

3EF Surge Limiters

Replacement of 3EF Surge Limiters by 3EJ Surge Arresters



3EF surge limiters are used for the protection against overvoltages in cable systems of indoor switchgear up to 15 kV. They have been developed for special applications, where low protection levels and high energy absorption capacities are required.

Back then, this demand could only be realized using spark gaps connected in series to the non-linear metal-oxide varistors, called surge limiters.

Today, the same technical functionality can be achieved by using the specially developed metal-oxide surge arresters 3EJ. Surge arresters 3EJ have been optimized for the protection against overvoltages caused by switching in combination with very low protection levels and have been specifically designed to follow the exact protection characteristics of the 3EF surge limiters.

For this reason, all 3EF1 and 3EF3 surge limiters will be replaced by modern 3EJ surge arresters.



The gapless 3EJ high energy discharge surge arresters feature the Siemens Cage Design™ and offer superior protection against overvoltages in medium-voltage systems. They protect rotating devices like generators and motors, arc furnaces, arc furnace transformers, industrial transformers, airfield-lighting systems, cable sheath, capacitors and capacitor banks and converters for drives.

The 3EJ portfolio is fully compatible to all 3EF applications and is able to replace the existing product family 3EF completely.

Last acceptance of 3EF orders is 31st December 2019.

Beginning 2020, the successor product 3EJ needs to be ordered through the new Org-ID [AF011105](#).

Please inform your regions, customers and partners accordingly and offer the successor product 3EJ for all future projects from now on.

An overview of the suitable 3EJ replacement types is shown in the table below.

MLFB	Ur	Uc	Ures @ 0.5 kA, 30/60 µs	Ures @ 10 kA, 8/20 µs	Height
	[kV]	[kV]	[kV]	[kV]	[mm]
3EF1036-0A	3,6	3,2	8	n.a.	91
3EF1048-0A	4,8	4,1	10	n.a.	91
3EF1072-0A	7,2	6,1	15	n.a.	91
3EF1120-0A	12	10,2	25	n.a.	169
3EF1150-0A	15	12	31	n.a.	169
3EF3036-0	3,6	3,2	8	n.a.	255
3EF3048-0	4,8	4,1	10	n.a.	255
3EF3072-0	7,2	6,1	15	n.a.	255
3EF3072-1	7,2	4,9	12	n.a.	255
3EF3120-0	12	10,2	25	n.a.	255
3EF3120-1	12	8,2	20	n.a.	255

MLFB	Ur	Uc	Ures @ 0.5 kA, 30/60 µs	Ures @ 10 kA, 8/20 µs	Height
	[kV]	[kV]	[kV]	[kV]	[mm]
3EJ0003-6CB71-0	3,6	3,2	8	n.a.	170
3EJ0004-8CB71-0	4,8	4,3	10	n.a.	170
3EJ0007-2CB71-0	7,2	6,5	15	n.a.	170
3EJ0012-0CC71-0	12	10,6	25	n.a.	200
3EJ0015-0CC71-0	15	13,3	31	n.a.	200
3EJ9003-6CB31-4A	3,6	3,2	8	n.a.	166
3EJ9004-8CB31-4A	4,8	4,3	10	n.a.	166
3EJ9007-2CC31-4A	7,2	6,5	15	n.a.	211
3EJ9007-2CB71-4B	7,2	6,5	12,5	n.a.	188
3EJ9012-0CC31-4A	12	10,6	25	n.a.	211
3EJ9012-0CC71-4B	12	10,6	20,5	n.a.	232

Further product information:
www.siemens.com/arresters