203	12.7	9.5	762	889	1016	1219	1676	3099	610

Voltage Class	Typical CGIT Bus System Dimensions - inches									
	A	B	C	D	E	F	G	H	J	K
145 / 172 kV	3.5	0.6	0.30	9.50	13.5	15	36	48	50	9.5
242 / 300 kV	4.0	0.5	0.30	12.10	16.0	18	36	48	60	12.5
362 kV	5.0	0.5	0.25	14.75	19.0	22	36	48	72	14.0
420 / 550 kV	7.0	0.5	0.25	20.00	25.5	28	36	52	90	18.0
800 kV	7.0	0.5	0.31	26.63	30.50	39.37	42	60	115	21.0
1200 kV	8.0	0.5	0.38	30.00	35.0	40	48	66	122	24.0



CGIT System Ratings							
Rated voltage	kV rms	145 / 172	242 / 300	362	420 / 550	800	1200
One minute power frequency withstand voltage	kV rms	310/365	425/460	500	740	960	1200
Lightning impulse withstand voltage	kV peak	650/750	900/1050	1050/1300	1550	2100	2175
Switching surge insulation level	kV peak	540/600	720/750	850/950	1175	1550	1800
Frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60
Open air current rating ¹	A	2500	3000	3500	4500	5000	5500
Power loss—open air	Per phase foot	W	36	46	52	71	74
	Per phase meter	W	117	150	170	232	242
Direct buried current rating ¹	A	1200	1500	2000	2300	2400	3750
Power loss—direct buried	Per phase foot	W	11	12	13	16	35
	Per phase meter	W	35	39	44	51	115
Short circuit current	3 seconds	kA	63	80	100	100	100
Effective AC resistance	Per phase foot	$\mu\Omega$	5.72	5.09	4.24	3.5	2.44
	Per phase meter	$\mu\Omega$	18.78	16.71	13.90	11.47	8.01
Capacitance	Per phase foot	pf	18.1	16.0	16.2	16.5	13.0
	Per phase meter	pf	59.5	52.6	53.1	54.2	42.7
Inductance	Per phase foot	μH	0.057	0.064	0.064	0.062	0.078
	Per phase meter	μH	0.187	0.211	0.210	0.205	0.260
Surge impedance	Ω	56.0	63.4	62.8	61.5	78.7	78.0
Enclosure diameter	mm	241.3	307.3	374.7	508.0	676.3	762.0
	inches	9.5	12.1	14.8	20.0	26.6	30.0
Conductor diameter	mm	88.9	101.6	127.0	177.8	177.8	203.2
	inches	3.5	4.0	5.0	7.0	7.0	8.0
Weight of bus without SF ₆ gas	Per phase foot	lbs.	17.47	20.54	22.81	31.79	50.59
	Per phase meter	kg	26.00	30.57	33.95	47.31	75.28
Weight of SF ₆ gas ²	Per phase foot	lbs.	0.76	1.31/1.43	2.03/2.22	3.85	8.88
	Per phase meter	kg	1.13	1.95/2.13	3.02/3.30	5.72	13.21

- Listed current ratings are based on phase spacing and burial depths specified
- Nominal fill pressure is 55 psig (480 kPa) or 60 psig (515 kPa) depending on system requirements