# BALDOR • RELIANCE II

# **Customer information packet** CESSWDM3546T-5

1HP, 1775RPM, 3PH, 60HZ, 143TC, 3522M, TEFC, F1 Class - None Division - Not Applicable

## Specifications

| Frame Material Stainless Ste Frequency 60.00 H Haz Area Class and Group Nor Haz Area Division Not Applicab Motor Letter Type Three Phase Output @ Frequency 1.000 HP @ 60 F Phase Synchronous Speed @ Frequency 1800 RPM @ 60 F Voltage @ Frequency 575.0 V @ 60 F Agency Approvals C  CC Ambient Temperature 40 Auxillary Box No Auxillary Box Polyrex EM (-20F +300 Blower Nor Current @ Voltage Drip Cover No Drip Cove Serior Condense Serior Serio | Enclosure                      | TEFC                      |
|--|--------------------------------|---------------------------|
| Frequency 60.00 ft Haz Area Class and Group Nor Haz Area Division Not Applicab  Motor Letter Type Three Phase  Output @ Frequency 1.000 HP @ 60 H  Phase  Synchronous Speed @ Frequency 1800 RPM @ 60 H  Voltage @ Frequency 575.0 V @ 60 H  Agency Approvals CC  Ambient Temperature 40 Auxillary Box No Auxillary Box No Auxillary Box Rig  Base Indicator Rig  Bearing Grease Type Polyrex EM (-20F + 300)  Blower Nor  Current @ Voltage Design Code  Drip Cover No Drip Cov  Duty Rating Cob  Efficiency @ 100% Load 85.5  Electrically Isolated Bearing Not Electrically Isolated Feedback Device No FEEDBACK Front Shaft Indicator Nor Heater Indicator  | Frame                          | 143TC                     |
| Haz Area Class and Group Haz Area Division Not Applicab Motor Letter Type Three Phas Output @ Frequency 1.000 HP @ 60 H Phase Synchronous Speed @ Frequency 1800 RPM @ 60 H Voltage @ Frequency 575.0 V @ 60 H Agency Approvals CC Ambient Temperature Auxillary Box Auxillary Box No Auxillary Box Rig Bearing Grease Type Polyrex EM (-20F + 300 Blower Current @ Voltage Tip Cover Design Code Drip Cover Duty Rating Con Efficiency @ 100% Load Electrically Isolated Bearing Feedback Device No FEEDBAC Front Shaft Indicator Nor Heater Indicator  | Frame Material                 | Stainless Steel           |
| Haz Area DivisionNot ApplicateMotor Letter TypeThree PhaseOutput @ Frequency1.000 HP @ 60 HPhase1800 RPM @ 60 HSynchronous Speed @ Frequency575.0 V @ 60 HAgency ApprovalsCCAmbient Temperature40 MAuxillary BoxNo Auxillary BoxAuxillary Box Lead TerminationNorBase IndicatorRigBearing Grease TypePolyrex EM (-20F +300BlowerNorCurrent @ Voltage1.300 A @ 575.0Design CodeNor Drip CoverDrip CoverNo Drip CoverDuty RatingCONEfficiency @ 100% Load85.5Electrically Isolated BearingNot Electrically IsolatedFront Shaft IndicatorNorHeater IndicatorNor Heater  | Frequency                      | 60.00 Hz                  |
| Motor Letter TypeThree PhaseOutput @ Frequency1.000 HP @ 60 HPhase1800 RPM @ 60 HSynchronous Speed @ Frequency575.0 V @ 60 HAgency ApprovalsCCCAmbient Temperature40 MAuxillary BoxNo Auxillary BoxAuxillary Box Lead TerminationNorBase IndicatorRigBearing Grease TypePolyrex EM (-20F +300BlowerNorCurrent @ Voltage1.300 A @ 575.0Design CodeNo Drip CovDuty RatingCONEfficiency @ 100% Load85.5Electrically Isolated BearingNot Electrically IsolatedFeedback DeviceNO FEEDBACKFront Shaft IndicatorNorHeater IndicatorNor Heater   | Haz Area Class and Group       | None                      |
| Output @ Frequency1.000 HP @ 60 FebruaryPhase1800 RPM @ 60 FebruaryVoltage @ Frequency575.0 V @ 60 FebruaryAgency ApprovalsContract of the properties of the propert   | Haz Area Division              | Not Applicable            |
| Phase Synchronous Speed @ Frequency Voltage @ Frequency Agency Approvals  CC Ambient Temperature Auxillary Box Auxillary Box No Auxillary Box Auxillary Box Lead Termination Base Indicator Bearing Grease Type Polyrex EM (-20F +300 Blower Nor Current @ Voltage Drip Cover Duty Rating CON Efficiency @ 100% Load Electrically Isolated Bearing Feedback Device Front Shaft Indicator Nor Nor Heater Indicator  | Motor Letter Type              | Three Phase               |
| Synchronous Speed @ Frequency 1800 RPM @ 60 FV Voltage @ Frequency 575.0 V @ 60 FV Agency Approvals CCS Ambient Temperature 40 CCS Ambient Temperature 40 CCS Auxillary Box No Auxillary Box No Auxillary Box Auxillary Box Lead Termination Nor Base Indicator Rig Bearing Grease Type Polyrex EM (-20F +300 Blower Nor Current @ Voltage 1.300 A @ 575.0 Design Code Drip Cover No Drip Cov Duty Rating CON Efficiency @ 100% Load 85.5 Electrically Isolated Bearing Not Electrically Isolated Feedback Device NO FEEDBACK Front Shaft Indicator No Heater Indicator No Heater Indicator  | Output @ Frequency             | 1.000 HP @ 60 HZ          |
| Voltage @ Frequency575.0 V @ 60 FAgency ApprovalsCCSCSAmbient Temperature40 °CAuxillary BoxNo Auxillary BoxAuxillary Box Lead TerminationNorBase IndicatorRigBearing Grease TypePolyrex EM (-20F +300BlowerNorCurrent @ Voltage1.300 A @ 575.0Design CodeNo Drip CoverDrip CoverNo Drip CovDuty RatingCONEfficiency @ 100% Load85.5Electrically Isolated BearingNot Electrically IsolatedFeedback DeviceNO FEEDBACFront Shaft IndicatorNorHeater IndicatorNo Heat  | Phase                          | 3                         |
| Agency Approvals  CS Ambient Temperature  Auxillary Box  Auxillary Box  Auxillary Box Lead Termination  Base Indicator  Bearing Grease Type  Polyrex EM (-20F +300  Blower  Current @ Voltage  Drip Cover  Drip Cover  No Drip Cove  Duty Rating  CON  Efficiency @ 100% Load  Efficiency @ 100% Load  Feedback Device  No FEEDBAC  Front Shaft Indicator  No Heater Indicator   | Synchronous Speed @ Frequency  | 1800 RPM @ 60 HZ          |
| Ambient Temperature 40 °C Auxillary Box No Auxillary Box Auxillary Box Lead Termination Nor Base Indicator Rig Bearing Grease Type Polyrex EM (-20F +300 Blower Nor Current @ Voltage 1.300 A @ 575.0 Design Code Drip Cover No Drip Cov Duty Rating CON Efficiency @ 100% Load 85.5 Electrically Isolated Bearing Not Electrically Isolated Feedback Device NO FEEDBAC Front Shaft Indicator No Heater  | Voltage @ Frequency            | 575.0 V @ 60 HZ           |
| Ambient Temperature40 °CAuxillary BoxNo Auxillary BoxAuxillary Box Lead TerminationNorBase IndicatorRigBearing Grease TypePolyrex EM (-20F +300BlowerNorCurrent @ Voltage1.300 A @ 575.0Design CodeNo Drip CoverDrip CoverNo Drip CoverDuty RatingCONEfficiency @ 100% Load85.5Electrically Isolated BearingNot Electrically IsolatedFeedback DeviceNO FEEDBACFront Shaft IndicatorNorHeater IndicatorNo Heat  | Agency Approvals               | UR                        |
| Auxillary Box No Auxillary Box Auxillary Box Lead Termination Nor Base Indicator Rig Bearing Grease Type Polyrex EM (-20F +300 Blower Nor Current @ Voltage 1.300 A @ 575.0 Design Code Drip Cover No Drip Cov Duty Rating CON Efficiency @ 100% Load 85.5 Electrically Isolated Bearing Not Electrically Isolated Feedback Device NO FEEDBAC Front Shaft Indicator No Heater Indicator  |                                | CSA                       |
| Auxillary Box Lead Termination  Base Indicator  Bearing Grease Type  Polyrex EM (-20F +300  Blower  Current @ Voltage  Design Code  Drip Cover  No Drip Cover  Duty Rating  CON  Efficiency @ 100% Load  Electrically Isolated Bearing  Feedback Device  No FEEDBAC  Front Shaft Indicator  No Heater Indicator  | Ambient Temperature            | 40 °C                     |
| Base Indicator  Bearing Grease Type  Polyrex EM (-20F +300 Blower  Current @ Voltage  1.300 A @ 575.0  Design Code  Drip Cover  No Drip Cover  Duty Rating  Efficiency @ 100% Load  Efficiency @ 100% Load  Electrically Isolated Bearing  Feedback Device  No FEEDBAC Front Shaft Indicator  No Heater Indicator  | Auxillary Box                  | No Auxillary Box          |
| Bearing Grease Type  Blower  Current @ Voltage  1.300 A @ 575.0  Design Code  Drip Cover  Duty Rating  Efficiency @ 100% Load  Electrically Isolated Bearing  Feedback Device  No FEEDBACK  Front Shaft Indicator  No Heater Indicator   | Auxillary Box Lead Termination | None                      |
| Blower Current @ Voltage 1.300 A @ 575.0  Design Code Drip Cover No Drip Cove Duty Rating CON Efficiency @ 100% Load 85.5  Electrically Isolated Bearing Not Electrically Isolated Feedback Device NO FEEDBACK Front Shaft Indicator Nor Heater Indicator  | Base Indicator                 | Rigid                     |
| Current @ Voltage 1.300 A @ 575.0  Design Code  Drip Cover No Drip Cov  Duty Rating CON  Efficiency @ 100% Load 85.5  Electrically Isolated Bearing Not Electrically Isolated  Feedback Device NO FEEDBAC  Front Shaft Indicator No Heater Indicator No Heater   | Bearing Grease Type            | Polyrex EM (-20F +300F)   |
| Design Code  Drip Cover No Drip Cov  Duty Rating CON  Efficiency @ 100% Load 85.5  Electrically Isolated Bearing Not Electrically Isolated Feedback Device NO FEEDBAC  Front Shaft Indicator No Heater Indicator   | Blower                         | None                      |
| Drip CoverNo Drip CoverDuty RatingCONEfficiency @ 100% Load85.5Electrically Isolated BearingNot Electrically IsolatedFeedback DeviceNO FEEDBACKFront Shaft IndicatorNorHeater IndicatorNo Heat   | Current @ Voltage              | 1.300 A @ 575.0 V         |
| Duty Rating CON  Efficiency @ 100% Load 85.5  Electrically Isolated Bearing Not Electrically Isolated  Feedback Device NO FEEDBACK  Front Shaft Indicator Nor Heater Indicator   | Design Code                    | В                         |
| Efficiency @ 100% Load 85.5  Electrically Isolated Bearing Not Electrically Isolated Feedback Device NO FEEDBAC  Front Shaft Indicator Nor  Heater Indicator No Heater   | Drip Cover                     | No Drip Cover             |
| Electrically Isolated BearingNot Electrically IsolatedFeedback DeviceNO FEEDBACKFront Shaft IndicatorNorHeater IndicatorNo Heater  | Duty Rating                    | CONT                      |
| Feedback DeviceNO FEEDBACKFront Shaft IndicatorNorHeater IndicatorNo Heat  | Efficiency @ 100% Load         | 85.5 %                    |
| Front Shaft Indicator Nor Heater Indicator No Heat   | Electrically Isolated Bearing  | Not Electrically Isolated |
| Heater Indicator No Heat   | Feedback Device                | NO FEEDBACK               |
|  | Front Shaft Indicator          | None                      |
|  | Heater Indicator               | No Heater                 |
| High Voltage Full Load Amps 1.3  | High Voltage Full Load Amps    | 1.3 a                     |
| Insulation Class   | Insulation Class               | F                         |
| Inverter Code Inverter Read  | Inverter Code                  | Inverter Ready            |
| KVA Code   | KVA Code                       | М                         |

#### Part detail

| Revision     | D          |
|--------------|------------|
| Туре         | AC         |
| Mech. spec.  | 35VV818    |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 35WGG119   |
| Layout       | 35LYVV818  |
| Eff. date    | 02-19-2024 |
| CD Diagram   | CD0006     |
| Poles        | 04         |
| Leads        | 3#18       |
| Proprietary  | False      |
| Created date | 03-11-2022 |

| Lifting Lugs                  | No Lifting Lugs             |
|-------------------------------|-----------------------------|
| Locked Bearing Indicator      | Locked Bearing              |
| Motor Finish                  | UNPAINTED                   |
| Motor Lead Quantity/Wire Size | 3 @ 18 AWG                  |
| Motor Lead Termination        | Flying Leads                |
| Motor Standards               | NEMA                        |
| Motor Type                    | 3522M                       |
| Mounting Arrangement          | F1                          |
| Number of Poles               | 4                           |
| Overall Length                | 13.42 IN                    |
| Power Factor                  | 70                          |
| Product Family Was            | sh Down All Stainless Steel |
| Pulley End Bearing Type       | Sealed Bearing              |
| Pulley Face Code              | C-Face                      |
| Pulley Shaft Indicator        | Standard                    |
| Rodent Screen                 | None                        |
| Service Factor                | 1.15                        |
| Shaft Diameter                | 0.875 IN                    |
| Shaft Ground Indicator        | No Shaft Grounding          |
| Shaft Rotation                | Reversible                  |
| Shaft Slinger Indicator       | No Slinger                  |
| Speed                         | 1775 rpm                    |
| Speed Code                    | Single Speed                |
| Starting Method               | Direct on line              |
| Thermal Device - Bearing      | None                        |
| Thermal Device - Winding      | None                        |
| Vibration Sensor Indicator    | No Vibration Sensor         |
| Winding Thermal 1             | None                        |
| Winding Thermal 2             | None                        |

## Nameplate

|              |         | NP1     | .951A | .05 |      |   |       |    |   |   |
|--------------|---------|---------|-------|-----|------|---|-------|----|---|---|
| CAT.NO.      | CESSW   | DM354   | 6T-5  |     |      |   |       |    |   |   |
| SPEC.        | 35VV81  | .8G119G | 1     |     |      |   |       |    |   |   |
| НР           | 1       |         |       |     |      |   |       |    |   |   |
| VOLTS        | 575     |         |       |     |      |   |       |    |   |   |
| AMP          | 1.3     |         |       |     |      |   |       |    |   |   |
| RPM          | 1775    |         |       |     |      |   |       |    |   |   |
| FRAME        | 143TC   |         |       | ΗZ  | 60   |   |       | РΗ |   | 3 |
| SER.F.       | 1.15    | со      | DE    | М   | DES  | В | CLASS |    | F |   |
| NEMA-NOM-EFF | 85.5    |         | PF    |     | 70   |   |       |    |   |   |
| RATING       | 40C AM  | 1B-CON  | Γ     |     |      |   |       |    |   |   |
| СС           | 010A    |         |       |     |      |   |       |    |   |   |
| DE           | 6205    |         | C     | DE  | 6203 |   |       |    |   |   |
| ENCL         | TEFC    | SN      |       |     |      |   |       |    |   |   |
|              | SFA 1.4 |         |       |     |      |   |       |    |   |   |
|              |         |         |       |     |      |   |       |    |   |   |
|              |         |         |       |     |      |   |       |    |   |   |

#### **AC Induction Motor Performance Data**

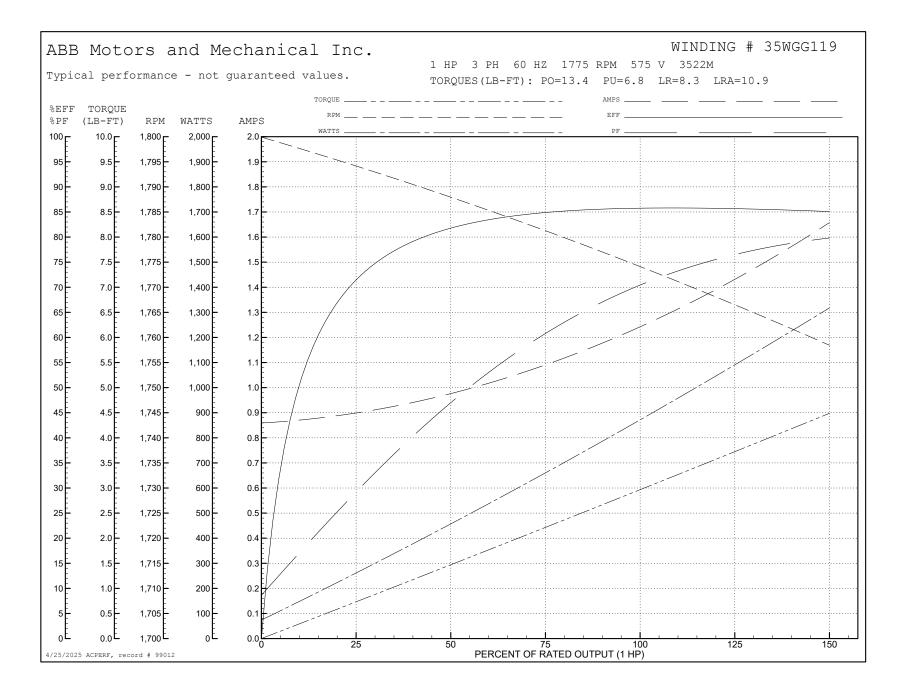
Record # 99012

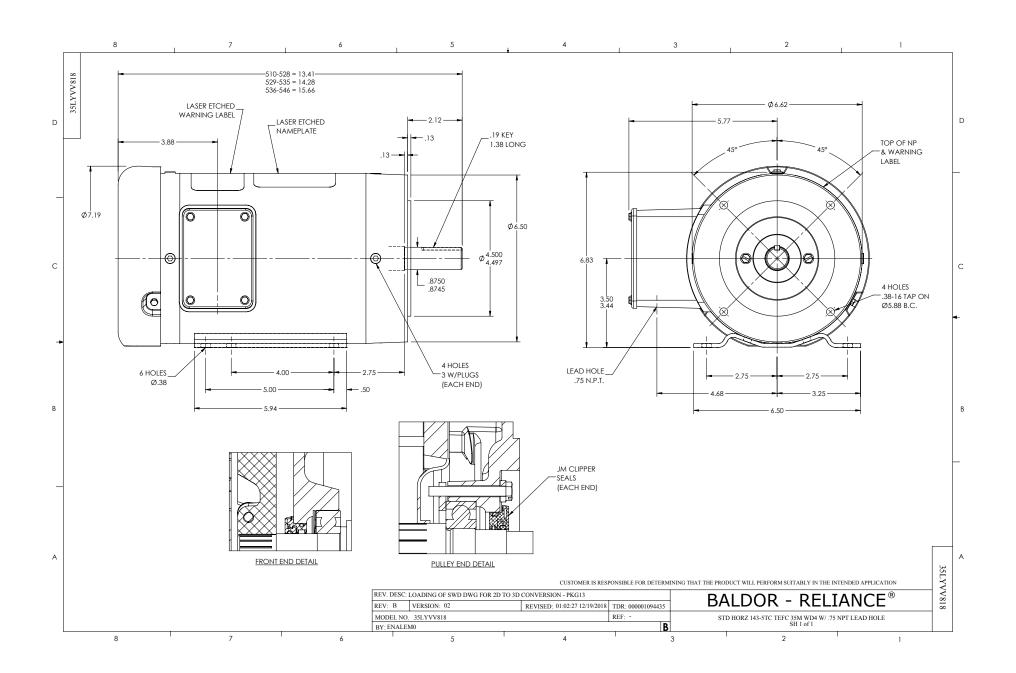
Typical performance - not guaranteed values

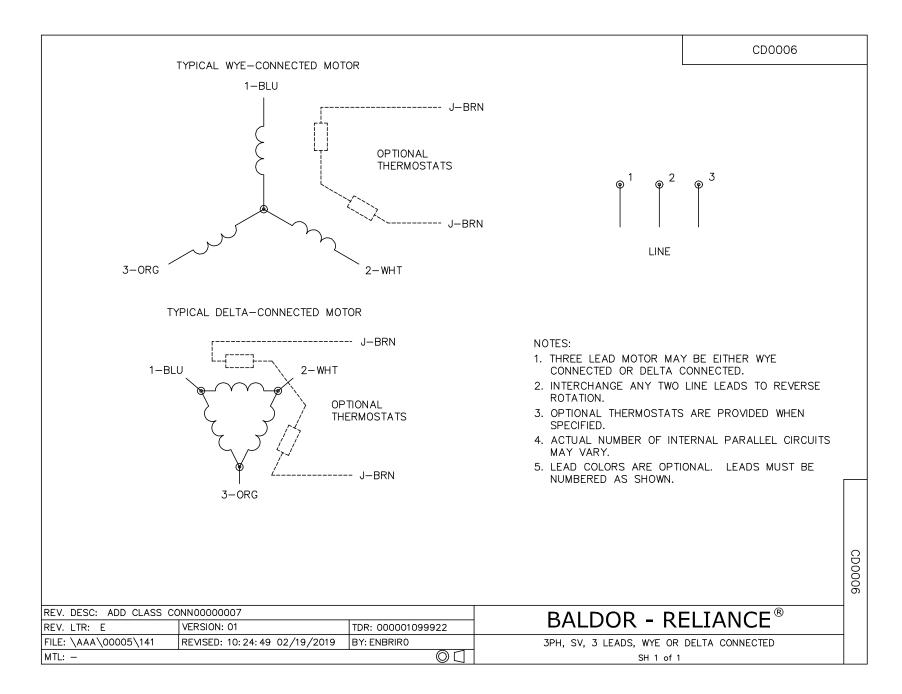
| Winding: 35WGG119-R001 Type: 35 |                   | 522M Enclosure: TEFC |                                       |                |  |
|---------------------------------|-------------------|----------------------|---------------------------------------|----------------|--|
| Nameplate Data                  |                   |                      | 575 V, 60 Hz:<br>Single Voltage Motor |                |  |
| Rated Output (HP)               |                   | 1                    | Full Load Torque                      | 2.99 LB-FT     |  |
| Volts                           |                   | 575                  | Start Configuration                   | direct on line |  |
| Full Load Amps                  |                   | 1.3                  | Breakdown Torque                      | 13.4 LB-FT     |  |
| R.P.M.                          |                   | 1775                 | Pull-up Torque                        | 6.8 LB-FT      |  |
| Hz                              | 60 <b>Phase</b>   | 3                    | Locked-rotor Torque                   | 8.3 LB-FT      |  |
| NEMA Design Code                | B <b>KVA Code</b> | М                    | Starting Current                      | 10.9 A         |  |
| Service Factor (S.F.)           |                   | 1.15                 | No-load Current                       | 0.87 A         |  |
| NEMA Nom. Eff.                  | 85.5 Power Factor | 70                   | Line-line Res. @ 25°C                 | 30.1 Ω         |  |
| Rating - Duty                   | 40                | C AMB-CONT           | Temp. Rise @ Rated Load               | 36°C           |  |
| S.F. Amps                       |                   | 1.4                  | Temp. Rise @ S.F. Load                | 42°C           |  |
|                                 |                   |                      | Locked-rotor Power Factor             | 63.4           |  |
|                                 |                   |                      | Rotor inertia                         | 0.159 lb-ft²   |  |

#### Load Characteristics 575 V, 60 Hz, 1 HP

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 31   | 48   | 61   | 70   | 76   | 80   | 74   |
| Efficiency      | 72.1 | 81.6 | 84.9 | 85.8 | 85.7 | 85   | 85.7 |
| Speed           | 1794 | 1787 | 1781 | 1774 | 1767 | 1758 | 1770 |
| Line amperes    | 0.89 | 0.97 | 1.1  | 1.26 | 1.44 | 1.65 | 1.37 |







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