Fuses



Safety, including the protection of people and property, is at the forefront of today's business. Fuses offer a simple and cost effective solution to some of the risk associated with electric distribution. The fuses listed in the next few pages are intended for use under oil in distribution equipment.

Hitachi ABB Power Grids Distribution Transformer Components offers a variety of expulsion fuses. Both Hitachi ABB Power Grids Distribution Transformer Components protective links and draw-out fuses offer protection to the distribution system should an internal transformer fault occur. Hitachi ABB Power Grids Distribution Transformer Components draw-out expulsion fuses also offer some protection for overload and secondary faults. Isolation links, though not true fuses with an interrupting rating, are used to protect those who work on transformers from connecting into a faulted circuit.

Hitachi ABB Power Grids Distribution Transformer Components draw-out fuses are designed for use in Hitachi ABB Power Grids Distribution Transformer Components DOIII type fuse holder, but are interchangeable with most draw-out fuse holders on the market today. These fuses are available in three different configurations for a wide array of current ratings. The draw-out fuses are generally limited to 24.94 kV line-to-line grounded Y. However, when paired with a current limiting fuse the voltage rating can be extended slightly.

Hitachi ABB Power Grids Distribution Transformer Components isolation links are not fuses in the sense that they are not designed to interupt current. However, isolation links are intended to be used in conjunction with draw-out expulsion fuses to prevent the unintentional re-energization of a faulted transformer. In the table below use the current rating and fuse type to locate the needed draw-out expulsion fuse and associated isolation link part numbers in the right two columns.

Draw-out fuses								
Current rating (Amperes)	Fuse type	Package quantity	Draw-out fuse part number	Optional isolation link part number				
6	current sensing	20	1B11143G04	1C11130G01				
10	current sensing	20	1B11143G06	1C11130G02				
15	current sensing	20	1B11143G08	1C11130G02				
25	current sensing	20	1B11143G10	1C11130G03				
40	current sensing	20	1B11143G12	1C11130G03				
65	current sensing	20	1B11143G14	1C11130G05				
100	current sensing	20	1B11143G16	1C11130G05				
140	current sensing	20	1B11143G17	1C11130G05				
3	dual sensing	20	1B11144G03	1C11130G01				
8	dual sensing	20	1B11144G05	1C11130G02				
15	dual sensing	20	1B11144G08	1C11130G03				
25	dual sensing	20	1B11144G10	1C11130G05				
50	dual sensing	20	1B11144G12	1C11130G06				
65	dual sensing	20	1B11144G14	1C11130G07				
5	dual element	20	1B11145G03	1C11130G01				
6	dual element	20	1B11145G04	1C11130G01				
8	dual element	20	1B11145G05	1C11130G02				
12	dual element	20	1B11145G06	1C11130G02				
15	dual element	20	1B11145G07	1C11130G02				
25	dual element	20	1B11145G09	1C11130G03				
40	dual element	20	1B11145G11	1C11130G03				
50	dual element	20	1B11145G12	1C11130G03				

The Hitachi ABB Power Grids Distribution Transformer Components protective link is an oil-immersed, expulsion type fuse designed for use in the high voltage circuit of distribution equipment. Protective links are available in a variety of fuse sizes and voltage ranges up to 34.5 kV line-to-line grounded Y. In most applications today, the protective link is used in series with a partial range or back-up current limiting fuse such as the Hi-Tech Trans-GuardTM family of current limiting fuses.

The standard offering for the 15 kV protective link featured below includes a long lead. This product is also offered with a short lead or for block mounting. Please contact Hitachi ABB Power Grids Distribution Transformer Components for details.

Protective links							
Current rating	Fuse curve	Package quantity	Part number through	Part number through	Part number through		
(Amperes)			15 kV	23 kV	34.5 kV		
4.5	2	10	592B581G01	779C667G01	345B995G21		
6.2	3	10	592B581G02	779C667G02	345B995G29		
7	3A	10	592B581G11	779C667G03	345B995G22		
8.2	4	10	592B581G06	779C667G08	345B995G33		
11	5	10	592B581G03	779C667G04	345B995G23		
13	5A	10	592B581G12	779C667G09	345B995G24		
16	6	10	592B581G04	779C667G05	345B995G28		
21	7	10	592B581G05	779C667G06	345B995G25		
24	7A	10	592B581G13	779C667G33	345B995G34		
30	8	10	592B581G07	779C667G07	345B995G26		
49	9	10	592B581G08	779C667G34	345B995G27		
71	10	10	592B581G09	779C667G35	345B995G31		
102	11	10	592B581G14	779C667G36	345B995G32		
160	12	10	592B581G31	Not available	Not available		
230	13	10	592B581G32	Not available	Not available		