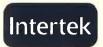


## "ASTA" Test Certifications

S.no	ASTA Rating	Certificate No.
1.	4000A	19217
2.	2500A	19216
3.	1600A	19215
4.	1250A	19214
5.	800A	19213
6.	400A	19212



### of Verification Tests

**LABORATORY REF. NO:** 

34005/8

**APPARATUS:** 

4000A 415V/1000V/8kV (U<sub>n</sub>/U<sub>I</sub>/U<sub>imp</sub>), 50Hz extendable low-voltage power

switchgear and controlgear assembly comprising:

three phase and neutral main and distribution busbars, a protective circuit, one

incoming ACB, one outgoing ACB and seven outgoing MCCB circuits

**DESIGNATION:** 

4000A Switchboard

**MANUFACTURER:** 

Safety Electrical Switchgear Manufacturing (L.L.C), PO Box 3494, Technopark,

Dubai, UAE

**TESTED BY:** 

kA Testing Facility, John Street, New Basford, Nottingham, NG7 7HL, UK

Prof. Ir. Damstra Laboratory, P.O Box 23, 7550 AA, Hengelo, Europalaan 202,

7559 SC Hengelo, The Netherlands

Particle Technology Limited, Station Yard Industrial Estate, Hatton,

Derbyshire, DE65 5DU, UK

Exova (UK) Limited, 6 Coronet Way, Centenary Park, Salford, M50 1RE, UK

DATE(S) OF TESTS: 6<sup>th</sup> December 2012 – 15<sup>th</sup> October 2013

The apparatus, constructed in accordance with the description, drawings and photographs incorporated in this certificate has been subjected to the series of proving tests in accordance with :-

#### IEC 61439-2: Edition 2.0 2011-08

Verifications with reference to the tests listed in Annex D of IEC 61439-1

- Strength of Materials and Parts
- 2: Degree of Protection of Enclosure
- 3: Clearances
- Creepage Distances
- **Protection Against Electric Shock**

- 9: **Dielectric Properties**
- 10: Temperature-Rise Limits
- 11: Short-Circuit Withstand Strength
- **Electromagnetic Compatibility**
- **Mechanical Operation** 13:

Refer to pages A, B, C and D for ratings

The results are shown in the record of Proving Tests attached hereto. The values obtained and the general performance is considered to comply with the above Standard(s) and to justify the ratings assigned by the manufacturer as stated on the ratings page(s). This certificate applies only to the apparatus tested. Responsibility for conformity of any apparatus having the same or other designations rests with the Manufacturer.

This certificate comprises:-

This front sheet, 4 ratings pages plus 122 other pages as detailed on page E

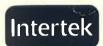
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### of Verification Tests

**LABORATORY REF. NO:** 

34005/7

APPARATUS:

2500A 415V/1000V/8kV (Un/Ui/Uimp), 50Hz extendable low-voltage power

switchgear and controlgear assembly comprising:

three phase and neutral main and distribution busbars, a protective circuit, one

incoming ACB and four outgoing MCCB circuits

**DESIGNATION:** 

2500A Switchboard

MANUFACTURER:

Safety Electrical Switchgear Manufacturing (L.L.C), PO Box 3494, Technopark,

Dubai, UAE

**TESTED BY:** 

kA Testing Facility, John Street, New Basford, Nottingham, NG7 7HL, UK

Prof. Ir. Damstra Laboratory, P.O Box 23, 7550 AA, Hengelo, Europalaan 202,

7559 SC Hengelo, The Netherlands

Particle Technology Limited, Station Yard Industrial Estate, Hatton,

Derbyshire, DE65 5DU, UK

Exova (UK) Limited, 6 Coronet Way, Centenary Park, Salford, M50 1RE, UK

DATE(S) OF TESTS: 5<sup>th</sup> December 2012 – 2<sup>nd</sup> May 2014

The apparatus, constructed in accordance with the description, drawings and photographs incorporated in this certificate has been subjected to the series of proving tests in accordance with :-

#### IEC 61439-2: Edition 2.0 2011-08

Verifications with reference to the tests listed in Annex D of IEC 61439-1

- Strength of Materials and Parts
- Degree of Protection of Enclosure 2:
- 3: Clearances
- Creepage Distances
- Protection Against Electric Shock

- Dielectric Properties
- Temperature-Rise Limits 10:
- Short-Circuit Withstand Strength 11:
- **Electromagnetic Compatibility** 12:
- Mechanical Operation 13:

Refer to pages A, B, C and D for ratings

The results are shown in the record of Proving Tests attached hereto. The values obtained and the general performance is considered to comply with the above Standard(s) and to justify the ratings assigned by the manufacturer as stated on the ratings page(s). This certificate applies only to the apparatus tested. Responsibility for conformity of any apparatus having the same or other designations rests with the Manufacturer.

This certificate comprises:-

This front sheet, 4 ratings pages plus 107 other pages as detailed on page E

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## of Verification Tests

LABORATORY REF. NO:

34005/6

**APPARATUS:** 

1600A 415V/1000V/8kV (Un/Ui/Uimp), 50Hz extendable low-voltage power

switchgear and controlgear assembly comprising:

three phase and neutral main and distribution busbars, a protective circuit, one

incoming ACB and three outgoing MCCB circuits

**DESIGNATION:** 

1600A Switchboard

MANUFACTURER:

Safety Electrical Switchgear Manufacturing (L.L.C), PO Box 3494, Technopark,

Dubai, UAE

**TESTED BY:** 

kA Testing Facility, John Street, New Basford, Nottingham, NG7 7HL, UK

Prof. Ir. Damstra Laboratory, P.O Box 23, 7550 AA, Hengelo, Europalaan 202,

7559 SC Hengelo, The Netherlands

Particle Technology Limited, Station Yard Industrial Estate, Hatton,

Derbyshire, DE65 5DU, UK

Exova (UK) Limited, 6 Coronet Way, Centenary Park, Salford, M50 1RE, UK

DATE(S) OF TESTS: 10<sup>th</sup> December 2012 – 20<sup>th</sup> June 2014

The apparatus, constructed in accordance with the description, drawings and photographs incorporated in this certificate has been subjected to the series of proving tests in accordance with :-

### IEC 61439-2: Edition 2.0 2011-08

Verifications with reference to the tests listed in Annex D of IEC 61439-1

- 1: Strength of Materials and Parts
- Degree of Protection of Enclosure 2:
- 3: Clearances
- 4: Creepage Distances
- Protection Against Electric Shock

- Dielectric Properties
- 10: Temperature-Rise Limits
- Short-Circuit Withstand Strength 11:
- 12: Electromagnetic Compatibility
- 13: **Mechanical Operation**

### Refer to pages A, B, C and D for ratings

The results are shown in the record of Proving Tests attached hereto. The values obtained and the general performance is considered to comply with the above Standard(s) and to justify the ratings assigned by the manufacturer as stated on the ratings page(s). This certificate applies only to the apparatus tested. Responsibility for conformity of any apparatus having the same or other designations rests with the Manufacturer.

This certificate comprises:-

This front sheet, 4 ratings pages plus 107 other pages as detailed on page E

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## of Verification Tests

LABORATORY REF. NO:

34005/13

APPARATUS:

1250A 415V/1000V/8kV (Un/Ui/Uimp), 50Hz extendable low-voltage power

switchgear and controlgear assembly comprising:

three phase and neutral main and distribution busbars, a protective circuit, one

incoming ACB and four outgoing MCCB circuits

**DESIGNATION:** 

1250A Switchboard

MANUFACTURER:

Safety Electrical Switchgear Manufacturing (L.L.C), PO Box 3494, Technopark,

Dubai, UAE

**TESTED BY:** 

kA Testing Facility, John Street, New Basford, Nottingham, NG7 7HL, UK

Prof. Ir. Damstra Laboratory, P.O Box 23, 7550 AA, Hengelo, Europalaan 202,

7559 SC Hengelo, The Netherlands

Particle Technology Limited, Station Yard Industrial Estate, Hatton,

Derbyshire, DE65 5DU, UK

Exova (UK) Limited, 6 Coronet Way, Centenary Park, Salford, M50 1RE, UK

DATE(S) OF TESTS: 30<sup>th</sup> November 2012 – 16<sup>th</sup> April 2014

The apparatus, constructed in accordance with the description, drawings and photographs incorporated in this certificate has been subjected to the series of proving tests in accordance with :-

#### IEC 61439-2: Edition 2.0 2011-08

Verifications with reference to the tests listed in Annex D of IEC 61439-1

- Strength of Materials and Parts
- Degree of Protection of Enclosure
- Clearances
- **Creepage Distances**
- Protection Against Electric Shock

- Dielectric Properties
- Temperature-Rise Limits 10:
- Short-Circuit Withstand Strength 11:
- **Electromagnetic Compatibility** 12:
- Mechanical Operation 13:

Refer to pages A, B, C and D for ratings

The results are shown in the record of Proving Tests attached hereto. The values obtained and the general performance is considered to comply with the above Standard(s) and to justify the ratings assigned by the manufacturer as stated on the ratings page(s). This certificate applies only to the apparatus tested. Responsibility for conformity of any apparatus having the same or other designations rests with the Manufacturer.

This certificate comprises:-

This front sheet, 4 ratings pages plus 109 other pages as detailed on page E

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Certification Manager..... 15th Sestember 2014 Date



### of Verification Tests

LABORATORY REF. NO:

34005/4

APPARATUS:

800A 415V/800V/8kV (U<sub>n</sub>/U<sub>imp</sub>), 50Hz low-voltage power switchgear and

controlgear assembly comprising:

three phase main busbars, a neutral conductor, a protective circuit, one incoming

MCCB and six outgoing MCCB circuits

**DESIGNATION:** 

800A Switchboard

MANUFACTURER:

Safety Electrical Switchgear Manufacturing (L.L.C), PO Box 3494, Technopark,

Dubai, UAE

TESTED BY:

kA Testing Facility, John Street, New Basford, Nottingham, NG7 7HL, UK

Prof. Ir. Damstra Laboratory, P.O Box 23, 7550 AA, Hengelo, Europalaan 202,

7559 SC Hengelo, The Netherlands

Particle Technology Limited, Station Yard Industrial Estate, Hatton,

Derbyshire, DE65 5DU, UK

Exova (UK) Limited, 6 Coronet Way, Centenary Park, Salford, M50 1RE, UK

DATE(S) OF TESTS: 18th December 2012 - 2nd May 2013

The apparatus, constructed in accordance with the description, drawings and photographs incorporated in this certificate has been subjected to the series of proving tests in accordance with :-

#### IEC 61439-2: Edition 2.0 2011-08

Verifications with reference to the tests listed in Annex D of IEC 61439-1

- Strength of Materials and Parts
- Degree of Protection of Enclosure
- Clearances
- Creepage Distances
- Protection Against Electric Shock

- Dielectric Properties
- Temperature-Rise Limits 10:
- 11: Short-Circuit Withstand Strength
- 12: Electromagnetic Compatibility
- 13: Mechanical Operation

#### Refer to pages A, B, C and D for ratings

The results are shown in the record of Proving Tests attached hereto. The values obtained and the general performance is considered to comply with the above Standard(s) and to justify the ratings assigned by the manufacturer as stated on the ratings page(s). This certificate applies only to the apparatus tested. Responsibility for conformity of any apparatus having the same or other designations rests with the Manufacturer.

his certificate comprises:-

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30" JANUARY 2014 Date





## of Verification Tests

LABORATORY REF. NO:

34005/2

**APPARATUS:** 

400A 415V/800V/8kV (U<sub>n</sub>/U<sub>imp</sub>), 50Hz low-voltage power switchgear and

controlgear assembly comprising:

three phase main busbars, a neutral conductor, a protective circuit, one incoming

MCCB and five outgoing MCCB circuits

**DESIGNATION:** 

400A Switchboard

MANUFACTURER:

Safety Electrical Switchgear Manufacturing (L.L.C), PO Box 3494, Technopark,

Dubai, UAE

**TESTED BY:** 

kA Testing Facility, John Street, New Basford, Nottingham, NG7 7HL, UK

Prof. Ir. Damstra Laboratory, P.O Box 23, 7550 AA, Hengelo, Europalaan 202,

7559 SC Hengelo, The Netherlands

Particle Technology Limited, Station Yard Industrial Estate, Hatton,

Derbyshire, DE65 5DU, UK

Exova (UK) Limited, 6 Coronet Way, Centenary Park, Salford, M50 1RE, UK

DATE(S) OF TESTS: 3rd December 2012 – 2nd May 2013

The apparatus, constructed in accordance with the description, drawings and photographs incorporated in this certificate has been subjected to the series of proving tests in accordance with :-

#### IEC 61439-2: Edition 2.0 2011-08

Verifications with reference to the tests listed in Annex D of IEC 61439-1

- 1: Strength of Materials and Parts
- 2: Degree of Protection of Enclosure
- 3: Clearances
- 4: Creepage Distances
- **Protection Against Electric Shock**

- **Dielectric Properties**
- **Temperature-Rise Limits**
- 11: **Short-Circuit Withstand Strength**
- 12: **Electromagnetic Compatibility**
- **Mechanical Operation** 13:

### Refer to pages A, B, C and D for ratings

The results are shown in the record of Proving Tests attached hereto. The values obtained and the general performance is considered to comply with the above Standard(s) and to justify the ratings assigned by the manufacturer as stated on the ratings page(s). This certificate applies only to the apparatus tested. Responsibility for conformity of any apparatus having the same or other designations rests with the Manufacturer.

This certificate comprises:-

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......Certification Manager