

## **Braunschweig und Berlin**

### DATA SHEET 07 TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3048

Manufacturer: Bauer Gear Motor GmbH

Eberhard-Bauer-Straße 30-60, 73734 Esslingen, Germany

for three-phase motor type DXE06LA4-...

#### Ratings and Data

This certificate is valid for the following designs providing the motors of this type differ only negligibly from the sample tested as regards the electrical and thermal stresses:

| Power for cooling tem                 | perature 60°C | <b>:</b> | 0.25    |     |      | kW                |
|---------------------------------------|---------------|----------|---------|-----|------|-------------------|
| Voltage:                              | 110           | 230      | 400     | 500 | 690  | V                 |
| Current:                              | 3.2           | 1.53     | 0.88    | 0.7 | 0.51 | Α                 |
| Power factor:                         |               |          | 0.69    |     |      |                   |
| Frequency:                            |               |          | 50      |     |      | Hz                |
| Speed: (motor)                        |               |          | 1341    |     |      | min <sup>-1</sup> |
| Duty Type:                            |               |          | S1      |     |      |                   |
| I <sub>A</sub> /I <sub>N</sub> ratio: |               |          | 3.3     |     |      |                   |
| Thermal class:                        |               |          | 155 (F) |     |      |                   |
|                                       |               |          |         |     |      |                   |

In addition to the above-mentioned voltages, intermediate values are also permissible. The associated currents are to be converted in the inverse ratio to the voltages. The mains voltage may vary by up to  $\pm$  5 % and the mains frequency by up to  $\pm$  2 % from the rated values, in keeping with ranges A according to IEC 60034-1.

A supplementary data plate on the motors indicates that connecting cables or lines with increased thermal endurance and a temperature limit of at least 80 °C must be used.

## Temperature monitoring

For the selection of a current dependent time-lag protective device, the times  $t_{\text{E}}$  were determined as follows:

| Temperature class:    | T1 | T2 | Т3 |   |
|-----------------------|----|----|----|---|
| Time t <sub>E</sub> : | 23 | 23 | 23 | s |

Test report PTB Ex 13-33234

Zertifizierungssektor Explosionsschutz On behalf of PTB:

Braunschweig, January, 16, 2014



## Braunschweig und Berlin

## DATA SHEET 08 TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3048

Manufacturer: Bauer Gear Motor GmbH

Eberhard-Bauer-Straße 30-60, 73734 Esslingen, Germany

for three-phase motor type DXE06LA4-...

#### Ratings and Data

This certificate is valid for the following designs providing the motors of this type differ only negligibly from the sample tested as regards the electrical and thermal stresses:

| Power for cooling temp                | erature 60° | C:   | 0.25    |      |      | kW |  |  |
|---------------------------------------|-------------|------|---------|------|------|----|--|--|
| Voltage:                              | 110         | 220  | 440     | 500  | 690  | V  |  |  |
| Current:                              | 3.2         | 1.60 | 0.80    | 0.7  | 0.51 | Α  |  |  |
| Power factor:                         |             |      | 0.69    |      |      |    |  |  |
| Frequency:                            |             |      | 60      |      |      | Hz |  |  |
| Speed: (motor)                        |             |      | 1641    | 1641 |      |    |  |  |
| Duty Type:                            | S1          |      |         |      |      |    |  |  |
| I <sub>A</sub> /I <sub>N</sub> ratio: | tio: 3.6    |      |         |      |      |    |  |  |
| Thermal class:                        |             |      | 155 (F) |      |      |    |  |  |
|                                       |             |      |         |      |      |    |  |  |

In addition to the above-mentioned voltages, intermediate values are also permissible. The associated currents are to be converted in the inverse ratio to the voltages. The mains voltage may vary by up to  $\pm$  5 % and the mains frequency by up to  $\pm$  2 % from the rated values, in keeping with ranges A according to IEC 60034-1.

A supplementary data plate on the motors indicates that connecting cables or lines with increased thermal endurance and a temperature limit of at least 80 °C must be used.

### Temperature monitoring

For the selection of a current dependent time-lag protective device, the times  $t_{\text{E}}$  were determined as follows:

Temperature class: T1 T2 T3

Time t<sub>E</sub>: 23 23 23

Test report PTB Ex 13-33234

Zertifizierungssektor Explosionsschutz On behalf of PTB:





## Braunschweig und Berlin

### DATA SHEET 09 TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3048

Manufacturer: Bauer Gear Motor GmbH

Eberhard-Bauer-Straße 30-60, 73734 Esslingen, Germany

for three-phase motor type DXE06LA4-...

#### Ratings and Data

This certificate is valid for the following designs providing the motors of this type differ only negligibly from the sample tested as regards the electrical and thermal stresses:

| Power for cooling tem                 | perature 60°0 | C:   | 0.12       |      | kW                |
|---------------------------------------|---------------|------|------------|------|-------------------|
| Voltage:                              | 110           | 220  | 400        | 500  | V                 |
| Current:                              | 1.51          | 0.75 | 0.42       | 0.33 | Α                 |
| Power factor:                         |               |      | 0.73       |      |                   |
| Frequency:                            |               |      | 50         |      | Hz                |
| Speed: (motor)                        |               |      | 1355       |      | min <sup>-1</sup> |
| Duty Type:                            |               |      | <b>S</b> 1 |      |                   |
| I <sub>A</sub> /I <sub>N</sub> ratio: |               |      | 3.4        |      |                   |
| Thermal class:                        |               |      | 155 (F)    |      |                   |

In addition to the above-mentioned voltages, intermediate values are also permissible. The associated currents are to be converted in the inverse ratio to the voltages. The mains voltage may vary by up to  $\pm$  5 % and the mains frequency by up to  $\pm$  2 % from the rated values, in keeping with ranges A according to IEC 60034-1.

A supplementary data plate on the motors indicates that connecting cables or lines with increased thermal endurance and a temperature limit of at least 80 °C must be used.

### Temperature monitoring

For the selection of a current dependent time-lag protective device, the times  $t_{\text{E}}$  were determined as follows:

Temperature class: T1 T2 T3

Time t<sub>E</sub>: 80 80 80 s

Test report PTB Ex 13-33234

Zertifizierungssektor Explosionsschutz

On behalf of PTBINISCHE

Dr.-Ing. F. Regierungsd



## Braunschweig und Berlin

### DATA SHEET 10 TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3048

Manufacturer: Bauer Gear Motor GmbH

Eberhard-Bauer-Straße 30-60, 73734 Esslingen, Germany

for three-phase motor type DXE06LA4-...

#### Ratings and Data

This certificate is valid for the following designs providing the motors of this type differ only negligibly from the sample tested as regards the electrical and thermal stresses:

| Power for cooling tem                 | perature 60°0 | <b>D</b> : | 0,.12   |      | kW                |
|---------------------------------------|---------------|------------|---------|------|-------------------|
| Current:                              | 110           | 220        | 440     | 500  | V                 |
| Strom:                                | 1.51          | 0.75       | 0.37    | 0.33 | Α                 |
| Power factor:                         |               |            | 0.73    |      |                   |
| Frequency:                            |               |            | 60      |      | Hz                |
| Speed: (motor)                        |               |            | 1655    |      | min <sup>-1</sup> |
| Duty Type:                            |               |            | S1      |      |                   |
| I <sub>A</sub> /I <sub>N</sub> ratio: |               |            | 3.8     |      |                   |
| Thermal class:                        |               |            | 155 (F) |      |                   |

In addition to the above-mentioned voltages, intermediate values are also permissible. The associated currents are to be converted in the inverse ratio to the voltages. The mains voltage may vary by up to ± 5 % and the mains frequency by up to ± 2 % from the rated values, in keeping with ranges A according to IEC 60034-1.

A supplementary data plate on the motors indicates that connecting cables or lines with increased thermal endurance and a temperature limit of at least 80 °C must be used.

### Temperature monitoring

For the selection of a current dependent time-lag protective device, the times t<sub>E</sub> were determined as follows:

Temperature class: T1 T2 T3

Time t<sub>E</sub>: 80 80 80

Test report PTB Ex 13-33234

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Zertifizierungssektor Explosionsschutz

On behalf of PTB



## Braunschweig und Berlin

## DATA SHEET 11 TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3048

Manufacturer: Bauer Gear Motor GmbH

Eberhard-Bauer-Straße 30-60, 73734 Esslingen, Germany

for three-phase motor type DXE06LA4-...

#### Ratings and Data

This certificate is valid for the following designs providing the motors of this type differ only negligibly from the sample tested as regards the electrical and thermal stresses:

| Power for cooling t                   | emperature 60°C | <b>)</b> : | 0.18    |      |      | kW |  |
|---------------------------------------|-----------------|------------|---------|------|------|----|--|
| Current:                              | 110             | 220        | 400     | 500  | 690  | V  |  |
| Strom:                                | 2.3             | 1.15       | 0.63    | 0.51 | 0.37 | Α  |  |
| Power factor:                         | 0.70            |            |         |      |      |    |  |
| Frequency:                            | 50              |            |         |      |      |    |  |
| Speed: (motor)                        | 1360            |            |         |      |      |    |  |
| Duty Type:                            | S1              |            |         |      |      |    |  |
| I <sub>A</sub> /I <sub>N</sub> ratio: | 3.4             |            |         |      |      |    |  |
| Thermal class:                        |                 |            | 155 (F) |      |      |    |  |

In addition to the above-mentioned voltages, intermediate values are also permissible. The associated currents are to be converted in the inverse ratio to the voltages. The mains voltage may vary by up to  $\pm$  5 % and the mains frequency by up to  $\pm$  2 % from the rated values, in keeping with ranges A according to IEC 60034-1.

A supplementary data plate on the motors indicates that connecting cables or lines with increased thermal endurance and a temperature limit of at least 80 °C must be used.

## Temperature monitoring

For the selection of a current dependent time-lag protective device, the times  $t_{\text{E}}$  were determined as follows:

Temperature class: T1 T2 T3

Time t<sub>E</sub>: 39 39 39 s

Test report PTB Ex 13-33234

On behalf of P

Regierungsd

Zertifizierungssektor Explosionsschutz

Braunschweig, January, 16, 2014

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## **Braunschweig und Berlin**

### DATA SHEET 12 TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3048

Manufacturer: Bauer Gear Motor GmbH

Eberhard-Bauer-Straße 30-60, 73734 Esslingen, Germany

for three-phase motor type DXE06LA4-...

#### Ratings and Data

This certificate is valid for the following designs providing the motors of this type differ only negligibly from the sample tested as regards the electrical and thermal stresses:

| Power for cooling ter                 | mperature 60°0 | <b>)</b> : | 0.18    |      |      | kW                |
|---------------------------------------|----------------|------------|---------|------|------|-------------------|
| Current:                              | 110            | 220        | 440     | 500  | 690  | V                 |
| Strom:                                | 2.3            | 1.15       | 0.58    | 0.51 | 0.37 | Α                 |
| Power factor:                         |                |            | 0.70    |      |      |                   |
| Frequency:                            |                |            | 60      |      |      | Hz                |
| Speed: (motor)                        |                |            | 1660    |      |      | min <sup>-1</sup> |
| Duty Type:                            |                |            | S1      |      |      |                   |
| I <sub>A</sub> /I <sub>N</sub> ratio: |                |            | 3.8     |      |      |                   |
| Thermal class:                        |                |            | 155 (F) |      |      |                   |
|                                       |                |            |         |      |      |                   |

In addition to the above-mentioned voltages, intermediate values are also permissible. The associated currents are to be converted in the inverse ratio to the voltages. The mains voltage may vary by up to  $\pm$  5 % and the mains frequency by up to  $\pm$  2 % from the rated values, in keeping with ranges A according to IEC 60034-1.

A supplementary data plate on the motors indicates that connecting cables or lines with increased thermal endurance and a temperature limit of at least 80 °C must be used.

## Temperature monitoring

For the selection of a current dependent time-lag protective device, the times  $t_{\text{E}}$  were determined as follows:

Temperature class: T1 T2 T3

Time  $t_E$ : 39 39 39 s

Test report PTB Ex 13-33234

Zertifizierungssektor Explosionsschutz On behalf of PTB:





## Braunschweig und Berlin

## DATA SHEET 12 TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3049

Manufacturer:

Bauer Gear Motor GmbH, 73734 Esslingen, Germany

for

three-phase asynchronmotor type DXE08MA4-...

### Ratings

This certificate is valid for the following designs providing the motors of this type differ only negligibly from the sample tested as regards the electrical and thermal stresses:

| Power for cooling                     | ı temperatur | e 60 °C: | 0.55    |      |      | kW                |
|---------------------------------------|--------------|----------|---------|------|------|-------------------|
| Voltage:                              | 110          | 230      | 400     | 500  | 690  | V                 |
| Current:                              | 5.8          | 2.8      | 1.60    | 1.28 | 0.93 | Α                 |
| Power factor:                         |              |          | 0.75    |      |      |                   |
| Frequency:                            |              |          | 50      |      |      | Hz                |
| Speed: (motor)                        |              |          | 1395    |      |      | min <sup>-1</sup> |
| Duty Type:                            |              |          | S1      |      |      |                   |
| I <sub>A</sub> /I <sub>N</sub> ratio: |              |          | 4.2     |      |      |                   |
| Thermal class:                        |              |          | F (155) |      |      |                   |

In addition to the above-mentioned voltages, intermediate values are also permissible. The associated currents are to be converted in the inverse ratio to the voltages. The mains voltage may vary by up to  $\pm$  5 % and the mains frequency by up to  $\pm$  2 % from the rated values, in keeping with range A according to IEC 60034-1.

A supplementary data plate on the motors indicates that connecting cables or lines with increased thermal endurance and a temperature limit of at least 80 °C must be used.

## Temperature monitoring

For the selection of a current dependent time-lag protective device, the times  $t_{\text{E}}$  were determined as follows:

Temperature class:

T1

T2

T3

Time t<sub>F</sub>:

16

16

16

S

Test report PTB Ex 13-33099

Zertifizierungssektor Explosionsschutz On behalf of PTB

Braunschweig, August 08, 2013





### Braunschweig und Berlin

#### DATA SHEET 13 TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3049

Manufacturer: Bauer Gear Motor GmbH, 73734 Esslingen, Germany

for three-phase asynchronmotor type DXE08LA4-...

#### Ratings

This certificate is valid for the following designs providing the motors of this type differ only negligibly from the sample tested as regards the electrical and thermal stresses:

| Power for cooling temperature 60 °C:  |     |     | 0.75    |      |      | kW                |
|---------------------------------------|-----|-----|---------|------|------|-------------------|
| Voltage:                              | 110 | 230 | 400     | 500  | 690  | V                 |
| Current:                              | 7.3 | 3.5 | 2.00    | 1.60 | 1.16 | Α                 |
| Power factor:                         |     |     | 0.76    |      |      |                   |
| Frequency:                            |     |     | 50      |      |      | Hz                |
| Speed: (motor)                        |     |     | 1399    |      |      | min <sup>-1</sup> |
| Duty Type:                            |     |     | S1      |      |      |                   |
| I <sub>A</sub> /I <sub>N</sub> ratio: |     |     | 4.6     |      |      |                   |
| Thermal class:                        |     |     | F (155) |      |      |                   |

In addition to the above-mentioned voltages, intermediate values are also permissible. The associated currents are to be converted in the inverse ratio to the voltages. The mains voltage may vary by up to  $\pm$  5 % and the mains frequency by up to  $\pm$  2 % from the rated values, in keeping with range A according to IEC 60034-1.

A supplementary data plate on the motors indicates that connecting cables or lines with increased thermal endurance and a temperature limit of at least 80 °C must be used.

#### Temperature monitoring

For the selection of a current dependent time-lag protective device, the times  $t_{\text{E}}$  were determined as follows:

Temperature class: T1 T2 T3

Time  $t_E$ : 12 12 s

Test report PTB Ex 13-33099

Zertifizierungssektor Explosionsschutz

On behalf of PTB

Dr.-Ing. F. Lienesch Regierungsdirektor



## Braunschweig und Berlin

## DATA SHEET 14 TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3049

Manufacturer:

Bauer Gear Motor GmbH, 73734 Esslingen, Germany

for

three-phase asynchronmotor type DXE08MA4-...

## Ratings

This certificate is valid for the following designs providing the motors of this type differ only negligibly from the sample tested as regards the electrical and thermal stresses:

| Power for cooling                     | temperatur | e 60 °C: | 0.55    |      |      | kW                |
|---------------------------------------|------------|----------|---------|------|------|-------------------|
| Voltage:                              | 110        | 220      | 440     | 500  | 690  | V                 |
| Current:                              | 5.8        | 2.9      | 1.45    | 1.28 | 0.93 | Α                 |
| Power factor:                         |            |          | 0.75    |      |      |                   |
| Frequency:                            |            |          | 60      |      |      | Hz                |
| Speed: (motor)                        |            |          | 1695    |      |      | min <sup>-1</sup> |
| Duty Type:                            |            |          | S1      |      |      |                   |
| I <sub>A</sub> /I <sub>N</sub> ratio: |            |          | 4.6     |      |      |                   |
| Thermal class:                        |            |          | F (155) |      |      |                   |

In addition to the above-mentioned voltages, intermediate values are also permissible. The associated currents are to be converted in the inverse ratio to the voltages. The mains voltage may vary by up to  $\pm$  5 % and the mains frequency by up to  $\pm$  2 % from the rated values, in keeping with range A according to IEC 60034-1.

A supplementary data plate on the motors indicates that connecting cables or lines with increased thermal endurance and a temperature limit of at least 80 °C must be used.

#### Temperature monitoring

For the selection of a current dependent time-lag protective device, the times  $t_{\text{E}}$  were determined as follows:

Temperature class:

T1

T2

T3

Time t<sub>=</sub>:

16

16

16

0

Test report PTB Ex 13-33099

Zertifizierungssektor Explosionsschutz

On behalf of PTB

Braunschweig, August 08, 2013



## Braunschweig und Berlin

## DATA SHEET 15 TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3049

Manufacturer:

Bauer Gear Motor GmbH, 73734 Esslingen, Germany

for

three-phase asynchronmotor type DXE08LA4-...

### Ratings

This certificate is valid for the following designs providing the motors of this type differ only negligibly from the sample tested as regards the electrical and thermal stresses:

| Power for cooling                     | temperatur | e 60 °C: | 0.75    |      |      | kW                |
|---------------------------------------|------------|----------|---------|------|------|-------------------|
| Voltage:                              | 110        | 220      | 440     | 500  | 690  | V                 |
| Current:                              | 7.3        | 3.65     | 1.82    | 1.60 | 1.16 | Α                 |
| Power factor:                         |            |          | 0.76    |      |      |                   |
| Frequency:                            |            |          | 60      |      |      | Hz                |
| Speed: (motor)                        |            |          | 1699    |      |      | min <sup>-1</sup> |
| Duty Type:                            |            |          | S1      |      |      |                   |
| I <sub>A</sub> /I <sub>N</sub> ratio: |            |          | 5.0     |      |      |                   |
| Thermal class:                        |            |          | F (155) |      |      |                   |

In addition to the above-mentioned voltages, intermediate values are also permissible. The associated currents are to be converted in the inverse ratio to the voltages. The mains voltage may vary by up to  $\pm$  5 % and the mains frequency by up to  $\pm$  2 % from the rated values, in keeping with range A according to IEC 60034-1.

A supplementary data plate on the motors indicates that connecting cables or lines with increased thermal endurance and a temperature limit of at least 80 °C must be used.

#### Temperature monitoring

For the selection of a current dependent time-lag protective device, the times  $t_E$  were determined as follows:

Temperature class: T1 T2

Time  $t_E$ : 12 12 12 s

Test report PTB Ex 13-33099

Zertifizierungssektor Explosionsschutz

On behalf of PTB

Braunschweig, August 08, 2013

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## Braunschweig und Berlin

## DATA SHEET 07 TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3050

Manufacturer: Bauer Gear Motor GmbH, 73734 Esslingen, Germany

for three-phase asynchronmotor type DXE09SA4-...

#### Ratings

This certificate is valid for the following designs providing the motors of this type differ only negligibly from the sample tested as regards the electrical and thermal stresses:

| Power for cooling                     | e 60 °C: | 1.1 |         |     | kW   |                   |
|---------------------------------------|----------|-----|---------|-----|------|-------------------|
| Voltage:                              | 110      | 230 | 400     | 500 | 690  | V                 |
| Current:                              | 10.1     | 4.8 | 2.75    | 2.2 | 1.61 | Α                 |
| Power factor:                         |          |     | 0.78    |     |      |                   |
| Frequency:                            |          |     | 50      |     |      | Hz                |
| Speed: (motor)                        |          |     | 1413    |     |      | min <sup>-1</sup> |
| Duty Type:                            |          |     | S1      |     |      |                   |
| I <sub>A</sub> /I <sub>N</sub> ratio: |          |     | 5.1     |     |      |                   |
| Thermal class:                        |          |     | F (155) |     |      |                   |

In addition to the above-mentioned voltages, intermediate values are also permissible. The associated currents are to be converted in the inverse ratio to the voltages. The mains voltage may vary by up to  $\pm$  5 % and the mains frequency by up to  $\pm$  2 % from the rated values, in keeping with range A according to IEC 60034-1.

A supplementary data plate on the motors indicates that connecting cables or lines with increased thermal endurance and a temperature limit of at least 80 °C must be used.

## Temperature monitoring

For the selection of a current dependent time-lag protective device, the times  $t_E$  were determined as follows:

Temperature class: T1 T2 T3

Time t<sub>E</sub>: 13 13 13 s

Test report PTB Ex 13-33100

Zertifizierungssektor Explosionsschutz

On behalf of PTB

Dr.-Ing. F. Lienesch Regierungsdirektor



### Braunschweig und Berlin

## DATA SHEET 08 TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3050

Manufacturer: Bauer Gear Motor GmbH, 73734 Esslingen, Germany

for three-phase asynchronmotor type DXE09LA4-...

### Ratings

This certificate is valid for the following designs providing the motors of this type differ only negligibly from the sample tested as regards the electrical and thermal stresses:

| Power for cooling temperature 60 °C:  |      |     | 1.5     |     |     | kW                |
|---------------------------------------|------|-----|---------|-----|-----|-------------------|
| Voltage:                              | 110  | 230 | 400     | 500 | 690 | V                 |
| Current:                              | 13.2 | 6.3 | 3.6     | 2.9 | 2.1 | Α                 |
| Power factor:                         |      |     | 0.80    |     |     |                   |
| Frequency:                            |      |     | 50      |     |     | Hz                |
| Speed: (motor)                        |      |     | 1410    |     |     | min <sup>-1</sup> |
| Duty Type:                            |      |     | S1      |     |     |                   |
| I <sub>A</sub> /I <sub>N</sub> ratio: |      |     | 5.4     |     |     |                   |
| Thermal class:                        |      |     | F (155) |     |     |                   |

In addition to the above-mentioned voltages, intermediate values are also permissible. The associated currents are to be converted in the inverse ratio to the voltages. The mains voltage may vary by up to  $\pm$  5 % and the mains frequency by up to  $\pm$  2 % from the rated values, in keeping with range A according to IEC 60034-1.

A supplementary data plate on the motors indicates that connecting cables or lines with increased thermal endurance and a temperature limit of at least 80 °C must be used.

## Temperature monitoring

For the selection of a current dependent time-lag protective device, the times  $t_E$  were determined as follows:

Temperature class: T1 T2 T3

Time t<sub>=</sub>: 9 9 9 s

Test report PTB Ex 13-33100

Zertifizierungssektor Explosionsschutz

On behalf of PTB

Dr.-Ing. F. Lienesch Regierungsdirektor



## Braunschweig und Berlin

## DATA SHEET 09 TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3050

Manufacturer:

Bauer Gear Motor GmbH, 73734 Esslingen, Germany

for

three-phase asynchronmotor type DXE09SA4-...

### Ratings

This certificate is valid for the following designs providing the motors of this type differ only negligibly from the sample tested as regards the electrical and thermal stresses:

| Power for cooling temperature 60 °C:  |      |     | 1.1     |     |      | kW                |
|---------------------------------------|------|-----|---------|-----|------|-------------------|
| Voltage:                              | 110  | 220 | 440     | 500 | 690  | V                 |
| Current:                              | 10.1 | 5.0 | 2.5     | 2.2 | 1.61 | Α                 |
| Power factor:                         |      |     | 0.78    |     |      |                   |
| Frequency:                            |      |     | 60      |     |      | Hz                |
| Speed: (motor)                        |      |     | 1713    |     |      | min <sup>-1</sup> |
| Duty Type:                            |      |     | S1      |     |      |                   |
| I <sub>A</sub> /I <sub>N</sub> ratio: |      |     | 5.6     |     |      |                   |
| Thermal class:                        |      |     | F (155) |     |      |                   |
|                                       |      |     |         |     |      |                   |

In addition to the above-mentioned voltages, intermediate values are also permissible. The associated currents are to be converted in the inverse ratio to the voltages. The mains voltage may vary by up to  $\pm$  5 % and the mains frequency by up to  $\pm$  2 % from the rated values, in keeping with range A according to IEC 60034-1.

A supplementary data plate on the motors indicates that connecting cables or lines with increased thermal endurance and a temperature limit of at least 80 °C must be used.

### Temperature monitoring

For the selection of a current dependent time-lag protective device, the times  $t_{\text{E}}$  were determined as follows:

Temperature class: T1 T2 T3 Time  $t_E$ : 13 13 13

Test report PTB Ex 13-33100

Zertifizierungssektor Explosionsschutz On behalf of PTB

Braunschweig, August 08, 2013



### Braunschweig und Berlin

## DATA SHEET 10 TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3050

Manufacturer: Bauer Gear Motor GmbH, 73734 Esslingen, Germany

for three-phase asynchronmotor type DXE09LA4-...

#### Ratings

This certificate is valid for the following designs providing the motors of this type differ only negligibly from the sample tested as regards the electrical and thermal stresses:

| Power for cooling temperature 60 °C:  |      |     | 1.5     |     |     | kW                |
|---------------------------------------|------|-----|---------|-----|-----|-------------------|
| Voltage:                              | 110  | 220 | 440     | 500 | 690 | V                 |
| Current:                              | 13.2 | 6.6 | 3.3     | 2.9 | 2.1 | Α                 |
| Power factor:                         |      |     | 0.80    |     |     |                   |
| Frequency:                            |      |     | 60      |     |     | Hz                |
| Speed: (motor)                        |      |     | 1710    |     |     | min <sup>-1</sup> |
| Duty Type:                            |      |     | S1      |     |     |                   |
| I <sub>A</sub> /I <sub>N</sub> ratio: |      |     | 5.9     |     |     |                   |
| Thermal class:                        |      |     | F (155) |     |     |                   |

In addition to the above-mentioned voltages, intermediate values are also permissible. The associated currents are to be converted in the inverse ratio to the voltages. The mains voltage may vary by up to  $\pm$  5 % and the mains frequency by up to  $\pm$  2 % from the rated values, in keeping with range A according to IEC 60034-1.

A supplementary data plate on the motors indicates that connecting cables or lines with increased thermal endurance and a temperature limit of at least 80 °C must be used.

### Temperature monitoring

For the selection of a current dependent time-lag protective device, the times t<sub>E</sub> were determined as follows:

Temperature class: T1 T2 T3

Time  $t_E$ : 9 9 9

Test report PTB Ex 13-33100

Zertifizierungssektor Explosionsschutz

On behalf of PTB

Dr.-Ing. F. Lienesch Regierungsdirektor



### Braunschweig und Berlin

### DATA SHEET 11 TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3051

Manufacturer: Bauer Gear Motor GmbH, 73734 Esslingen, Germany

for three-phase asynchronmotor type DXE11SA4-...

#### Ratings

This certificate is valid for the following designs providing the motors of this type differ only negligibly from the sample tested as regards the electrical and thermal stresses:

| Power for cooling temperature 60°C:   |      | 2.2 |         |     | kW   |                   |
|---------------------------------------|------|-----|---------|-----|------|-------------------|
| Voltage:                              | 110  | 230 | 400     | 550 | 690  | V                 |
| Current:                              | 18.5 | 8.9 | 5.1     | 4.1 | 2.95 | Α                 |
| Power factor:                         |      |     | 0.82    |     |      |                   |
| Frequency:                            |      |     | 50      |     |      | Hz                |
| Speed: (motor)                        |      |     | 1435    |     |      | min <sup>-1</sup> |
| Duty Type:                            |      |     | S1      |     |      |                   |
| I <sub>A</sub> /I <sub>N</sub> ratio: |      |     | 6.2     |     |      |                   |
| Thermal class:                        |      |     | F (155) |     |      |                   |

In addition to the above-mentioned voltages, intermediate values are also permissible. The associated currents are to be converted in the inverse ratio to the voltages. The mains voltage may vary by up to  $\pm$  5 % and the mains frequency by up to  $\pm$  2 % from the rated values, in keeping with range A according to IEC 60034-1.

A supplementary data plate on the motors indicates that connecting cables or lines with increased thermal endurance and a temperature limit of at least 80 °C must be used.

## Temperature monitoring

For the selection of a current dependent time-lag protective device, the times  $t_{\text{E}}$  were determined as follows:

Temperature class: T1 T2 T3

Time t<sub>E</sub>: 9 9 9 s

Test report PTB Ex 13-33101

Zertifizierungssektor Explosionsschutz

On behalf of PTB

Dr.-Ing. F. Lienesch Regierungsdirektor



### Braunschweig und Berlin

## DATA SHEET 12 TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3051

Manufacturer: B

Bauer Gear Motor GmbH, 73734 Esslingen, Germany

for

three-phase asynchronmotor type DXE11MA4-...

### Ratings

This certificate is valid for the following designs providing the motors of this type differ only negligibly from the sample tested as regards the electrical and thermal stresses:

| Power for cooling temperature 60°C:   |      | 3.0  |         |     | kW   |                   |
|---------------------------------------|------|------|---------|-----|------|-------------------|
| Voltage:                              | 110  | 230  | 400     | 500 | 690  | V                 |
| Current:                              | 23.5 | 11.2 | 6.5     | 5.2 | 3.75 | Α                 |
| Power factor:                         |      |      | 0.85    |     |      |                   |
| Frequency:                            |      |      | 50      |     |      | Hz                |
| Speed: (motor)                        |      |      | 1428    |     |      | min <sup>-1</sup> |
| Duty Type:                            |      |      | S1      |     |      |                   |
| I <sub>A</sub> /I <sub>N</sub> ratio: |      |      | 6.3     |     |      |                   |
| Thermal class:                        |      |      | F (155) |     |      |                   |

In addition to the above-mentioned voltages, intermediate values are also permissible. The associated currents are to be converted in the inverse ratio to the voltages. The mains voltage may vary by up to  $\pm$  5 % and the mains frequency by up to  $\pm$  2 % from the rated values, in keeping with range A according to IEC 60034-1.

A supplementary data plate on the motors indicates that connecting cables or lines with increased thermal endurance and a temperature limit of at least 80 °C must be used.

### Temperature monitoring

For the selection of a current dependent time-lag protective device, the times  $t_E$  were determined as follows:

Temperature class:

T1

T2

T3

Time t<sub>F</sub>:

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Test report PTB Ex 13-33101

Zertifizierungssektor Explosionsschutz

On behalf of PTB

Dr.-Ing. F. Lienesch Regierungsdirektor



### Braunschweig und Berlin

### DATA SHEET 13 TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3051

Manufacturer: Bauer Gear Motor GmbH, 73734 Esslingen, Germany

for three-phase asynchronmotor type DXE11LA4-...

#### Ratings

This certificate is valid for the following designs providing the motors of this type differ only negligibly from the sample tested as regards the electrical and thermal stresses:

| Power for cooling temperature 60 °C:  |      |      | 4.0     |     |     | kW                |
|---------------------------------------|------|------|---------|-----|-----|-------------------|
| Voltage:                              | 110  | 230  | 400     | 500 | 690 | V                 |
| Current:                              | 31.5 | 15.0 | 8.7     | 6.9 | 5.1 | Α                 |
| Power factor:                         |      |      | 0.81    |     |     |                   |
| Frequency: 50                         |      |      |         |     |     | Hz                |
| Speed: (motor) 1445                   |      |      |         |     |     | min <sup>-1</sup> |
| Duty Type:                            |      |      | S1      |     |     |                   |
| I <sub>A</sub> /I <sub>N</sub> ratio: |      |      | 7.8     |     |     |                   |
| Thermal class:                        |      |      | F (155) |     |     |                   |

In addition to the above-mentioned voltages, intermediate values are also permissible. The associated currents are to be converted in the inverse ratio to the voltages. The mains voltage may vary by up to  $\pm$  5 % and the mains frequency by up to  $\pm$  2 % from the rated values, in keeping with range A according to IEC 60034-1.

A supplementary data plate on the motors indicates that connecting cables or lines with increased thermal endurance and a temperature limit of at least 80 °C must be used.

## Temperature monitoring

For the selection of a current dependent time-lag protective device, the times  $t_E$  were determined as follows:

Temperature class: T1 T2 T3

Time  $t_E$ : 7 7 7 s

Test report PTB Ex 13-33101

Zertifizierungssektor Explosionsschutz

On behalf of PTB

Dr.-Ing. F. Lienesch Regierungsdirektor



### Braunschweig und Berlin

#### DATA SHEET 14 TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3051

Manufacturer: Bauer Gear Motor GmbH, 73734 Esslingen, Germany

for three-phase asynchronmotor type DXE11SA4-...

#### Ratings

This certificate is valid for the following designs providing the motors of this type differ only negligibly from the sample tested as regards the electrical and thermal stresses:

| Power for cooling temperature 60 °C:  |      |     | 2.2     |     |      | kW                |
|---------------------------------------|------|-----|---------|-----|------|-------------------|
| Voltage:                              | 110  | 220 | 400     | 500 | 690  | V                 |
| Current:                              | 18.5 | 9.3 | 4.65    | 4.1 | 2.95 | Α                 |
| Power factor:                         |      |     | 0.82    |     |      |                   |
| Frequency:                            |      |     | 60      |     |      | Hz                |
| Speed: (motor)                        |      |     | 1735    |     |      | min <sup>-1</sup> |
| Duty Type:                            |      |     | S1      |     |      |                   |
| I <sub>A</sub> /I <sub>N</sub> ratio: |      |     | 6.8     |     |      |                   |
| Thermal class:                        |      |     | F (155) |     |      |                   |

In addition to the above-mentioned voltages, intermediate values are also permissible. The associated currents are to be converted in the inverse ratio to the voltages. The mains voltage may vary by up to  $\pm$  5 % and the mains frequency by up to  $\pm$  2 % from the rated values, in keeping with range A according to IEC 60034-1.

A supplementary data plate on the motors indicates that connecting cables or lines with increased thermal endurance and a temperature limit of at least 80 °C must be used.

#### Temperature monitoring

For the selection of a current dependent time-lag protective device, the times  $t_E$  were determined as follows:

Temperature class: T1 T2 T3

Time  $t_E$ : 9 9 9

Test report PTB Ex 13-33101

Zertifizierungssektor Explosionsschutz

On behalf of PTB

Dr.-Ing. F. Lienesch Regierungsdirektor



## Braunschweig und Berlin

## DATA SHEET 15 TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3051

Manufacturer:

Bauer Gear Motor GmbH, 73734 Esslingen, Germany

for

three-phase asynchronmotor type DXE11MA4-...

### Ratings

This certificate is valid for the following designs providing the motors of this type differ only negligibly from the sample tested as regards the electrical and thermal stresses:

| Power for cooling temperature 60 °C:  |      |      | 3.0     |     |      | kW                |
|---------------------------------------|------|------|---------|-----|------|-------------------|
| Voltage:                              | 110  | 220  | 440     | 500 | 690  | V                 |
| Current:                              | 23.5 | 11.7 | 5.9     | 5.2 | 3.75 | Α                 |
| Power factor:                         |      |      | 0.85    |     |      |                   |
| Frequency:                            |      |      | 60      |     |      | Hz                |
| Speed: (motor)                        |      |      | 1728    |     |      | min <sup>-1</sup> |
| Duty Type:                            |      |      | S1      |     |      |                   |
| I <sub>A</sub> /I <sub>N</sub> ratio: |      |      | 6.9     |     |      |                   |
| Thermal class:                        |      |      | F (155) |     |      |                   |

In addition to the above-mentioned voltages, intermediate values are also permissible. The associated currents are to be converted in the inverse ratio to the voltages. The mains voltage may vary by up to  $\pm$  5 % and the mains frequency by up to  $\pm$  2 % from the rated values, in keeping with range A according to IEC 60034-1.

A supplementary data plate on the motors indicates that connecting cables or lines with increased thermal endurance and a temperature limit of at least 80 °C must be used.

#### Temperature monitoring

For the selection of a current dependent time-lag protective device, the times  $t_{\text{E}}$  were determined as follows:

Temperature class:

T1

T2

T3

Time t<sub>F</sub>:

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Test report PTB Ex 13-33101

Zertifizierungssektor Explosionsschutz

On behalf of PTB

Braunschweig, August 08, 2013



### Braunschweig und Berlin

## DATA SHEET 16 TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3051

Manufacturer:

Bauer Gear Motor GmbH, 73734 Esslingen, Germany

for

three-phase asynchronmotor type DXE11LA4-...

#### Ratings

This certificate is valid for the following designs providing the motors of this type differ only negligibly from the sample tested as regards the electrical and thermal stresses:

| Power for cooling temperature 60 °C:  |      |      | 4.0     |     |     | kW                |
|---------------------------------------|------|------|---------|-----|-----|-------------------|
| Voltage:                              | 110  | 220  | 440     | 500 | 690 | V                 |
| Current:                              | 31.5 | 15.8 | 7.9     | 6.9 | 5.1 | Α                 |
| Power factor:                         |      |      | 0.81    |     |     |                   |
| Frequency:                            |      |      | 60      |     |     | Hz                |
| Speed: (motor)                        |      |      | 1745    |     |     | min <sup>-1</sup> |
| Duty Type:                            |      |      | S1      |     |     |                   |
| I <sub>A</sub> /I <sub>N</sub> ratio: |      |      | 8.4     |     |     |                   |
| Thermal class:                        |      |      | F (155) |     |     |                   |

In addition to the above-mentioned voltages, intermediate values are also permissible. The associated currents are to be converted in the inverse ratio to the voltages. The mains voltage may vary by up to  $\pm$  5 % and the mains frequency by up to  $\pm$  2 % from the rated values, in keeping with range A according to IEC 60034-1.

A supplementary data plate on the motors indicates that connecting cables or lines with increased thermal endurance and a temperature limit of at least 80 °C must be used.

#### Temperature monitoring

For the selection of a current dependent time-lag protective device, the times t<sub>E</sub> were determined as follows:

Temperature class:

T1

T2

T3

Time t<sub>F</sub>:

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Test report PTB Ex 13-33101

Zertifizierungssektor Explosionsschutz On behalf of PTB Braunschweig, August 08, 2013





## Braunschweig und Berlin

## DATA SHEET 04 TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3052

Manufacturer:

Bauer Gear Motor GmbH, 73734 Esslingen, Germany

for

three-phase asynchronmotor type DXE13LA4-...

### Ratings

This certificate is valid for the following designs providing the motors of this type differ only negligibly from the sample tested as regards the electrical and thermal stresses:

| Power for cooling temperature 60°C:   |      |      | 5.5     |     |     | kW                |
|---------------------------------------|------|------|---------|-----|-----|-------------------|
| Voltage:                              | 110  | 230  | 400     | 550 | 690 | V                 |
| Current:                              | 43.0 | 20.6 | 11.9    | 9.5 | 6.9 | Α                 |
| Power factor:                         |      |      | 0.80    |     |     |                   |
| Frequency:                            |      |      | 50      |     |     | Hz                |
| Speed: (motor)                        |      |      | 1460    |     |     | min <sup>-1</sup> |
| Duty Type:                            |      |      | S1      |     |     |                   |
| I <sub>A</sub> /I <sub>N</sub> ratio: |      |      | 8.1     |     |     |                   |
| Thermal class:                        |      |      | F (155) |     |     |                   |

In addition to the above-mentioned voltages, intermediate values are also permissible. The associated currents are to be converted in the inverse ratio to the voltages. The mains voltage may vary by up to  $\pm$  5 % and the mains frequency by up to  $\pm$  2 % from the rated values, in keeping with range A according to IEC 60034-1.

A supplementary data plate on the motors indicates that connecting cables or lines with increased thermal endurance and a temperature limit of at least 80 °C must be used.

### Temperature monitoring

For the selection of a current dependent time-lag protective device, the times t<sub>E</sub> were determined as follows:

Temperature class:

T1

T2

T3

Time t<sub>E</sub>:

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Test report PTB Ex 13-33102

Zertifizierungssektor Explosionsschutz

On behalf of PTB

Dr.-Ing. F. Lienesch Regierungsdirektor



## Braunschweig und Berlin

## DATA SHEET 05 TO EC-TYPE-EXAMINATION CERTIFICATE PTB 08 ATEX 3052

Manufacturer:

Bauer Gear Motor GmbH, 73734 Esslingen, Germany

for

three-phase asynchronmotor type DXE13LA4-...

### Ratings

This certificate is valid for the following designs providing the motors of this type differ only negligibly from the sample tested as regards the electrical and thermal stresses:

| Power for cooling temperature 60°C: |      |         |   |   | kW  |
|-------------------------------------|------|---------|---|---|---|
| 110                                 | 220  | 440     | 550   | 690   | V   |
| 43.0                                | 21.5 | 10.7    | 9.5   | 6.9   | Α   |
|                                     |      | 0.80    |   |   |   |
|                                     |      | 60      |   |   | Hz  |
|                                     |      | 1760    |   |   | min <sup>-1</sup>   |
|                                     |      | S1      |   |   |   |
|                                     |      | 8.6     |   |   |   |
|                                     |      | F (155) |   |   |   |
|                                     | 110  | 110 220 | 110 220 440<br>43.0 21.5 10.7<br>0.80<br>60<br>1760<br>\$1<br>8.6 | 110 220 440 550<br>43.0 21.5 10.7 9.5<br>0.80<br>60<br>1760<br>\$1<br>8.6 | 110 220 440 550 690<br>43.0 21.5 10.7 9.5 6.9<br>0.80<br>60<br>1760<br>\$1<br>8.6 |

In addition to the above-mentioned voltages, intermediate values are also permissible. The associated currents are to be converted in the inverse ratio to the voltages. The mains voltage may vary by up to  $\pm$  5 % and the mains frequency by up to  $\pm$  2 % from the rated values, in keeping with range A according to IEC 60034-1.

A supplementary data plate on the motors indicates that connecting cables or lines with increased thermal endurance and a temperature limit of at least 80 °C must be used.

#### Temperature monitoring

For the selection of a current dependent time-lag protective device, the times  $t_{\text{E}}$  were determined as follows:

Temperature class:

T1

T2

T3

Time t<sub>F</sub>:

9

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8

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Test report PTB Ex 13-33102

Zertifizierungssektor Explosionsschutz On behalf of PTB

Braunschweig, August 08, 2013