

### main specifications of TGE MOV

No.	series	type	suggested rated voltage (kV)	MCOV (kV)	diameter (mm)	height (mm)	DC $U_{1mA}$ (kV)	$I_L$ at 75% of $U_{1mA}$ ( $\mu A$ )	$U_{res}$ (kV)	typical $U_{res}/U_{1mA}$	repetitive charge transfer $Q_{rs}$ (C)	guaranteed 2ms test current (A)	max 2ms test current (A)	4/10 $\mu s$ high current test (kA)	nominal discharge current $I_n$ (kA)	accelerated ageing test
1	AC	D28H23.5	3.6	3.1	28±0.7	23.5±0.3	5.52±0.3	≤ 10	9.7±0.5	1.75	0.3	150	150	65	5	115°C $0.9 \cdot U_{1mA} \sqrt{2}$ Kct ≤ 1.0
2		D28H29	4.5	3.8	28±0.7	29±0.3	6.82±0.35	≤ 10	12.0±0.6	1.75	0.3	150	150	65	5	
3		D30H23.5	3.6	3.1	30±0.7	23.5±0.3	5.52±0.3	≤ 10	9.5±0.5	1.72	0.3	150	200	65	5	
4		D30H29	4.5	3.8	30±0.7	29±0.3	6.82±0.35	≤ 10	11.7±0.6	1.72	0.3	150	200	65	5	
5		D33H23.5	3.7	3.1	34±0.7	23.5±0.3	5.52±0.3	≤ 10	9.2±0.5	1.67	0.4	250	300	65	5	
6		D33H29	4.6	3.9	34±0.7	29.0±0.3	6.82±0.35	≤ 10	11.4±0.6	1.67	0.4	250	300	65	5	
7		D33H35	5.5	4.7	34±0.7	35.0±0.3	8.22±0.4	≤ 10	13.7±0.7	1.67	0.4	250	300	65	5	
8		D36H20.7	3.2	2.8	36±0.7	20.7±0.3	4.85±0.3	≤ 15	8.8±0.5	1.81	0.5	350	400	100	10	
9		D36H31	4.9	4.1	36±0.7	31±0.3	7.3±0.45	≤ 15	13.25±0.8	1.81	0.5	350	400	100	10	
10		D36H34.5	5.4	4.6	36±0.7	34.5±0.3	8.1±0.5	≤ 15	14.65±0.8	1.81	0.5	350	400	100	10	
11		D38H20.7	3.2	2.8	38.5±0.7	23.5±0.3	4.85±0.3	≤ 15	8.6±0.5	1.77	0.5	400	450	100	10	
12		D38H31	4.9	4.1	38.5±0.7	29±0.3	7.3±0.45	≤ 15	12.9±0.8	1.77	0.5	400	450	100	10	
13		D38H34.5	5.4	4.6	38.5±0.7	35±0.3	8.1±0.5	≤ 15	14.35±0.8	1.77	0.5	400	450	100	10	
14		D40H20.7	3.3	2.8	40±0.7	23.5±0.3	4.85±0.3	≤ 15	8.5±0.5	1.75	0.5	400	500	100	10	
15		D40H31	4.9	4.2	40±0.7	29±0.3	7.3±0.45	≤ 15	12.8±0.8	1.75	0.5	400	500	100	10	
16		D40H34.5	5.5	4.6	40±0.7	35±0.3	8.1±0.5	≤ 15	14.2±0.8	1.75	0.5	400	500	100	10	
17		D42H22	3.3	2.8	42±0.7	22±0.3	4.85±0.3	≤ 15	8.6±0.5	1.77	0.5	400	400	100	10	
18		D42H29	4.4	3.7	42±0.7	29±0.3	6.4±0.45	≤ 15	11.3±0.7	1.77	0.5	400	400	100	10	
19		D42H36	5.4	4.6	42±0.7	36±0.3	7.95±0.5	≤ 15	14.1±0.8	1.77	0.5	400	400	100	10	
20		D42H19.5	3	2.6	42±0.7	19.5±0.3	4.45±0.3	≤ 15	7.8±0.5	1.75	0.6	500	600	100	10	
21		D42H32	5	4.2	42±0.7	32±0.3	7.3±0.45	≤ 15	12.75±0.8	1.75	0.6	500	600	100	10	
22		D42H26.4	4.5	3.8	42±0.7	26.4±0.3	6.6±0.45	≤ 15	11.45±0.8	1.73	0.6	400	500	100	10	
23		D42H29.4	5	4.2	42±0.7	29.4±0.3	7.35±0.45	≤ 15	12.75±0.8	1.73	0.6	400	500	100	10	
24		D46H35.4	5.5	4.7	46±1	35.4±0.3	7.8±0.5	≤ 20	13.45±0.8	1.72	1.6	600	800	100	10	
25		D48H35.4	5.5	4.7	48±1	35.4±0.3	7.8±0.5	≤ 20	13.45±0.8	1.71	1.6	800	900	100	10	
26		D50H24	3.7	3.2	50±2	24±0.3	5.3±0.3	≤ 20	9.0±0.5	1.7	1.8	800	900	100	10	
27		D50H36	5.6	4.7	50±3	36±0.3	7.9±0.5	≤ 20	13.45±0.8	1.7	1.8	800	900	100	10	
28		D60H35.4	5.6	4.7	60±1	35.4±0.3	7.8±0.5	≤ 20	12.95±0.8	1.64	2.4	1000	1200	100	10	
29		D64H35.4	5.6	4.7	64.5±1	35.4±0.3	7.8±0.5	≤ 20	12.75±0.8	1.63	2.4	1200	1400	100	10	
30		D71H35.4	5.7	4.8	70.5±1	35.4±0.3	7.8±0.5	≤ 20	12.65±0.8	1.59	3.2	1500	1600	100	20	
31		D78H35.4	5.7	4.8	78±1	35.4±0.3	7.8±0.5	≤ 20	12.45±0.8	1.58	4	2000	2100	100	20	
32		D99H21.4	3.5	2.9	99±1.2	21.4±0.3	4.7±0.35	≤ 20	7.85±0.5	1.54	6	2500	3000	100	20	
33	DC	D71H35.4			70.5±1	35.4±0.3	7.8±0.5	≤ 20	12.65±0.8	1.59	3.2	1500	1600	100	20	115°C $0.85 \cdot U_{1mA}$ Kct ≤ 1.0
34		D78H35.4			78±1	35.4±0.3	7.8±0.5	≤ 20	12.45±0.8	1.58	4	2000	2100	100	20	
35		D99H21.4				99±1.2	21.4±0.3	4.7±0.35	≤ 20	7.85±0.5	1.54	6	2500	3000	100	
36	high gradient	D71H21.4	5.7	4.8	70.5±1	21.4±0.3	7.9±0.5	≤ 20	12.4±0.8	1.57	1.6	800	800	100	10	115°C $0.9 \cdot U_{1mA} \sqrt{2}$ Kct ≤ 1.0
37		D78H21.4	5.7	4.8	78±1	21.4±0.3	7.9±0.5	≤ 20	12.3±0.8	1.55	2	1000	1000	100	10	
38		D86H21.4	5.7	4.8	86±1	21.4±0.3	7.9±0.5	≤ 20	12.1±0.8	1.53	2.4	1200	1200	100	20	
39		D99H21.4	5.5	4.7	99±1.2	21.4±0.3	7.7±0.5	≤ 20	11.6±0.8	1.51	3.2	1500	1600	100	20	
40		D115H21.4	5.5	4.7	115±1.2	21.4±0.3	7.7±0.5	≤ 20	11.4±0.8	1.48	4	2000	2000	100	20	
41	for EGLA	D33H23.5	4.9	4.2	33.5±0.7	23.5±0.3	7.05±0.4	≤ 10	11.6±0.7	1.67	0.2	150	150	65	5	115°C $0.9 \cdot U_{1mA} \sqrt{2}$ Kct ≤ 1.0
42		D36H23.5	4.9	4.2	36±0.7	23.5±0.3	7.05±0.4	≤ 10	12.5±0.7	1.8	0.3	250	250	100	10	
43		D38H23.5	4.9	4.2	38.5±0.7	23.5±0.3	7.05±0.4	≤ 10	12.3±0.7	1.77	0.4	300	300	100	10	

1) repetitive charge transferring test: D28-D42, use lightning impulse 8/20 $\mu s$  for non EGLA; D46-D115, use 2ms impulse; D33-D38 for EGLA, use 90/200 $\mu s$  impulse.  
 2) suggested rated voltage is based on center value of  $U_{1mA}$  and test according to ICE60099-4. 3)  $U_{res}$  is measured at 5kA for D28-D33,  $U_{res}$  is measured at 10kA for D36-D115.  
 4) 17-19# D42 series are organic coated, others are glass coated.