

Maximum measured values of earth fault loop impedance (Z_s)

The table below provides maximum values of Z_s for fuses and circuit breakers.

Nominal Rating (A)	Fuses										Circuit-breakers to BS 3871 or BS EN 60898 or RCBOs to BS EN 61009				
	BS 88 (gG) Parts 2 and 6		BS 1361 or BS 1362		BS 3036		BS 88-2 Fuse systems E (bolted) and G (clip in)		BS88-3 Fuse System C		Type 1	Type 2	Type B	Type 3&C	Type D
	0.4 s	5 s	0.4 s	5 s	0.4 s	5 s	0.4 s	5s	0.4 s	5 s	0.2, 0.4 and 5s				
3	-	-	16.40	23.20	-	-	-	-	-	-	-	-	15.32	-	-
5	-	-	10.45	16.40	9.575	17.70	-	-	10.45	15.32	11.50	6.575	-	4.60	2.30
6	8.525	13.50	-	-	-	-	8.212	12.80	-	-	9.575	5.462	7.662	3.825	1.925
10	5.10	7.425	-	-	-	-	4.887	7.187	-	-	5.75	3.287	4.60	2.30	1.15
13	-	-	2.425	3.825	-	-	-	-	-	-	-	-	-	-	-
15	-	-	3.275	5.00	2.55	5.35	-	-	-	-	3.825	2.187	-	1.537	0.762
16	2.70	4.175	-	-	-	-	2.562	4.175	2.425	4.112	3.587	2.05	2.875	1.437	0.725
20	1.775	2.912	1.70	2.80	1.762	3.825	1.775	2.95	2.037	3.375	2.875	1.637	2.30	1.15	0.575
25	1.437	2.30	-	-	-	-	1.35	2.30	-	-	2.30	1.30	1.837	0.925	0.462
30	-	-	1.15	1.837	1.08	2.637	-	-	-	-	1.912	1.087	-	0.762	0.387
32	1.037	1.837	-	-	-	-	1.037	1.837	0.962	1.637	1.80	1.025	1.437	0.725	0.362
40	0.812	1.35	-	-	-	-	-	1.35	-	-	1.437	0.812	1.15	0.575	0.287
45	-	-	0.575	0.962	0.587	1.587	-	-	-	1.037	1.275	0.725	1.025	0.512	0.25
50	0.60	1.037	-	-	-	-	-	1.037	-	-	1.15	0.65	0.912	0.462	0.225
60	-	-	-	0.70	-	1.125	-	-	-	-	-	-	-	-	-
63	0.45	0.825	-	-	-	-	-	0.825	-	0.725	0.90	0.512	0.725	0.362	0.175
80	0.30	0.575	-	0.50	-	-	-	0.575	-	0.525	0.712	0.40	0.575	0.287	0.137
100	0.225	0.425	-	0.362	-	0.525	-	0.462	-	0.40	0.575	0.325	0.462	0.225	0.112
125	0.175	0.325	-	-	-	-	-	0.337	-	-	-	-	0.375	0.175	0.087
160	0.137	0.25	-	-	-	-	-	0.275	-	-	-	-	-	-	-
200	0.10	0.187	-	-	-	-	-	-	-	-	-	-	-	-	-

Existing BS 1671:2008 Fuse Reference	BS 7671:2008 (2011) Amendment 1 Reference	Comment
BS 88-2.2	BS 88-2	This is a bolted type fuse that is recognised internationally as a fuse system E
BS 88-6	BS 88-2	This is a clip in type fuse that is recognised internationally as fuse system G
BS1361	BS 88-3	This is a cartridge that is recognised internationally as fuse system C

BS 1361 Fuse Ratings (Amps)	BS 88-3 Fuse Ratings (Amps)
5	5
15	16 ₍₁₎
20	20
30	32 ₍₁₎
45	45
60	63 ₍₁₎
80	80
100	100

1: highlights different rating