

Polymer-housed Metal-oxide Surge Arrester without Gaps

TGE-MOA-A Series

TGE surge arresters are the primary protection against atmospheric and switching over-voltages. They are generally connected in parallel with the equipment to be protected to divert the surge current. The active elements (Metal-oxide Varistors) of TGE surge arresters are manufactured using a highly non-linear ceramic varistor material, composed primarily of zinc oxide mixed with other metal oxides and sintered together. It has passed the full series of type tests conducted by KEMA laboratory and fully meets the technical requirements of the latest version of IEC6009-4:2014、IEEE Std62.11:2020. It has good protection level, strong charge transfer ability, excellent pollution resistance, and safe short-circuit performance.

Features

- Independently developed and manufactured nonlinear metal oxide varistors with excellent technical performance
- Patent technology: Layered winding surge arrester core for distribution
- Durable HTV material with excellent hydrophobicity, long-term aging resistance, and electrical insulation properties
- Excellent short-circuit characteristics

Brief performance data



Arrester classification as per IEC60099-4: Edition 3.0 2014-06	DH Distribution
Rated voltages (U_r)	3~45kVrms
Max. Continuous operating voltage U_c	2.4~36kVrms
Nominal discharge current (I_n)	10kAp
Repetitive charge transfer rating, Q_{rs}	0.4C
Thermal charge transfer rating, Q_{th}	1.1C
High current impulse 4/ 10 μ s	100 kA _{peak}
Short-circuit/ Pressure relief capability	20 kArms(sym)
TOV capability (With prior duty)	1.2Ur/0.1s 1.15Ur/1.1s 1.05Ur/10.1s 0.95Ur/1000s
Mechanical strength	
Specified long-term load (SLL)	230N·m
Specified short-term load (SSL)	300N·m
Blocks size	ϕ 36mm
Service conditions:	
Ambient temperature	-40°C to +40°C
Design altitude max.	1000m
Frequency	48~62 Hz

Note: It also meets the requirements of IEC60099-4: Edition 3.0 2014-06.

Technical data for surge arresters

Type	Rated voltage	Max. continuous operating voltage	Max. residual voltage with current wave					Fig.
			30/60	1/5	8/20			
	Ur	U _c	500A	10kA	5kA	10kA	20kA	
	kV _{rms}	kV _{rms}	kV _{peak}					
TGE-MOA-3A	3	2.4	6.6	10.3	7.7	8.3	9.3	
TGE-MOA-6A	6	4.8	13.2	19	15.3	16.5	18.6	
TGE-MOA-9A	9	7.2	19.8	28.4	23	24.8	28	
TGE-MOA-12A	12	9.6	26.4	37.8	30.7	33	37.3	
TGE-MOA-15A	15	12	33	47.3	38.4	41.3	46.6	
TGE-MOA-18A	18	14.4	39.6	56.7	46	49.5	55.9	
TGE-MOA-21A	21	16.8	46.2	66.2	53.7	57.8	65.3	
TGE-MOA-24A	24	19.2	52.8	75.6	61.4	66	74.6	
TGE-MOA-27A	27	21.6	59.4	85.1	69.1	74.3	83.9	
TGE-MOA-30A	30	24	66	94.5	76.7	82.5	93.2	
TGE-MOA-33A	33	26.4	72.6	104	84.4	90.8	102.5	
TGE-MOA-36A	36	28.8	79.2	113.4	92.1	99	111.9	
TGE-MOA-39A	39	31.2	85.8	122.9	99.7	107.3	121.2	
TGE-MOA-42A	42	33.6	92.4	132.3	107.4	115.5	130.5	
TGE-MOA-45A	45	36	99	141.8	115.1	123.8	139.8	

Technical data for housings

Fig	Type	Creepage distance	Insulation of housings			Dimensions				
			1.2/50 μs	50Hz	A	B	C	D	E	
			mm	kV _{peak}	kV _{rms}	mm				
	TGE-MOA-3A	314	74	31	206	118				
	TGE-MOA-6A	314	74	31	206	118				
	TGE-MOA-9A	393	87	38	228	140				
	TGE-MOA-12A	531	108	48	268	180				
	TGE-MOA-15A	531	108	48	268	180				
	TGE-MOA-18A	669	129	59	308	220				
	TGE-MOA-21A	669	129	59	308	220				
	TGE-MOA-24A	806	150	70	348	260	Φ 49 ± 1	Φ 113 ± 2	Φ 95 ± 2	
	TGE-MOA-27A	806	150	70	348	260				
	TGE-MOA-30A	806	150	70	348	260				
	TGE-MOA-33A	1083	192	92	428	340				
	TGE-MOA-36A	1083	192	92	428	340				
	TGE-MOA-39A	1359	234	114	508	420				
	TGE-MOA-42A	1359	234	114	508	420				
	TGE-MOA-45A	1359	234	114	508	420				

TGE-MOA-3A (YH10W-3)

Polymer-housed surge arresters



Features

- Independently developed and manufactured nonlinear metal oxide varistors with excellent technical performance
- Patent technology: Layered winding surge arrester core for distribution
- Durable HTV material with excellent hydrophobicity, long-term aging resistance, and electrical insulation properties
- Excellent short-circuit characteristics

Product Assets

Catalogs: Arresters IEC & IEEE & GB DH (TGE-MOA-1)

ISO 9001:2015 – Xi'an Tiangong Electric Co., Ltd 2020

ISO 14001:2015 - Xi'an Tiangong Electric Co., Ltd 2020

Application Guide: Metal-oxide Surge Arresters for use on AC systems

Classification

DH Distribution

Dimensions

Height	206mm/ in
Stud Type	M12/ 3/8-16
Weight	0.95kg/ lb

Brief performance data

- Rated voltages (U_r)
3kVr.m.s
- Continuous operating voltage
2.4kVr.m.s
- Nominal discharge current (I_n)
10kAp
- Max. residual voltage 8/20
8.3kVpeak
- Repetitive charge transfer rating Q_{rs}
0.4C
- Thermal charge transfer rating Q_{th}
1.1C
- TOV capability (With prior duty)
1.20Ur/0.1s 1.15Ur/1.1s 1.05Ur/10.1s 0.95Ur/1000s
- Short-circuit/ Pressure relief capability
20kAr.m.s
- SSL
230N·m
- Blocks size
φ36mm

Service conditions

Ambient temperature	-40°C to +40°C
Design altitude max.	1000m
Frequency	15 ~ 62 Hz

Address / Tel / Web

No. 1616 Tianzhang, Xi'an, Shaanxi Province, China,
029-84362608
<https://www.xatge.com>

TGE-MOA-6A (YH10W-6)

Polymer-housed surge arresters



Features

- Independently developed and manufactured nonlinear metal oxide varistors with excellent technical performance
- Patent technology: Layered winding surge arrester core for distribution
- Durable HTV material with excellent hydrophobicity, long-term aging resistance, and electrical insulation properties
- Excellent short-circuit characteristics

Product Assets

Catalogs: Arresters IEC & IEEE & GB DH (TGE-MOA-1)

ISO 9001:2015 – Xi'an Tiangong Electric Co., Ltd 2020

ISO 14001:2015 - Xi'an Tiangong Electric Co., Ltd 2020

Application Guide: Metal-oxide Surge Arresters for use on AC systems

Classification

DH Distribution

Dimensions

Height	206mm/ in
Stud Type	M12/ 3/8-16
Weight	0.95kg/ lb

Brief performance data

- Rated voltages (U_r)
6kVr.m.s
- Continuous operating voltage
4.8kVr.m.s
- Nominal discharge current (I_n)
10kAp
- Max. residual voltage 8/20 10kA
16.5kVpeak
- Repetitive charge transfer rating Q_{rs}
0.4C
- Thermal charge transfer rating Q_{th}
1.1C
- TOV capability (With prior duty)
1.20Ur/0.1s 1.15Ur/1.1s 1.05Ur/10.1s 0.95Ur/1000s
- Short-circuit/ Pressure relief capability
20kAr.m.s
- SSL
230N·m
- Blocks size
φ36mm

Service conditions

Ambient temperature	-40°C to +40°C
Design altitude max.	1000m
Frequency	15 ~ 62 Hz

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TGE-MOA-9A (YH10W-9)

Polymer-housed surge arresters



Features

- Independently developed and manufactured nonlinear metal oxide varistors with excellent technical performance
- Patent technology: Layered winding surge arrester core for distribution
- Durable HTV material with excellent hydrophobicity, long-term aging resistance, and electrical insulation properties
- Excellent short-circuit characteristics

Product Assets

Catalogs: Arresters IEC & IEEE & GB DH (TGE-MOA-1)

ISO 9001:2015 – Xi'an Tiangong Electric Co., Ltd 2020

ISO 14001:2015 - Xi'an Tiangong Electric Co., Ltd 2020

Application Guide: Metal-oxide Surge Arresters for use on AC systems

Classification

DH Distribution

Dimensions

Height	228mm/ in
Stud Type	M12/ 3/8-16
Weight	1.14kg/ lb

Brief performance data

- Rated voltages (U_r)
9kVr.m.s
- Continuous operating voltage
7.2kVr.m.s
- Nominal discharge current (I_n)
10kAp
- Max. residual voltage 8/20 10kA
24.8kVpeak
- Repetitive charge transfer rating Q_{rs}
0.4C
- Thermal charge transfer rating Q_{th}
1.1C
- TOV capability (With prior duty)
1.20 U_r /0.1s 1.15 U_r /1.1s 1.05 U_r /10.1s 0.95 U_r /1000s
- Short-circuit/ Pressure relief capability
20kAr.m.s
- SSL
230N·m
- Blocks size
 ϕ 36mm

Service conditions

Ambient temperature	-40°C to +40°C
Design altitude max.	1000m
Frequency	15 ~ 62 Hz

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TGE-MOA-12A (YH10W-12)

Polymer-housed surge arresters



Features

- Independently developed and manufactured nonlinear metal oxide varistors with excellent technical performance
- Patent technology: Layered winding surge arrester core for distribution
- Durable HTV material with excellent hydrophobicity, long-term aging resistance, and electrical insulation properties
- Excellent short-circuit characteristics

Product Assets

Catalogs: Arresters IEC & IEEE & GB DH (TGE-MOA-1)

ISO 9001:2015 – Xi'an Tiangong Electric Co., Ltd 2020

ISO 14001:2015 - Xi'an Tiangong Electric Co., Ltd 2020

Application Guide: Metal-oxide Surge Arresters for use on AC systems

Classification

DH Distribution

Dimensions

Height	268mm/ in
Stud Type	M12/ 3/8-16
Weight	1.46kg/ lb

Brief performance data

- Rated voltages (U_r)
12kVr.m.s
- Continuous operating voltage
9.6kVr.m.s
- Nominal discharge current (I_n)
10kAp
- Max. residual voltage 8/20 10kA
33kVpeak
- Repetitive charge transfer rating Q_{rs}
0.4C
- Thermal charge transfer rating Q_{th}
1.1C
- TOV capability (With prior duty)
1.20 U_r /0.1s 1.15 U_r /1.1s 1.05 U_r /10.1s 0.95 U_r /1000s
- Short-circuit/ Pressure relief capability
20kAr.m.s
- SSL
230N·m
- Blocks size
 ϕ 36mm

Service conditions

Ambient temperature	-40°C to +40°C
Design altitude max.	1000m
Frequency	15 ~ 62 Hz

Address / Tel / Web

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<https://www.xatge.com>

TGE-MOA-15A (YH10W-15)

Polymer-housed surge arresters



Features

- Independently developed and manufactured nonlinear metal oxide varistors with excellent technical performance
- Patent technology: Layered winding surge arrester core for distribution
- Durable HTV material with excellent hydrophobicity, long-term aging resistance, and electrical insulation properties
- Excellent short-circuit characteristics

Product Assets

Catalogs: Arresters IEC & IEEE & GB DH (TGE-MOA-1)

ISO 9001:2015 – Xi'an Tiangong Electric Co., Ltd 2020

ISO 14001:2015 - Xi'an Tiangong Electric Co., Ltd 2020

Application Guide: Metal-oxide Surge Arresters for use on AC systems

Classification

DH Distribution

Dimensions

Height	268mm/ in
Stud Type	M12/ 3/8-16
Weight	1.46kg/ lb

Brief performance data

- Rated voltages (U_r)
15kVr.m.s
- Continuous operating voltage
12kVr.m.s
- Nominal discharge current (I_n)
10kAp
- Max. residual voltage 8/20 10kA
41.3kVpeak
- Repetitive charge transfer rating Q_{rs}
0.4C
- Thermal charge transfer rating Q_{th}
1.1C
- TOV capability (With prior duty)
1.20Ur/0.1s 1.15Ur/1.1s 1.05Ur/10.1s 0.95Ur/1000s
- Short-circuit/ Pressure relief capability
20kAr.m.s
- SSL
230N·m
- Blocks size
φ36mm

Service conditions

Ambient temperature	-40°C to +40°C
Design altitude max.	1000m
Frequency	15 ~ 62 Hz

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TGE-MOA-18A (YH10W-18)

Polymer-housed surge arresters



Features

- Independently developed and manufactured nonlinear metal oxide varistors with excellent technical performance
- Patent technology: Layered winding surge arrester core for distribution
- Durable HTV material with excellent hydrophobicity, long-term aging resistance, and electrical insulation properties
- Excellent short-circuit characteristics

Product Assets

Catalogs: Arresters IEC & IEEE & GB DH (TGE-MOA-1)

ISO 9001:2015 – Xi'an Tiangong Electric Co., Ltd 2020

ISO 14001:2015 - Xi'an Tiangong Electric Co., Ltd 2020

Application Guide: Metal-oxide Surge Arresters for use on AC systems

Classification

DH Distribution

Dimensions

Height	308mm/ in
Stud Type	M12/ 3/8-16
Weight	1.85kg/ lb

Brief performance data

- Rated voltages (U_r)
18kVr.m.s
- Continuous operating voltage
14.4kVr.m.s
- Nominal discharge current (I_n)
10kAp
- Max. residual voltage 8/20 10kA
49.5kVpeak
- Repetitive charge transfer rating Q_{rs}
0.4C
- Thermal charge transfer rating Q_{th}
1.1C
- TOV capability (With prior duty)
1.20 U_r /0.1s 1.15 U_r /1.1s 1.05 U_r /10.1s 0.95 U_r /1000s
- Short-circuit/ Pressure relief capability
20kAr.m.s
- SSL
230N·m
- Blocks size
 ϕ 36mm

Service conditions

Ambient temperature	-40°C to +40°C
Design altitude max.	1000m
Frequency	15 ~ 62 Hz

Address / Tel / Web

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TGE-MOA-21A (YH10W-21)

Polymer-housed surge arresters



Features

- Independently developed and manufactured nonlinear metal oxide varistors with excellent technical performance
- Patent technology: Layered winding surge arrester core for distribution
- Durable HTV material with excellent hydrophobicity, long-term aging resistance, and electrical insulation properties
- Excellent short-circuit characteristics

Product Assets

Catalogs: Arresters IEC & IEEE & GB DH (TGE-MOA-1)

ISO 9001:2015 – Xi'an Tiangong Electric Co., Ltd 2020

ISO 14001:2015 - Xi'an Tiangong Electric Co., Ltd 2020

Application Guide: Metal-oxide Surge Arresters for use on AC systems

Classification

DH Distribution

Dimensions

Height	308mm/ in
Stud Type	M12/ 3/8-16
Weight	1.85kg/ lb

Brief performance data

- Rated voltages (U_r)
21kVr.m.s
- Continuous operating voltage
16.8kVr.m.s
- Nominal discharge current (I_n)
10kAp
- Max. residual voltage 8/20 10kA
57.8kVpeak
- Repetitive charge transfer rating Q_{rs}
0.4C
- Thermal charge transfer rating Q_{th}
1.1C
- TOV capability (With prior duty)
1.20 U_r /0.1s 1.15 U_r /1.1s 1.05 U_r /10.1s 0.95 U_r /1000s
- Short-circuit/ Pressure relief capability
20kAr.m.s
- SSL
230N·m
- Blocks size
 ϕ 36mm

Service conditions

Ambient temperature	-40°C to +40°C
Design altitude max.	1000m
Frequency	15 ~ 62 Hz

Address / Tel / Web

No. 1616 Tianzhang, Xi'an, Shaanxi Province, China,
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<https://www.xatge.com>

TGE-MOA-24A (YH10W-24)

Polymer-housed surge arresters



Features

- Independently developed and manufactured nonlinear metal oxide varistors with excellent technical performance
- Patent technology: Layered winding surge arrester core for distribution
- Durable HTV material with excellent hydrophobicity, long-term aging resistance, and electrical insulation properties
- Excellent short-circuit characteristics

Product Assets

Catalogs: Arresters IEC & IEEE & GB DH (TGE-MOA-1)

ISO 9001:2015 – Xi'an Tiangong Electric Co., Ltd 2020

ISO 14001:2015 - Xi'an Tiangong Electric Co., Ltd 2020

Application Guide: Metal-oxide Surge Arresters for use on AC systems

Classification

DH Distribution

Dimensions

Height	348mm/ in
Stud Type	M12/ 3/8-16
Weight	2.23kg/ lb

Brief performance data

- Rated voltages (U_r)
24kVr.m.s
- Continuous operating voltage
19.2kVr.m.s
- Nominal discharge current (I_n)
10kAp
- Max. residual voltage 8/20 10kA
66kVpeak
- Repetitive charge transfer rating Q_{rs}
0.4C
- Thermal charge transfer rating Q_{th}
1.1C
- TOV capability (With prior duty)
1.20 U_r /0.1s 1.15 U_r /1.1s 1.05 U_r /10.1s 0.95 U_r /1000s
- Short-circuit/ Pressure relief capability
20kAr.m.s
- SSL
230N·m
- Blocks size
φ36mm

Service conditions

Ambient temperature	-40°C to +40°C
Design altitude max.	1000m
Frequency	15 ~ 62 Hz

Address / Tel / Web

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TGE-MOA-27A (YH10W-27)

Polymer-housed surge arresters



Features

- Independently developed and manufactured nonlinear metal oxide varistors with excellent technical performance
- Patent technology: Layered winding surge arrester core for distribution
- Durable HTV material with excellent hydrophobicity, long-term aging resistance, and electrical insulation properties
- Excellent short-circuit characteristics

Product Assets

Catalogs: Arresters IEC & IEEE & GB DH (TGE-MOA-1)

ISO 9001:2015 – Xi'an Tiangong Electric Co., Ltd 2020

ISO 14001:2015 - Xi'an Tiangong Electric Co., Ltd 2020

Application Guide: Metal-oxide Surge Arresters for use on AC systems

Classification

DH Distribution

Dimensions

Height	348mm/ in
Stud Type	M12/ 3/8-16
Weight	2.23kg/ lb

Brief performance data

- Rated voltages (U_r)
27kVr.m.s
- Continuous operating voltage
21.6kVr.m.s
- Nominal discharge current (I_n)
10kAp
- Max. residual voltage 8/20 10kA
74.3kVpeak
- Repetitive charge transfer rating Q_{rs}
0.4C
- Thermal charge transfer rating Q_{th}
1.1C
- TOV capability (With prior duty)
1.20 U_r /0.1s 1.15 U_r /1.1s 1.05 U_r /10.1s 0.95 U_r /1000s
- Short-circuit/ Pressure relief capability
20kAr.m.s
- SSL
230N·m
- Blocks size
 ϕ 36mm

Service conditions

Ambient temperature	-40°C to +40°C
Design altitude max.	1000m
Frequency	15 ~ 62 Hz

Address / Tel / Web

No. 1616 Tianzhang, Xi'an, Shaanxi Province, China,
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<https://www.xatge.com>

TGE-MOA-30A (YH10W-30)

Polymer-housed surge arresters



Features

- Independently developed and manufactured nonlinear metal oxide varistors with excellent technical performance
- Patent technology: Layered winding surge arrester core for distribution
- Durable HTV material with excellent hydrophobicity, long-term aging resistance, and electrical insulation properties
- Excellent short-circuit characteristics

Product Assets

Catalogs: Arresters IEC & IEEE & GB DH (TGE-MOA-1)

ISO 9001:2015 – Xi'an Tiangong Electric Co., Ltd 2020

ISO 14001:2015 - Xi'an Tiangong Electric Co., Ltd 2020

Application Guide: Metal-oxide Surge Arresters for use on AC systems

Classification

DH Distribution

Dimensions

Height	348mm/ in
Stud Type	M12/ 3/8-16
Weight	2.23kg/ lb

Brief performance data

- Rated voltages (U_r)
30kVr.m.s
- Continuous operating voltage
24kVr.m.s
- Nominal discharge current (I_n)
10kAp
- Max. residual voltage 8/20 10kA
82.5kVpeak
- Repetitive charge transfer rating Q_{rs}
0.4C
- Thermal charge transfer rating Q_{th}
1.1C
- TOV capability (With prior duty)
1.20 U_r /0.1s 1.15 U_r /1.1s 1.05 U_r /10.1s 0.95 U_r /1000s
- Short-circuit/ Pressure relief capability
20kAr.m.s
- SSL
230N·m
- Blocks size
 ϕ 36mm

Service conditions

Ambient temperature	-40°C to +40°C
Design altitude max.	1000m
Frequency	15 ~ 62 Hz

Address / Tel / Web

No. 1616 Tianzhang, Xi'an, Shaanxi Province, China,
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<https://www.xatge.com>

TGE-MOA-33A (YH10W-33)

Polymer-housed surge arresters



Features

- Independently developed and manufactured nonlinear metal oxide varistors with excellent technical performance
- Patent technology: Layered winding surge arrester core for distribution
- Durable HTV material with excellent hydrophobicity, long-term aging resistance, and electrical insulation properties
- Excellent short-circuit characteristics

Product Assets

Catalogs: Arresters IEC & IEEE & GB DH (TGE-MOA-1)

ISO 9001:2015 – Xi'an Tiangong Electric Co., Ltd 2020

ISO 14001:2015 - Xi'an Tiangong Electric Co., Ltd 2020

Application Guide: Metal-oxide Surge Arresters for use on AC systems

Classification

DH Distribution

Dimensions

Height	428mm/ in
Stud Type	M12/ 3/8-16
Weight	2.78kg/ lb

Brief performance data

- Rated voltages (U_r)
33kVr.m.s
- Continuous operating voltage
26.4kVr.m.s
- Nominal discharge current (I_n)
10kAp
- Max. residual voltage 8/20 10kA
90.8kVpeak
- Repetitive charge transfer rating Q_{rs}
0.4C
- Thermal charge transfer rating Q_{th}
1.1C
- TOV capability (With prior duty)
1.20 U_r /0.1s 1.15 U_r /1.1s 1.05 U_r /10.1s 0.95 U_r /1000s
- Short-circuit/ Pressure relief capability
20kAr.m.s
- SSL
230N·m
- Blocks size
 ϕ 36mm

Service conditions

Ambient temperature	-40°C to +40°C
Design altitude max.	1000m
Frequency	15 ~ 62 Hz

Address / Tel / Web

No. 1616 Tianzhang, Xi'an, Shaanxi Province, China,
029-84362608
<https://www.xatge.com>

TGE-MOA-36A (YH10W-36)

Polymer-housed surge arresters



Features

- Independently developed and manufactured nonlinear metal oxide varistors with excellent technical performance
- Patent technology: Layered winding surge arrester core for distribution
- Durable HTV material with excellent hydrophobicity, long-term aging resistance, and electrical insulation properties
- Excellent short-circuit characteristics

Product Assets

Catalogs: Arresters IEC & IEEE & GB DH (TGE-MOA-1)

ISO 9001:2015 – Xi'an Tiangong Electric Co., Ltd 2020

ISO 14001:2015 - Xi'an Tiangong Electric Co., Ltd 2020

Application Guide: Metal-oxide Surge Arresters for use on AC systems

Classification

DH Distribution

Dimensions

Height	428mm/ in
Stud Type	M12/ 3/8-16
Weight	2.78kg/ lb

Brief performance data

- Rated voltages (U_r)
36kVr.m.s
- Continuous operating voltage
28.8kVr.m.s
- Nominal discharge current (I_n)
10kAp
- Max. residual voltage 8/20 10kA
99kVpeak
- Repetitive charge transfer rating Q_{rs}
0.4C
- Thermal charge transfer rating Q_{th}
1.1C
- TOV capability (With prior duty)
1.20 U_r /0.1s 1.15 U_r /1.1s 1.05 U_r /10.1s 0.95 U_r /1000s
- Short-circuit/ Pressure relief capability
20kAr.m.s
- SSL
230N·m
- Blocks size
 ϕ 36mm

Service conditions

Ambient temperature	-40°C to +40°C
Design altitude max.	1000m
Frequency	15 ~ 62 Hz

Address / Tel / Web

No. 1616 Tianzhang, Xi'an, Shaanxi Province, China,
029-84362608
<https://www.xatge.com>

TGE-MOA-39A (YH10W-39)

Polymer-housed surge arresters



Features

- Independently developed and manufactured nonlinear metal oxide varistors with excellent technical performance
- Patent technology: Layered winding surge arrester core for distribution
- Durable HTV material with excellent hydrophobicity, long-term aging resistance, and electrical insulation properties
- Excellent short-circuit characteristics

Product Assets

Catalogs: Arresters IEC & IEEE & GB DH (TGE-MOA-1)

ISO 9001:2015 – Xi'an Tiangong Electric Co., Ltd 2020

ISO 14001:2015 - Xi'an Tiangong Electric Co., Ltd 2020

Application Guide: Metal-oxide Surge Arresters for use on AC systems

Classification

DH Distribution

Dimensions

Height	508mm/ in
Stud Type	M12/ 3/8-16
Weight	3.35kg/ lb

Brief performance data

- Rated voltages (U_r)
39kVr.m.s
- Continuous operating voltage
31.2kVr.m.s
- Nominal discharge current (I_n)
10kAp
- Max. residual voltage 8/20 10kA
107.3kVpeak
- Repetitive charge transfer rating Q_{rs}
0.4C
- Thermal charge transfer rating Q_{th}
1.1C
- TOV capability (With prior duty)
1.20 U_r /0.1s 1.15 U_r /1.1s 1.05 U_r /10.1s 0.95 U_r /1000s
- Short-circuit/ Pressure relief capability
20kAr.m.s
- SSL
230N·m
- Blocks size
φ36mm

Service conditions

Ambient temperature	-40°C to +40°C
Design altitude max.	1000m
Frequency	15 ~ 62 Hz

Address / Tel / Web

No. 1616 Tianzhang, Xi'an, Shaanxi Province, China,
029-84362608
<https://www.xatge.com>

TGE-MOA-42A (YH10W-42)

Polymer-housed surge arresters



Features

- Independently developed and manufactured nonlinear metal oxide varistors with excellent technical performance
- Patent technology: Layered winding surge arrester core for distribution
- Durable HTV material with excellent hydrophobicity, long-term aging resistance, and electrical insulation properties
- Excellent short-circuit characteristics

Product Assets

Catalogs: Arresters IEC & IEEE & GB DH (TGE-MOA-1)

ISO 9001:2015 – Xi'an Tiangong Electric Co., Ltd 2020

ISO 14001:2015 - Xi'an Tiangong Electric Co., Ltd 2020

Application Guide: Metal-oxide Surge Arresters for use on AC systems

Classification

DH Distribution

Dimensions

Height	508mm/ in
Stud Type	M12/ 3/8-16
Weight	3.35kg/ lb

Brief performance data

- Rated voltages (U_r)
42kVr.m.s
- Continuous operating voltage
33.6kVr.m.s
- Nominal discharge current (I_n)
10kAp
- Max. residual voltage 8/20 10kA
115.5kVpeak
- Repetitive charge transfer rating Q_{rs}
0.4C
- Thermal charge transfer rating Q_{th}
1.1C
- TOV capability (With prior duty)
1.20 U_r /0.1s 1.15 U_r /1.1s 1.05 U_r /10.1s 0.95 U_r /1000s
- Short-circuit/ Pressure relief capability
20kAr.m.s
- SSL
230N·m
- Blocks size
 ϕ 36mm

Service conditions

Ambient temperature	-40°C to +40°C
Design altitude max.	1000m
Frequency	15 ~ 62 Hz

Address / Tel / Web

No. 1616 Tianzhang, Xi'an, Shaanxi Province, China,
029-84362608
<https://www.xatge.com>

TGE-MOA-45A (YH10W-45)

Polymer-housed surge arresters



Features

- Independently developed and manufactured nonlinear metal oxide varistors with excellent technical performance
- Patent technology: Layered winding surge arrester core for distribution
- Durable HTV material with excellent hydrophobicity, long-term aging resistance, and electrical insulation properties
- Excellent short-circuit characteristics

Product Assets

Catalogs: Arresters IEC & IEEE & GB DH (TGE-MOA-1)

ISO 9001:2015 – Xi'an Tiangong Electric Co., Ltd 2020

ISO 14001:2015 - Xi'an Tiangong Electric Co., Ltd 2020

Application Guide: Metal-oxide Surge Arresters for use on AC systems

Classification

DH Distribution

Dimensions

Height	508mm/ in
Stud Type	M12/ 3/8-16
Weight	3.35kg/ lb

Brief performance data

- Rated voltages (U_r)
45kVr.m.s
- Continuous operating voltage
36kVr.m.s
- Nominal discharge current (I_n)
10kAp
- Max. residual voltage 8/20 10kA
123.8kVpeak
- Repetitive charge transfer rating Q_{rs}
0.4C
- Thermal charge transfer rating Q_{th}
1.1C
- TOV capability (With prior duty)
1.20 U_r /0.1s 1.15 U_r /1.1s 1.05 U_r /10.1s 0.95 U_r /1000s
- Short-circuit/ Pressure relief capability
20kAr.m.s
- SSL
230N·m
- Blocks size
 ϕ 36mm

Service conditions

Ambient temperature	-40°C to +40°C
Design altitude max.	1000m
Frequency	15 ~ 62 Hz

Address / Tel / Web

No. 1616 Tianzhang, Xi'an, Shaanxi Province, China,
029-84362608
<https://www.xatge.com>