

Elastimold®

Fused loadbreak elbows

Electrical characteristics of Elastimold EFX-E elbow fuses

System voltage class (kV)	Nominal fuse voltage rating (kV)	Current rating (amps)	Fuse cat. no. (N1)	Rated maximum voltage (kV)	Maximum continuous current (A) (N2) (N6) (N7)			Peak arc voltage (kV) (N5)	Minimum melt I ² t (amp ² -sec)	Maximum total I ² t (amp ² -sec) (N3) (N4)	Fuse housing
					25 °C	40 °C	65 °C				
15	8.3	3	EFX083003-E	10.0	4.3	4.2	3.9	30	100	350	168FLR1
		6	EFX083006-E		9.5	9.0	8.5	32	620	2,700	
		8	EFX083008-E		11.5	11.0	10.5	28	800	4,000	
		10	EFX083010-E		14.0	13.5	13.0	28	800	4,000	
		12	EFX083012-E		19.0	18.5	17.5	26	920	8,000	
		18	EFX083018-E		21.0	20.0	19.0	26	1,310	9,500	
		20	EFX083020-E		26.0	25.0	24.0	26	1,620	11,000	
		25	EFX083025-E		34.0	33.0	31.0	26	3,660	22,000	
		30	EFX083030-E		37.5	36.5	34.5	26	5,250	30,000	
		40	EFX083040-E		43.0	42.0	40.0	26	8,700	50,000	
		45	EFX083045-E		49.0	47.0	45.0	26	12,800	70,000	
		65	EFX083065-E	8.8	70.0	68.0	64.5	23	34,000	200,000	168FLR3
		80	EFX083080-E		80.0	77.5	73.5	22	51,200	280,000	
25	15.5	6	EFX155006-E	15.5	8.5	8.0	7.7	52	620	3,000	274FLR1
		8	EFX155008-E		10.5	10.0	9.5	40	800	4,300	
		10	EFX155010-E		13.0	12.5	12.0	40	800	4,300	
		12	EFX155012-E		16.0	15.5	15.0	38	920	8,000	
		18	EFX155018-E		20.0	19.5	18.5	38	1,620	13,000	
		20	EFX155020-E		23.5	22.5	21.5	38	2,200	16,500	
25/28	17.2	3	EFX172003-E	17.2	4.3	4.2	3.9	51	100	510	274FLR3
		6	EFX172006-E		9.5	9.0	8.5	54	620	3,250	
		8	EFX172008-E		11.5	11.0	10.5	46	800	4,600	
		10	EFX172010-E		14.0	13.5	13.0	46	800	4,600	
		12	EFX172012-E		18.0	17.5	16.5	43	920	8,500	
		18	EFX172018-E		20.0	19.5	18.5	45	1,310	10,000	
		20	EFX172020-E		24.0	23.0	22.0	45	1,620	12,500	
		25	EFX172025-E		31.5	30.5	29.0	45	3,660	27,500	
		30	EFX172030-E		35.5	34.5	32.5	45	5,250	37,500	
		40	EFX172040-E		41.0	40.0	38.0	45	8,700	62,500	
		45	EFX172045-E		46.0	45.0	42.5	45	12,800	87,500	

Notes:

N1. Ratings have maximum interrupting capability of 50 kA, except 17.2 kV 3 A (EFX172003-E) which tested at 44 kA.

N2. Fuses have a rated maximum application temperature (RMAT) of 65 °C. RMAT is the maximum temperature of the air, in contact with the elbow housing, at which fuses have been shown to be suitable for use.

N3. Tabulated maximum total I²t values are for currents of 50,000 A at the nominal voltage of the fuse. Values for 8.3 kV fuses at 10 kV are approximately 30% higher. Values for 17.2 kV fuses at 15.5 kV are approximately 20% lower.

N4. Maximum total I²t values are reduced for currents below 50,000 A. For example, at 10,000 A, maximum total I²t values are approximately 15% less than the published values.

N5. Peak arc voltages listed are for 50,000 A currents at the rated maximum voltage listed. Reduced currents and voltages will reduce the peak arc voltage.

Consult the factory for further information.

N6. Maximum continuous currents at ambient temperatures other than those listed may be determined by derating the fuses by .2% per degree C over 25 °C.

For example: At 40 °C the derating would be 15 x .2 = 3%, making the maximum continuous current of a 17.2 kV, 25 A fuse 31.5 x .97 = 30.5 A.

N7. Time-current characteristic curves are published at 25 °C. Reduction in the long time melting current of the fuses (approximately one hour and longer) due to higher ambient temperatures is the same as described above for "Maximum continuous currents."