

N° :

Date : 23 févr. 2018

Induction motor

4P LSES 100LR 2,2kW IFT/IE3 B35 380D/400D/415D/690Y-460D 50-60Hz -

Utilisation : Environment Current ; Ambiance Non corrosive ; Finition - ; Zone Non specific ; General applications ; Ambient temperature -16 +40 °C ; Maximum altitude 1000 m.

Motor characteristics : Aluminium alloy housing ; Cast iron DE endshield ; Cast iron NDE endshield.



Motor definition

| | | | |
|----------------------------------|-------|--|--------------------------|
| Protection type | - | Application | General applications |
| Generation code | IFT | Main voltage (V) | 400 |
| Efficiency class | IE3 | Connection | DY |
| Number of network phases | 3 | Motor winding (V) | 380D/400D/415D/690Y-460D |
| Number of speed | | Rated Frequency (Hz) | 50-60 |
| Polarity | 4P | Operation position | IM2001(IMB35) |
| Motor serie | LSES | Index of protection | IP55 |
| Frame size (mm) | 100 | Index of cooling | IC411 |
| Lenght code | LR | Insulation class | F |
| HS rated power (kW) | 2.200 | Finish | - |
| LS rated power (kW) | - | Moment of inertia J (kg.m ²) | 0.0067600 |
| Rated speed (min-1) | 1454 | Motor weight (kg) | 25.8 |
| Maximum mechanical speed (min-1) | 9900 | | |

Common definitions

| | |
|--------------|--|
| Paint shade | RAL6000 |
| Paint system | 1a (1 polyurethane coat 20/30 microns) |

Motor mechanical interface

| | | | |
|------------------------|------------------------|------------------------------|------------------|
| Mounting flange | FF215 | Shaft material type | Steel shaft |
| Drive end shaft type | IEC STANDARD shaft end | Nuance of shaft material | - |
| Diameter DE shaft (mm) | 28j6 | Second shaft extension | - |
| Length DE shaft (mm) | 60 | Diameter NDE shaft (mm) | - |
| DE bearing mounting | Locked | Second shaft end length (mm) | - |
| DE bearing type | DE ball bearing | NDE bearing type | NDE ball bearing |
| DE bearing | 6206 | NDE bearing | 6205 |
| Code Type de graissage | Vie | | |

Motor electrical interface

| | | | |
|--------------------------------------|---------------------|--------------------------------|---|
| Connection network type | Terminal box | Cable type | - |
| Connection network material | Composite materials | Cable gland material | Cable gland not supplied, holes tapped with polyamide plugs |
| Connection network position | A | Main cable gland type | 1xM20 ; With plugs |
| Connection network orientation | up | Principal cable gland position | Right (1) |
| Connection network relative position | 0 | | |

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Motor options

| | | | |
|-------------------------------|---|------------------------------------|---------------|
| Vibration level | A (25µm ; 1.6mm/s ; 2.5m/s ²) | Cover | Plastic cover |
| Balancing type | Half-key (H) | Drip proof cover option | - |
| Impregnation type | < 95% ; -16+40°C (T) | cooling type | - |
| Winding thermal protection | - | Forced ventilation characteristics | - |
| Space heater | - | Encoder type | - |
| Draining plugs position | 6H | Encoder characteristics | - |
| Nameplate material | Aluminium nameplate | Screw material | Steel screw |
| Endshield thermal protection | - | Adaptation for vibration sensor | - |
| Reinforced winding insulation | - | | |

Motor characteristics (on mains supply)

| Main voltage (V) | Rated Frequency (Hz) | HS rated power (kW) | Rated torque (N.m) | Rated speed (min-1) | Rated current (A) | Power factor at 4/4 of the load | Power factor at 3/4 of the load | Power factor at 2/4 of the load | Efficiency at 4/4 (IEC 60 034-2-1) of the load (%) | Efficiency at 3/4 (IEC 60 034-2-1) of the load (%) | Efficiency at 2/4 (IEC 60 034-2-1) of the load (%) |
|------------------|----------------------|---------------------|--------------------|---------------------|-------------------|---------------------------------|---------------------------------|---------------------------------|--|--|--|
| 380 | 50 | 2.200 | 14,4 | 1445.00 | 4.70 | 0.82 | | | 86.70 | | |
| 400 | 50 | 2.200 | 14,4 | 1454 | 4.6 | 0,79 | 0,71 | 0,58 | 87.10 | 87.66 | 86.69 |
| 415 | 50 | 2.200 | 14,4 | 1456.00 | 4.60 | 0.77 | | | 87.27 | | |
| 460 | 60 | - | - | 1760.00 | 4.15 | 0.76 | | | 88.40 | | |

Motor characteristics (on mains supply) 400 V 50 Hz

| | | | |
|---|-------|---------------------------------|-------|
| Starting torque (N.m) | 46.08 | Id / In | 8.05 |
| Average starting torque (N.m) | | Id | 37.03 |
| Maximum torque (N.m) | 54 | Maximum current (A) | |
| Unload maximum starting frequency (d/h) | - | No-load current (A) | 0.00 |
| Rotor locked time (cold) (s) | | Acoustic pressure level (dB(A)) | 47 |

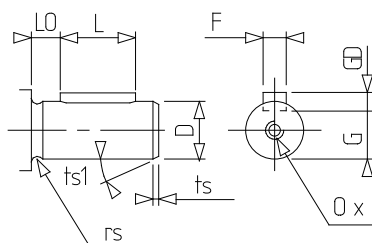
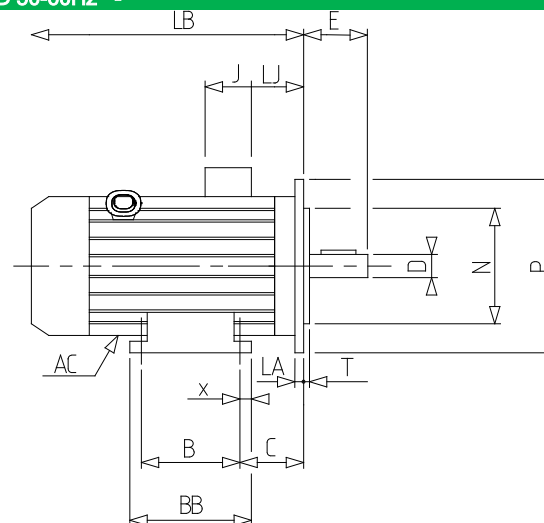
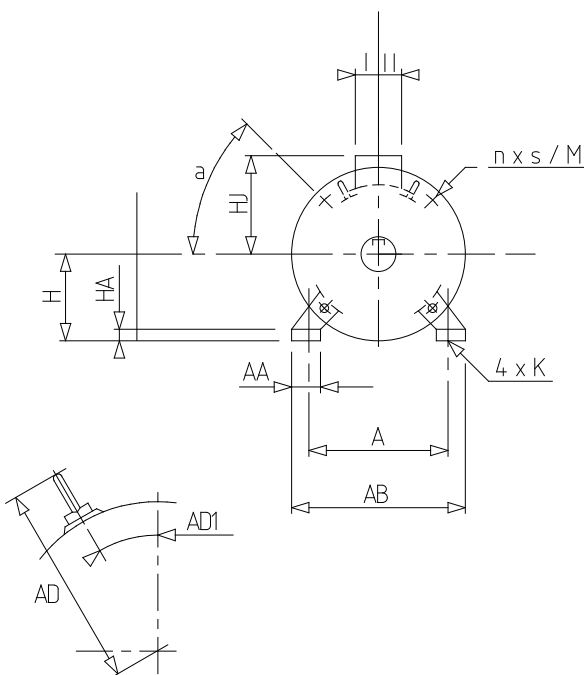
Motor characteristics (supplied via drives)

| Main voltage (V) | Nominal frequency (Hz) | Pn (kW) | Nn (min-1) | In (A) | Cos Phi | Mn @ f/10 (N.m) | Mn @ f/5 (N.m) | Mn @ f/3 (N.m) | Mn @ f/2 (N.m) | Mn (N.m) | Mn @ fx1.7 (N.m) | Mn @ fx2 (N.m) |
|------------------|------------------------|---------|------------|--------|---------|-----------------|----------------|----------------|----------------|----------|------------------|----------------|
| 400 D | 50 | 2.2 | 1454 | 4.77 | 0.79 | 0.00 | 12.96 | 14.40 | 14.40 | 14.400 | 8.28 | 0.00 |

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| | | | |
|-----|--------|-----|------|
| A | 160 | p | 22 |
| a | 45 | rs | 0.5 |
| AA | 40 | S | 14.5 |
| AB | 196 | T | 4 |
| AC | 200.00 | ts | 2 |
| AD1 | 45 | ts1 | 20 |
| B | 140 | x | 12 |
| BB | 165 | | |
| C | 63.0 | | |
| D | 28j6 | | |
| E | 60 | | |
| F | 8 | | |
| G | 24 | | |
| GD | 7 | | |
| H | 100 | | |
| HA | 13 | | |
| HJ | 140.0 | | |
| I | 43 | | |
| II | 43 | | |
| J | 86 | | |
| K | 12 | | |
| L | 50 | | |
| LA | 12 | | |
| LB | 309.0 | | |
| LJ | 26.0 | | |
| LO | 6 | | |
| M | 215 | | |
| N | 180 | | |
| n | 4 | | |
| O | M10 | | |
| P | 250 | | |



Data sheet

LEROY-SOMER[™]

The information contained in this data-sheet is for guidance only and does not form part of any contract. The accuracy cannot be guaranteed as our company have an ongoing process of development and reserve the right to change the specification of their products without notice.
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