

# 3F3A-160LA-2B35

## MECHANICAL DATA

|                         |                         |
|-------------------------|-------------------------|
| Noise at 50Hz           | 81 dB(A)                |
| Moment of inertia       | 0.0968 kgm <sup>2</sup> |
| Bearing DE              | 6309ZZ                  |
| Bearing NDE             | 6309ZZ                  |
| Bearing lifetime        | 40000 h                 |
| Direction of rotation   | bidirectional           |
| Frame material          | aluminum                |
| Colour                  | RAL 7030                |
| Cooling method          | IC411                   |
| Ambient temperature     | -20 / +40 °C            |
| Altitude above sealevel | 1000 m                  |
| Output                  | 18.5kW                  |
| Speed                   | 2930 rpm                |
| Ins. Class              | F                       |
| Efficiency              | 92,4% IE3               |
| Voltage                 | 400V                    |
| Connection              | D                       |
| F.L. Current            | 32.5A                   |
| Power factor            | 0,89                    |
| Duty                    | S1                      |
| Frequency               | 50 Hz                   |
| IP                      | 55                      |
| Weight                  | 117 kg                  |

## SPECIAL DESIGN

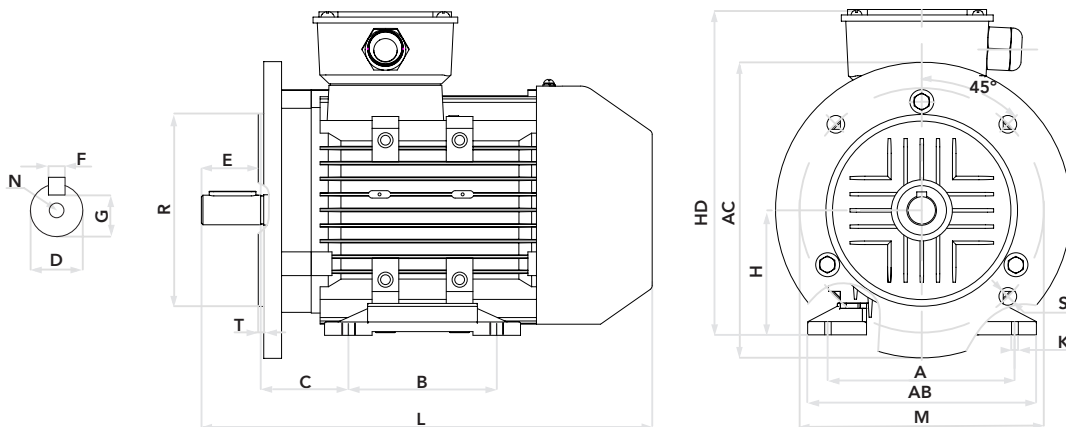
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## ELECTRICAL TEST DATA

|                                                         |           |
|---------------------------------------------------------|-----------|
| Ambient temperature                                     | 16,1 °C   |
| Resistance of winding                                   | 0,178 Ω   |
| Three phase current unbalanced                          | 2,11 %    |
| No load amps                                            | 8,25 A    |
| No load input                                           | 518,01 W  |
| Core loss (Pfe)                                         | 335,03 W  |
| Windage friction loss (Pfw)                             | 158,4 W   |
| Stator winding loss (Pcu1)                              | 357,8 W   |
| Rotor winding loss (Pcu2)                               | 326,8 W   |
| Stray load loss (Ps)                                    | 282 W     |
| Locked rotor current                                    | 280,15 A  |
| Locked rotor current / Full load current                | 8,62      |
| Full load torque                                        | 60,3 Nm   |
| Locked rotor input power at full load                   | 88623,8 W |
| Locked rotor torque                                     | 188,13 Nm |
| Locked rotor torque / Full load torque                  | 3,12      |
| Full load input                                         | 19960 W   |
| Full load current                                       | 31,89 A   |
| Efficiency at 50% load                                  | 92,68 %   |
| Efficiency at 75% load                                  | 93,05 %   |
| Efficiency at 100% load                                 | 92,66 %   |
| Power factor at full load                               | 0,9037    |
| Full load slip                                          | 1,696 %   |
| Full load speed                                         | 2950 rpm  |
| Stator winding temperature rise                         | 53,35 K   |
| Stator phase resistance at Ambient temperature of 95 °C | 0,352 Ω   |
| Sound pressure level                                    | 72 dB(A)  |
| Vibration                                               | 1,5 mm/s  |
| Insulation resistance                                   | 200 MΩ    |
| Bearing temperature                                     | 53,6 °C   |

Efficiency in compliance with IEC 60034-30 Edition 1.0 - 2008, IE3  
Testing method IEC 60034-2-1 Edition 1.0 - 2007-09

## DIMENSIONS 3F3A-160LA-2B35



| Frame size | Number of poles | A   | B   | C   | D  | E   | F  | G  | H   | K    | M   | R   | S      | T | AB  | AC  | HD  | L   | N   |
|------------|-----------------|-----|-----|-----|----|-----|----|----|-----|------|-----|-----|--------|---|-----|-----|-----|-----|-----|
| 160LA      | 02              | 254 | 254 | 108 | 42 | 110 | 12 | 37 | 160 | 14.5 | 300 | 250 | 4-18.5 | 5 | 305 | 330 | 420 | 665 | M16 |

FELSTROM

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