| Location: indoor Altitude (meters) Hazardous area Area classificatio Gas group Temp.class Type of Explosic e'/Type 'n') Approving autho Electrical param Starting perform Method of startin Load GD ² (kgm ²) Load GD ² (kgm ²) Load torque-spee Starting time at 1 Running Perfor. Efficiency class Ambient temp./tt | <i>ils</i> n (Safe / Hazardous) /outdoor/deck // details n GAS (Zone 1/Zone 2) n protection (FLP/Type rity for hazardous area neters nance ng) 2 2 d curve ated voltage (sec) | ER TO FURNISH ER TO FURNISH Industrial safe area Indoor 1000 or less N.A. N.A. N.A. N.A. N.A. Not Applicable DOL CUSTOMER TO FURNISH 1.67 CUSTOMER TO FURNISH 1.67 Parabolic TS curve | Customer BBL Enquiry reference No Customer P.O.Number W.O. No. / SAP No. Output kW / pole Frame size Applicable standards (latest edition) Performance: IS/IEC 60034-1 Maintenance IS:900 Dimensions: IS 1231/IS 2223/IS:8223 Vibrations: IS 12075 Noise level: IS 12065 Supply conditions and permissible variations (grid Number of phases Voltage (Volts) and permissible variation Frequency (Hz) and permissible variation Combined variation (absolute sum) Starting current (%FLC) Starting torque (%FLT) Pull out torque (%FLT) | 45 45 45 415 50 | | 4P 10% 5% |
|---|---|---|---|-----------------------------------|-----------------|-----------------|
| Quantity Application Fag no. BBL type tef. Installation deta Area classification (Location: indoor Altitude (meters) Hazardous area Area classification Gas group Femp.class Type of Explosica e'/Type 'n') Approving author Electrical paran Starting perform Motor GD ² (kgm Load GD ² (kgm Load GD ² (kgm Load GD ² (kgm Load GD ² (kgm Conter and the speed Starting time at the Running Perfor. | 3 Phase Induction Motor CUSTOME ills in (Safe / Hazardous) /outdoor/deck details m GAS (Zone 1/Zone 2) n protection (FLP/Type rity for hazardous area neters ance ng)) 2) details details | Industrial safe area Indoor 1000 or less N.A. N.A. N.A. N.A. N.A. Not Applicable DOL CUSTOMER TO FURNISH 1.67 CUSTOMER TO FURNISH | BBL Enquiry reference No Customer P.O.Number W.O. No. / SAP No. Output kW / pole Frame size Applicable standards (latest edition) Performance: IS/IEC 60034-1 Maintenance IS:900 Dimensions: IS 1231/IS 2223/IS:8223 Vibrations: IS 12075 Noise level: IS 12065 Supply conditions and permissible variations (grid Number of phases Voltage (Volts) and permissible variation Frequency (Hz) and permissible variation Combined variation (absolute sum) Starting current (%FLC) Starting torque (%FLT) Pull out torque (%FLT) | <i>d supply</i>) | Three ± ± | 10% |
| Application Fag no. BBL type tef. Installation deta Area classification Location: indoor Altitude (meters) Hazardous area Area classification Gas group Femp.class Fype of Explosica ('Type 'n') Approving author Electrical param Starting perform Motor GD ² (kgm ²) Load GD ² (kgm ²) | <i>ils</i> n (Safe / Hazardous) /outdoor/deck // details n GAS (Zone 1/Zone 2) n protection (FLP/Type rity for hazardous area neters nance ng) 2 2 d curve ated voltage (sec) | Industrial safe area Indoor 1000 or less N.A. N.A. N.A. N.A. N.A. Not Applicable DOL CUSTOMER TO FURNISH 1.67 CUSTOMER TO FURNISH | Customer P.O.Number W.O. No. / SAP No. Output kW / pole Frame size Applicable standards (latest edition) Performance: IS/IEC 60034-1 Maintenance IS:900 Dimensions: IS 1231/IS 2223/IS:8223 Vibrations: IS 12075 Noise level: IS 12065 Supply conditions and permissible variations (grid Number of phases Voltage (Volts) and permissible variation Frequency (Hz) and permissible variation Combined variation (absolute sum) Starting current (%FLC) Starting torque (%FLT) Pull out torque (%FLT) | <i>d supply</i>) | Three ± ± | 10% |
| Application Fag no. BBL type tef. Installation deta Area classification Location: indoor Altitude (meters) Hazardous area Area classification Gas group Femp.class Type of Explosica e'/Type 'n') Approving author Electrical param Starting perform Method of startin Load GD ² (kgm ²) Load GD ² (kgm Load GD ² (kgm Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control Control | <i>ils</i> n (Safe / Hazardous) /outdoor/deck // details n GAS (Zone 1/Zone 2) n protection (FLP/Type rity for hazardous area neters nance ng) 2 2 d curve ated voltage (sec) | Industrial safe area Indoor 1000 or less N.A. N.A. N.A. N.A. N.A. Not Applicable DOL CUSTOMER TO FURNISH 1.67 CUSTOMER TO FURNISH | Output kW / pole Frame size Applicable standards (latest edition) Performance: IS/IEC 60034-1 Maintenance IS:900 Dimensions: IS 1231/IS 2223/IS:8223 Vibrations: IS 12075 Noise level: IS 12065 Supply conditions and permissible variations (griden in the second | <i>d supply</i>) | Three ± ± | 10% |
| Tag no. BEL type tef. Installation deta Area classification Location: indoor Altitude (meters) Hazardous area Area classification Gas group Femp.class Type of Explosice e'/Type 'n') Approving author Electrical param Starting perform Motor GD ² (kgm ²) Load GD ² (kgm ²) Load torque-spect Starting time at re Running Perfore Efficiency class Ambient temp./tt | n (Safe / Hazardous) /outdoor/deck //outdoor/deck//outdoor/de | Indoor 1000 or less N.A. N.A. N.A. N.A. Not Applicable DOL CUSTOMER TO FURNISH 1.67 CUSTOMER TO FURNISH | Frame size Applicable standards (latest edition) Performance: IS/IEC 60034-1 Maintenance IS:900 Dimensions: IS 1231/IS 2223/IS:8223 Vibrations: IS 12075 Noise level: IS 12065 Supply conditions and permissible variations (grid) Number of phases Voltage (Volts) and permissible variation Frequency (Hz) and permissible variation Combined variation (absolute sum) Starting current (%FLC) Starting torque (%FLT) Pull out torque (%FLT) | <i>d supply</i>) | Three ± ± | 10% |
| BBL type tef. Installation deta Area classificatio Location: indoor Altitude (meters) Hazardous area Area classificatio Gas group Temp.class Type of Explosic e'/Type 'n') Approving author Electrical param Starting perform Method of startin Load Speed (rpm Motor GD ² (kgm ²) Load GD ² (kgm ²) Load torque-spee Starting time at 1 Running Perfor. Efficiency class Ambient temp./tu | n (Safe / Hazardous) /outdoor/deck //outdoor/deck//outdoor/de | Indoor 1000 or less N.A. N.A. N.A. N.A. Not Applicable DOL CUSTOMER TO FURNISH 1.67 CUSTOMER TO FURNISH | Frame size Applicable standards (latest edition) Performance: IS/IEC 60034-1 Maintenance IS:900 Dimensions: IS 1231/IS 2223/IS:8223 Vibrations: IS 12075 Noise level: IS 12065 Supply conditions and permissible variations (grid) Number of phases Voltage (Volts) and permissible variation Frequency (Hz) and permissible variation Combined variation (absolute sum) Starting current (%FLC) Starting torque (%FLT) Pull out torque (%FLT) | <i>d supply</i>) | Three ± ± | 10% |
| Installation deta Area classification Location: indoor Altitude (meters) Hazardous area Area classificatio Gas group Temp.class Type of Explosic e'/Type 'n') Approving author Electrical param Starting perform Method of startin Load Speed (rpm Motor GD ² (kgm ²) Load torque-spee Starting time at t Running Perfor. | n (Safe / Hazardous) /outdoor/deck //outdoor/deck//outdoor/dec | Indoor 1000 or less N.A. N.A. N.A. N.A. Not Applicable DOL CUSTOMER TO FURNISH 1.67 CUSTOMER TO FURNISH | Applicable standards (latest edition) Performance: IS/IEC 60034-1 Maintenance IS:900 Dimensions: IS 1231/IS 2223/IS:8223 Vibrations: IS 12075 Noise level: IS 12065 Supply conditions and permissible variations (grid Number of phases Voltage (Volts) and permissible variation Frequency (Hz) and permissible variation Combined variation (absolute sum) Starting current (%FLC) Starting torque (%FLT) Pull out torque (%FLT) | 415 | Three ± ± | 10% |
| Location: indoor Altitude (meters) Hazardous area Area classificatio Gas group Femp.class Type of Explosic e'/Type 'n') Approving autho Electrical param Starting perform Method of startin Load Speed (rpm Motor GD ² (kgm ²) Load GD ² (kgm ²) Load torque-spee Starting time at 1 Running Perfor Efficiency class Ambient temp./te | /outdoor/deck details n GAS (Zone 1/Zone 2) n protection (FLP/Type rity for hazardous area neters nance 12 2) 12 2) 12 22 14 22 14 22 14 22 14 22 14 22 14 22 14 22 14 22 14 22 14 22 14 22 14 24 24 24 24 24 24 24 24 24 2 | Indoor 1000 or less N.A. N.A. N.A. N.A. Not Applicable DOL CUSTOMER TO FURNISH 1.67 CUSTOMER TO FURNISH | Dimensions: IS 1231/IS 2223/IS:8223 Vibrations: IS 12075 Noise level: IS 12065 <i>Supply conditions and permissible variations (grid</i> Number of phases Voltage (Volts) and permissible variation Frequency (Hz) and permissible variation Combined variation (absolute sum) Starting current (%FLC) Starting torque (%FLT) Pull out torque (%FLT) | 415 | ± ± | |
| Gas group Temp.class Type of Explosic (e'/Type 'n') Approving author <i>Electrical param</i> <i>Starting perform</i> Method of startin Load speed (rpn Motor GD ² (kgm ²) Load GD ² (kgm ²) Load GD ² (kgm ²) Load torque-spee Starting time at 1 <i>Running Perfor</i> . Efficiency class Ambient temp./te | details n GAS (Zone 1/Zone 2) n protection (FLP/Type rity for hazardous area neters nance ng) 2 ²) dd curve ated voltage (sec) | 1000 or less N.A. N.A. N.A. N.A. Not Applicable DOL CUSTOMER TO FURNISH 1.67 CUSTOMER TO FURNISH | Vibrations: IS 12075 Noise level: IS 12065 Supply conditions and permissible variations (grid Number of phases Voltage (Volts) and permissible variation Frequency (Hz) and permissible variation Combined variation (absolute sum) Starting current (%FLC) Starting torque (%FLT) Pull out torque (%FLT) | 415 | ± ± | |
| Hazardous area Area classificatio Gas group Temp.class Type of Explosic e'/Type 'n') Approving author Electrical param Starting perform Mothod of startii Load speed (rpm Motor GD ² (kgm Load GD ² (kgm Load GD ² (kgm Load torque-spee Starting time at r Running Perfor Efficiency class Ambient temp./tt | details n GAS (Zone 1/Zone 2) n protection (FLP/Type rity for hazardous area neters ance 12 2) ed curve ated voltage (sec) | N.A. N.A. N.A. N.A. Not Applicable DOL CUSTOMER TO FURNISH 1.67 CUSTOMER TO FURNISH | Noise level: IS 12065 Supply conditions and permissible variations (grid Number of phases Voltage (Volts) and permissible variation Frequency (Hz) and permissible variation Combined variation (absolute sum) Starting current (%FLC) Starting torque (%FLT) Pull out torque (%FLT) | 415 | ± ± | |
| Area classificatio Gas group Temp.class Type of Explosic e/Type 'n') Approving author Electrical param Starting perform Method of startin Load speed (rpm Motor GD ² (kgm ²) Load GD ² (kgm ²) Load torque-spee Starting time at 1 Running Perfor. Efficiency class Ambient temp./te | n GAS (Zone 1/Zone 2) n protection (FLP/Type rity for hazardous area neters nance 12 2 1 2 d curve ated voltage (sec) | N.A. N.A. N.A. Not Applicable DOL CUSTOMER TO FURNISH 1.67 CUSTOMER TO FURNISH | Number of phases Voltage (Volts) and permisible variation Frequency (Hz) and permissible variation Combined variation (absolute sum) Starting current (%FLC) Starting torque (%FLT) Pull out torque (%FLT) | 415 | ± ± | |
| Gas group Temp.class Type of Explosic (e'/Type 'n') Approving author <i>Electrical param</i> <i>Starting perform</i> Method of startin Load speed (rpn Motor GD ² (kgm ²) Load GD ² (kgm ²) Load GD ² (kgm ²) Load torque-spee Starting time at 1 <i>Running Perfor</i> . Efficiency class Ambient temp./te | n protection (FLP/Type rity for hazardous area neters nance ng)) 2) 2) 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | N.A. N.A. N.A. Not Applicable DOL CUSTOMER TO FURNISH 1.67 CUSTOMER TO FURNISH | Voltage (Volts) and permisible variation Frequency (Hz) and permissible variation Combined variation (absolute sum) Starting current (%FLC) Starting torque (%FLT) Pull out torque (%FLT) | | ± ± | |
| Temp.class Type of Explosic (e'/Type 'n') Approving author <i>Electrical paran</i> <i>Starting perform</i> Method of startin Load speed (rpm Motor GD ² (kgm ²) Load GD ² (kgm ²) Load GD ² (kgm ²) Load torque-speet Starting time at r <i>Running Perfor</i> . Efficiency class Ambient temp./te | rity for hazardous area neters nance ng 2 2 2 2 d curve ated voltage (sec) | N.A. N.A. Not Applicable DOL CUSTOMER TO FURNISH 1.67 CUSTOMER TO FURNISH | Frequency (Hz) and permissible variation Combined variation (absolute sum) Starting current (%FLC) Starting torque (%FLT) Pull out torque (%FLT) | | ± | |
| Type of Explosic (e'/Type 'n') Approving author <i>Electrical paran</i> <i>Starting perform</i> Method of startin Load speed (rpm Motor GD ² (kgm ²) Load GD ² (kgm ²) Load GD ² (kgm ²) Load torque-speet Starting time at 1 <i>Running Perfor</i> . Efficiency class Ambient temp./tt | rity for hazardous area neters nance ng 2 2 2 2 d curve ated voltage (sec) | N.A. Not Applicable DOL CUSTOMER TO FURNISH 1.67 CUSTOMER TO FURNISH | Frequency (Hz) and permissible variation Combined variation (absolute sum) Starting current (%FLC) Starting torque (%FLT) Pull out torque (%FLT) | 50 | | :5% |
| e'Type 'n' Approving autho Electrical paran Starting perform Method of startin Load speed (rpm Motor GD ² (kgm ²) Load GD ² (kgm ²) Load torque-spee Starting time at 1 Running Perfor. Efficiency class Ambient temp./tu | rity for hazardous area neters nance ng 2 2 2 2 d curve ated voltage (sec) | Not Applicable DOL CUSTOMER TO FURNISH 1.67 CUSTOMER TO FURNISH | Starting current (%FLC) Starting torque (%FLT) Pull out torque (%FLT) | | ±10% | |
| Approving autho Electrical param Starting perforn Method of startin Load speed (rpm Motor GD ² (kgm ²) Load GD ² (kgm ²) Load torque-speed Starting time at r Running Perfor Efficiency class Ambient temp./tt | ated voltage (sec) | DOL CUSTOMER TO FURNISH 1.67 CUSTOMER TO FURNISH | Starting torque (%FLT) Pull out torque (%FLT) | | | |
| Electrical param Starting perform Method of startin Load speed (rpm Motor GD ² (kgm ²) Load GD ² (kgm ²) Load torque-spee Starting time at 1 Running Perfor. Efficiency class Ambient temp./tt | ated voltage (sec) | DOL CUSTOMER TO FURNISH 1.67 CUSTOMER TO FURNISH | Starting torque (%FLT) Pull out torque (%FLT) | | | |
| Method of startin Load speed (rpm Motor GD ² (kgm ²) Load GD ² (kgm ²) Load torque-spee Starting time at r <i>Running Perfor</i> . Efficiency class Ambient temp./temp. | 1g) 2) 2d curve ated voltage (sec) | CUSTOMER TO FURNISH 1.67 CUSTOMER TO FURNISH | Starting torque (%FLT) Pull out torque (%FLT) | | | |
| Load speed (rpm Motor GD ² (kgm Load GD ² (kgm ²) Load torque-spee Starting time at 1 Running Perfor. Efficiency class Ambient temp./tem. |) 2) ed curve ated voltage (sec) | CUSTOMER TO FURNISH 1.67 CUSTOMER TO FURNISH | Starting torque (%FLT) Pull out torque (%FLT) | | | |
| Motor GD ² (kgm Load GD ² (kgm ²) Load torque-spee Starting time at 1 Running Perfor. Efficiency class Ambient temp./te | 2) ed curve ated voltage (sec) | 1.67 CUSTOMER TO FURNISH | Pull out torque (%FLT) | | 650 | |
| Running Perfor Efficiency class | ed curve ated voltage (sec) | CUSTOMER TO FURNISH | | | 240 | |
| Load torque-spectrum Starting time at r Running Perfor. Efficiency class Ambient temp.//a | ed curve ated voltage (sec) | | X 1 1 1 1 1 1 1 1 1 1 | | 250 | |
| Load torque-spectrum Starting time at r Running Perfor. Efficiency class Ambient temp.//a | ed curve ated voltage (sec) | Parabolic TS curve | Locked rotor withstand time (hot/cold) (sec) | 15 | / | 30 |
| Starting time at 1 Running Perform Efficiency class Ambient temp./to | ated voltage (sec) | | Number of consecutive starts (hot/cold) (nos.) | | 2/3 | |
| Running Perfor Efficiency class Ambient temp./te | U | PLEASE FURNISH ALL ABOVE | provided Load GD2 = Motor GD2 | 1 | | |
| Efficiency class Ambient temp./te | nance | DETAILS | | | | |
| Ambient temp./te | I | 1170 | Dute and design of | ~ | | (01) |
| • | un des tractions of the second | IE2 | Duty and designation | Co | ontinuous | (51) |
| Enclosure | emp.rise by resistance (deg.C) | 50 / 70 | CDF/Equivalent starts per hour/FI | | - | |
| | | TEFC (TOTALLY ENCLOSED FAN COOLED) | Insulation class / utilisation class on DOL | | F/B | |
| Full load current | | 79.1 | Rotor type (Squirrel Cage/ Slip ring) | | Squirrel C | <u> </u> |
| Full load speed (rpm) | | 1470 | Rotor voltage/rotor current (RV/RA) (Volts/Amps) | Not applicable | | |
| Full load torque | | 29.8 | Stator/rotor time constant (min) | | 108/14 | |
| 2 | t FL/0.75FL/0.5FL | 93.1 92.8 91.0 | Power factor at FL/0.75FL/0.5FL | 0.85 | 0.82 | 0.74 |
| Mechanical par | ameters | | 1 | | | |
| Mounting | | B3 | Mounting dimensions | Ret | fer GA dr | U |
| Shaft extention | | Single cylindrical | Direction of rotation viewed from DE | | Clockwi | se |
| Degree of protec | tion | IP 55 | Suitable for bidirectional rotation | | Yes | |
| Method of cooling (TEFC/forced cooled/TESC) | | TEFC (IC 411) | Paint type | Acrylic | | |
| Net weight of motor (kgs.) | | 362 | Paint shade | RAL 5000 | | 0 |
| iver weight of mo | noi (kgs.) | 302 | | | Yes | 10 |
| Bearings | | | Earthing provision (two terminals on stator body) Terminal box | 1 | 1 05 | |
| Coupling (Direct | /flexible/Belt & | | | | | |
| Pulley/Gearbox) | nearbic/beit & | Direct | Terminal box location when viewed from DE | As per GA drawing | | |
| | oulley (OD x width) mm | | Direction of cable entry | As per GA drawing | | awing |
| | • • • | | · · · · | | | |
| Bearings (roller/ | oall/angular contact) | Ball /Ball | Cable size and type(Aluminium) | 2R X | 3C x 50 | 3Q MN |
| Bearing size DE/ | NDE | 6313 C3 / 6213 C3 | Earthing provision (one terminal in TB) | | Yes | |
| Type of lubrication | | SKF LGMT3- GREASE | No of phases/Winding connection/number of terminals | 3 / DELTA / 6 | | |
| Accessories | | | | 1 | | |
| | rs simplex (w/o controller) | | Arrow plate for direction of rotation | | | |
| | r per bearing (w/o controller) | | Double compression glands (main cable) | | | |
| Space heaters - single phase 50z, 230V | | | Double compression glands (Space | | | |
| Thermisters - PTC, 1 number per phase | | | heater/thermisters/RTDs) Brake (Type/voltage/torque) | | | |
| Additional T-Box for Accessories | | | | | | |
| Additional name | plate | | | | | |
| Notes: 1)All performant | e values are subject to IS/IEC 6 | 0034-1 tolerances, unless otherwise s | specified. | | | |
| 2)Performance v | alues are at rated voltage and ra | ted frequency condition and for DOL | starting condition. | | | |
| 3)Motor $GD^2 = \frac{1}{2}$ | load GD ² assumed wherever no | t mentioned. | | | | |
| | | provision of heavy duty relays is man | datory. | | | |
| 5)Kilowatt rating | | | | | | |
| 5)Kilowatt rating | ovided are marked as "YES" | | | | | |
| 5)Kilowatt rating | ovided are marked as "YES" | | | | | |
| 5)Kilowatt rating | ovided are marked as "YES" | | | | | |
| 5)Kilowatt rating | rovided are marked as "YES" | | | | | |
| 5)Kilowatt rating | rovided are marked as "YES" | | | Prepared b | | |
| 5)Kilowatt rating | rovided are marked as "YES" | | | Prepared b Approved Revison | | |

| | Revison | | | |
|------------|-------------------|--|-------|--|
| Project: | Contractor/Client | | Date: | |
| Consultant | Package | | Date. | |