

# CERTIFICATE

Issued to:

Applicant:

MAXGE ELECTRIC TECHNOLOGY CO.,LTD  
No.299 East Changhong Road, Wukang Town  
313200 Deqing County Zhejiang, China

Licensee:

MAXGE ELECTRIC TECHNOLOGY CO.,LTD  
No.299 East Changhong Road, Wukang Town  
313200 Deqing County Zhejiang, China

Product : Air Circuit-Breaker  
Trade name(s) : MAXGE  
Type(s)/model(s) : MGW6-4000

The product and any acceptable variation thereof as specified in the Annex to this certificate and the documents referred to therein.

DEKRA hereby declares that the above-mentioned product has been certified on the basis of:

- a type test according to EN 60947-2:2017, EN 60947-2:2017/A1:2020, IEC 60947-2:2016, IEC 60947-2:2016/AMD1:2019, IEC 60947-5-1:2016 and EN 60947-5-1:2017
- an inspection of the factory location according to CENELEC Operational Document CIG 021
- a DEKRA certification agreement with the number 2165673

DEKRA hereby grants the right to use the KEMA-KEUR certification mark.

The KEMA-KEUR certification mark may be applied to the product as specified in this certificate for the duration and under the conditions of the KEMA-KEUR certification agreement.

This certificate is issued on 29 April 2024 and expires upon withdrawal of one of the above mentioned standards.

Certificate number: 33-139167 REV.1

DEKRA Certification B.V.



B.T.M. Holtus  
Managing Director



Miranda Zhou  
Certification Manager

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COUNCIL





## SPECIFICATION OF THE CERTIFIED PRODUCT

### Product data

|                                                      |                                                                                                                                                                                                            |
|------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product                                              | : Air Circuit-Breaker                                                                                                                                                                                      |
| Trade name(s)                                        | : MAXGE                                                                                                                                                                                                    |
| Type(s)/model(s)                                     | : MGW6-4000                                                                                                                                                                                                |
| Number of poles                                      | : 3P or 4P (N pole with overcurrent protection)                                                                                                                                                            |
| Rated operational voltage (Ue)                       | : 220 / 230 / 240 / 380 / 400 / 415 / 440 Vac                                                                                                                                                              |
| Rated insulation voltage (Ui)                        | : 1000 V for main circuit<br>690 V for control circuit<br>690 V for auxiliary circuit                                                                                                                      |
| Rated impulse withstand voltage (Uimp)               | : 12 kV for main circuit<br>8 kV for control circuit<br>2,5 kV for auxiliary circuit                                                                                                                       |
| Rated frequency                                      | : 50 / 60 Hz                                                                                                                                                                                               |
| Rated current (In)                                   | : 2000, 2500, 2900, 3000, 3200, 3600, 4000 A                                                                                                                                                               |
| Conventional thermal current (Ith)                   | : Equal to In                                                                                                                                                                                              |
| Current rating for four-pole circuit-breakers        | : Equal to In                                                                                                                                                                                              |
| Rated service short-circuit breaking capacity (Ics)  | : 100% Icu                                                                                                                                                                                                 |
| Rated ultimate short-circuit breaking capacity (Icu) | : 100 kA                                                                                                                                                                                                   |
| Rated short-time withstand current (Icw)             | : 100 kA - 1 s                                                                                                                                                                                             |
| Suitable for isolation                               | : Suitable                                                                                                                                                                                                 |
| Selectivity category                                 | : B                                                                                                                                                                                                        |
| Safety distance (screen-circuit breaker)             | : All sides: 0 mm                                                                                                                                                                                          |
| Reference temperature                                | : Independent                                                                                                                                                                                              |
| Ambient temperature                                  | : - 5 °C to 40 °C                                                                                                                                                                                          |
| Method of mounting                                   | : Withdrawable or fixed                                                                                                                                                                                    |
| EMC environment                                      | : A and B                                                                                                                                                                                                  |
| Rated tightening torque for terminals                | : M16 / 70 Nm                                                                                                                                                                                              |
| Line/load terminal Connection                        | : Immaterial<br>Minimum cross-sectional area of conductor:<br>copper busbars, (100 x 5) mm <sup>2</sup> x 3<br>Maximum cross-sectional area of conductor:<br>Copper busbar, (100 x 10) mm <sup>2</sup> x 5 |
| Inverse time delay release                           | : Ir: (0,4 - 1,0) x In, OFF, step 1 A                                                                                                                                                                      |
| Time setting of the inverse time delay release       | : tr: 15 s, 30 s, 60 s, 120 s, 240 s, 480 s, OFF, with tolerance of ± 10% (at 1,5 Ir)<br>tripping time at 2 Ir:<br>7,60 s - 9,28 s (tr = 15 s)<br>243 s - 297 s (tr = 480 s)                               |
| Short time delay release                             | : Isd: (1,5 - 15) x Ir, OFF, step 1 A                                                                                                                                                                      |
| Time setting of the short time delay release         | : tsd: I <sup>2</sup> t off: 0,1 s, 0,2 s, 0,3 s, 0,4 s, with tolerance of ± 10% (min. 40 ms)<br>non-tripping duration stated by the manufacturer: tsd - 40 ms                                             |
| Instantaneous release                                | : li: (2 - 15) x In, OFF, step 1 A                                                                                                                                                                         |
| Making current release (MCR)                         | : 40 kA                                                                                                                                                                                                    |
| Ground fault release                                 | : Ig: (0,2 - 1) x In, OFF, step 1 A,<br>tg: I <sup>2</sup> t off: 0,1 s - 1 s, step 0,1 s, with tolerance of ± 10% (min. 40 ms)                                                                            |
| Shunt release                                        | : 220 - 240 Vac, 380 - 440 Vac, 50 / 60 Hz<br>110 Vdc, 200 - 250 Vdc                                                                                                                                       |
| Under-voltage release                                | : 220 - 250 Vac, 380 - 440 Vac, 50 / 60 Hz                                                                                                                                                                 |

|                                         |                                                                                                                                                                                                                                                             |
|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Closing coil                            | : 220 - 240 Vac, 380 - 440 Vac, 50 / 60 Hz<br>110 Vdc, 200 - 250 Vdc                                                                                                                                                                                        |
| Stored energy motor                     | : 220 - 240 Vac, 380 - 440 Vac, 50 / 60 Hz<br>110 Vdc, 200 - 250 Vdc                                                                                                                                                                                        |
| External supply for overcurrent release | : 220 - 240 Vac, 380 - 440 Vac, 50 / 60 Hz<br>110 Vdc, 200 - 250 Vdc                                                                                                                                                                                        |
| Auxiliary circuits                      | : F10-6<br>5NO5NC<br>AC-15: 3 A at 415 Vac, 5 A at 250 Vac, 50 / 60 Hz<br>DC-13: 0,27 A at 250 Vdc, 0,55 A at 125 Vdc<br>Ui: 690 V, Uimp: 2,5 kV, Ith: 6 A<br>Rated conditional short-circuit current: 1 kA<br>Fuse: Yinrong NT00-6A, 6 A, 120 kA / 500 Vac |

## TESTS

### Test requirements

EN 60947-2:2017  
EN 60947-2:2017/A1:2020  
IEC 60947-2:2016  
IEC 60947-2:2016/AMD1:2019  
IEC 60947-5-1:2016  
EN 60947-5-1:2017

### Test result

The test results are laid down in DEKRA test file 332811500.

### Additional information

Nomenclature breakdown:

MG W6 - 4000 / 4P 4000A D

a b c d e f

a = Manufacturer: 'MG' means MAXGE ELECTRIC TECHNOLOGY CO., LTD

b = Product code: W6

c = Frame size: 4000

d = Pole number: '4P' or '3P'

e = Rated current: 2000A, 2500A, 2900A, 3000A, 3200A, 3600A or 4000A

f = Installation method: 'D' means Drawer, 'F' means Fixation.

The referred test reports are 3328115.50 and 3328120.50.

This certificate replaces certificate No. 33-139167 which we hereby declare invalid.

### Conclusion

The examination proved that all requirements were met.

### Factory location

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