ABB BALDOR RELIANCE

# Customer information packet

## EM3581T-G

1HP, 1770RPM, 3PH, 60HZ, 143T, 0520M, TEFC, F1
Class - None
Division - Not Applicable


7/9/2026 1:56:41 AM

## Specifications

| | |
|---|---|
| **Enclosure** | TEFC |
| **Frame** | 143T |
| **Frame Material** | Iron |
| **Frequency** | 60.00 Hz |
| **Haz Area Class and Group** | None |
| **Haz Area Division** | Not Applicable |
| **Motor Letter Type** | Three Phase |
| **Output @ Frequency** | 1.000 HP @ 60 HZ |
| **Phase** | 3 |
| **Synchronous Speed @ Frequency** | 1800 RPM @ 60 HZ |
| **Voltage @ Frequency** | 230.0 V @ 60 HZ |
| | 460.0 V @ 60 HZ |
| **Agency Approvals** | CSA EEV |
| | UR |
| | NEMA_PREMIUM |
| | NEMA PREMIUM |
| **Ambient Temperature** | 40 °C |
| **Auxiliary Box** | NO AUXILLARY BOX |
| **Auxiliary Box Lead Termination** | None |
| **Base Indicator** | Rigid |
| **Bearing Grease Type** | Polyrex EM (-20F +300F) |
| **Blower** | None |
| **Current @ Voltage** | 1.600 A @ 460.0 V |
| | 3.200 A @ 208.0 V |
| | 3.200 A @ 230.0 V |
| **Design Code** | B |
| **Drip Cover** | No Drip Cover |
| **Duty Rating** | CONT |
| **Efficiency @ 100% Load** | 85.5 % |
| **Electrically Isolated Bearing** | Not Electrically Isolated |
| **Feedback Device** | NO FEEDBACK |
| **Heater Indicator** | No Heater |

## Part Detail

| | |
|---|---|
| **Revision** | C |
| **Type** | AC |
| **Mech. spec.** | |
| **Base** | |
| **Status** | PRD/A |
| **Elec. spec.** | 05WGX508 |
| **Layout** | 05LYG784 |
| **Eff. date** | 01-02-2026 |
| **CD Diagram** | CD0005 |
| **Poles** | 04 |
| **Leads** | 9#18 |
| **Proprietary** | False |
| **Created date** | 10-28-2021 |

| | |
|---|---|
| **High Voltage Full Load Amps** | 1.6 a |
| **Insulation Class** | H |
| **Inverter Code** | Inverter Ready |
| **KVA Code** | N |
| **Lifting Lugs** | No Lifting Lugs |
| **Locked Bearing Indicator** | Locked Bearing |
| **Motor Lead Termination** | Flying Leads |
| **Motor Standards** | NEMA |
| **Motor Type** | 0520M |
| **Mounting Arrangement** | F1 |
| **Number of Poles** | 4 |
| **Overall Length** | 12.54 IN |
| **Power Factor** | 68 |
| **Product Family** | General Purpose |
| **Pulley Face Code** | Standard |
| **Rodent Screen** | None |
| **Service Factor** | 1.15 |
| **Shaft Diameter** | 0.875 IN |
| **Shaft Ground Indicator** | Shaft Grounding |
| **Shaft Rotation** | Reversible |
| **Speed** | 1770 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**

| NP3441LUA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **CAT.NO.** | EM3581T-G | | | | | | | | |
| **SPEC** | 05-0000-1049 | | | | | | | | |
| **HP** | 1 | | | | | | | | |
| **VOLTS** | 230/460 | | | | | | | | |
| **AMPS** | 3.2/1.6 | | | | | | | | |
| **RPM** | 1770 | | | | | | | | |
| **FRAME** | 143T | **HZ** | 60 | | | **PH** | 3 | | |
| **SF** | 1.15 | **CODE** | N | **DES** | B | **CLASS** | H | | |
| **NEMA NOM. EFF** | 85.5 | **PF** | 68 | | | | | | |
| **RATING** | 40C AMB-CONT | | | | | | | | |
| **CC** | 010A | | | | | | | | |
| **ENCL** | TEFC | **SER** | | | | | | | |
| **DE** | 6205 | **ODE** | 6203 | | | | | | |
| **VPWM INVERTER READY** | SFA 3.5/1.75 | | | | | | | | |
| **CT6-60H(10:1)VT3-60H(20:1** | | | | | | | | | |
| | 50HZ 1HP 190/380V 3.6/1.8A | | | | | | | | SF1.0 |

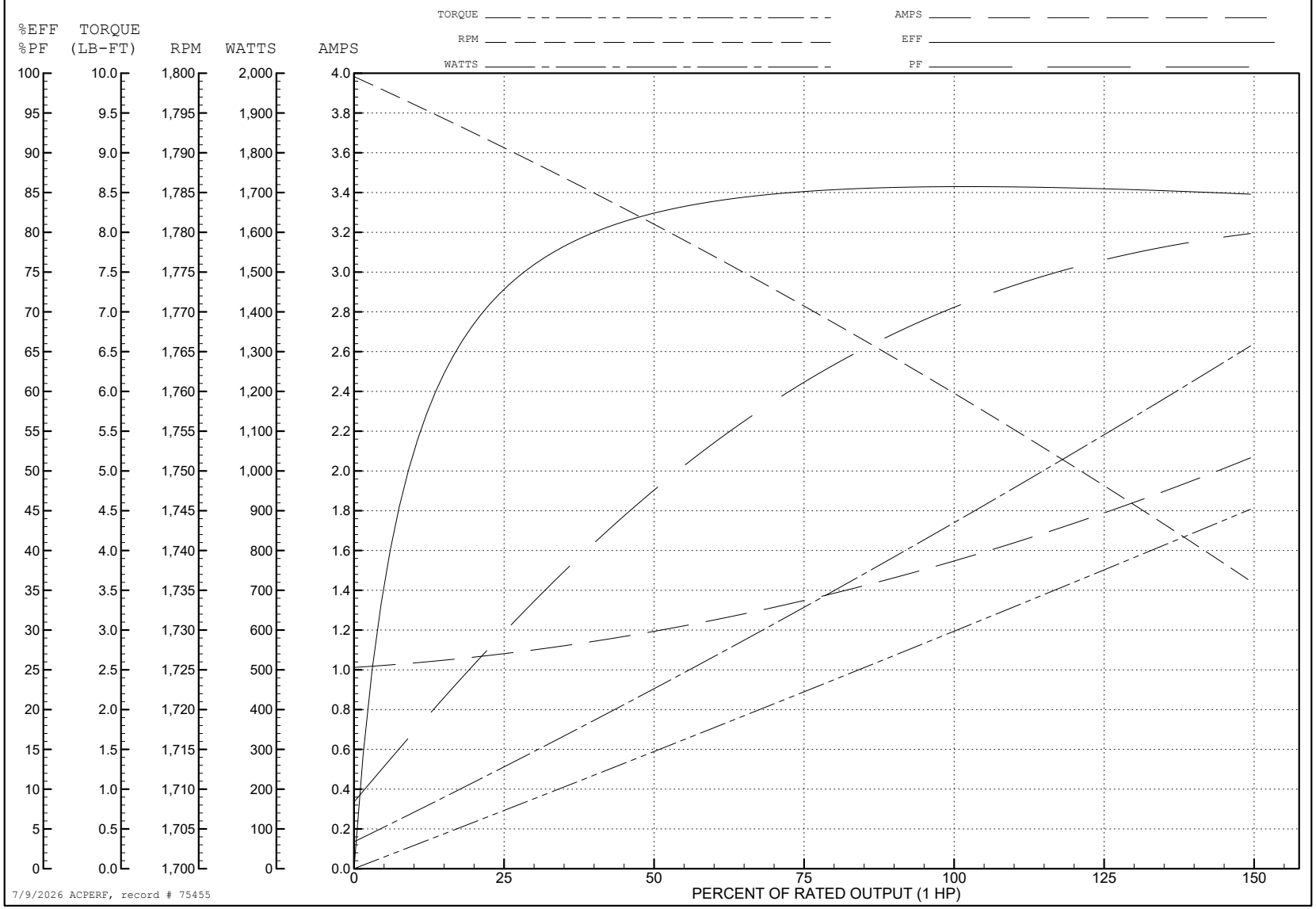
ABB Motors and Mechanical Inc.

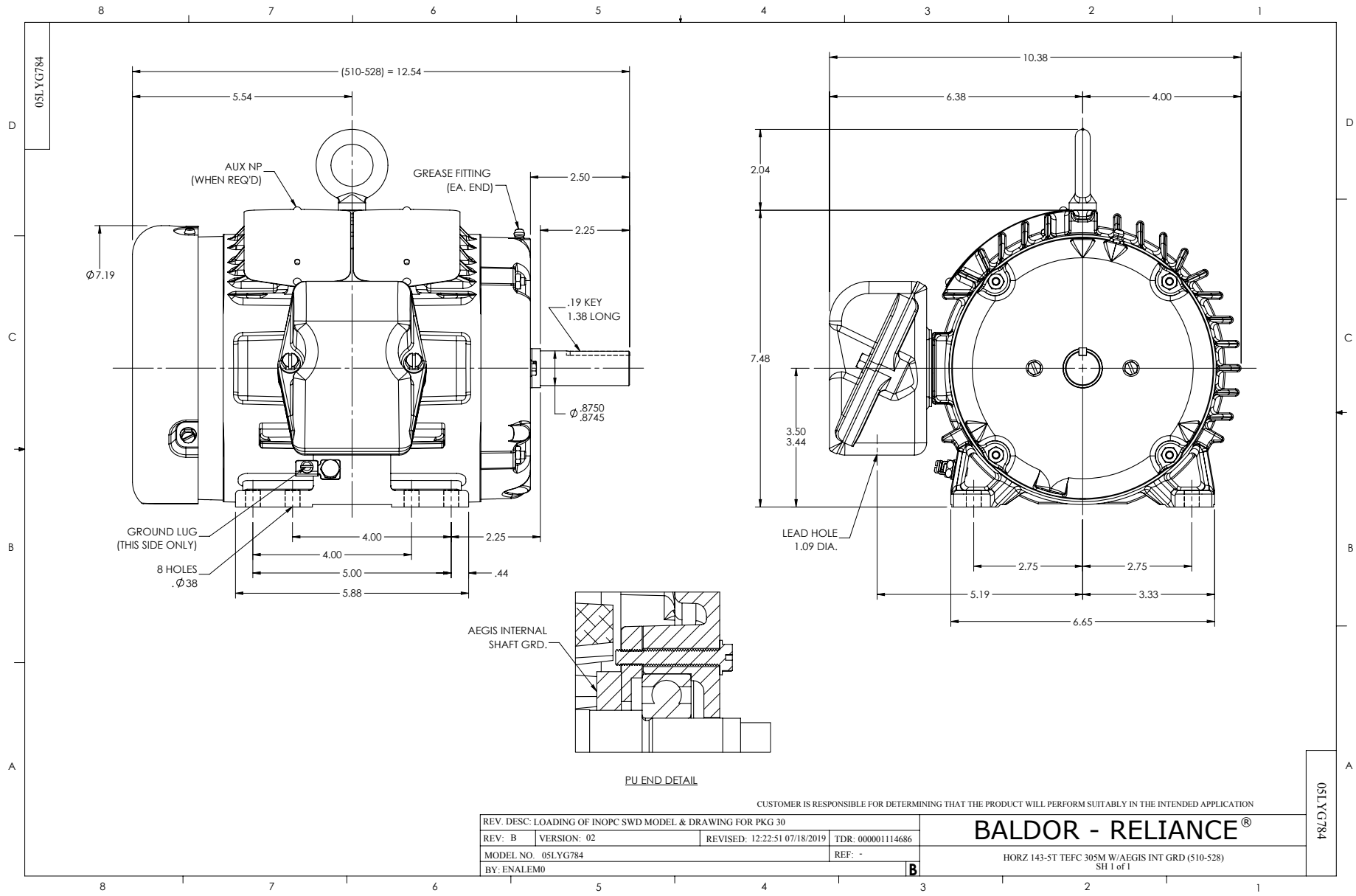
WINDING # 05WGX122

1 HP 3 PH 60 HZ 1760 RPM 460 V 0518M

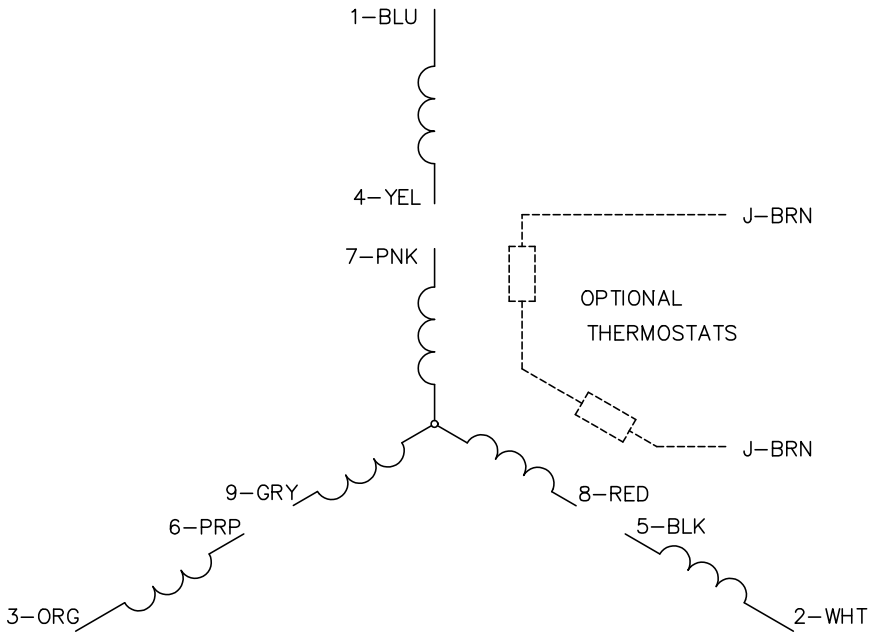
Typical performance - not guaranteed values.

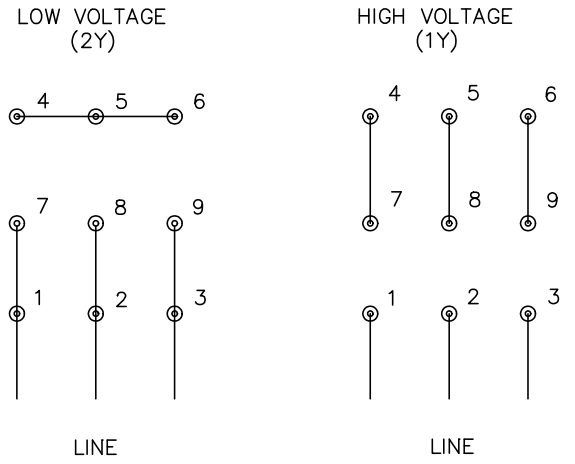
TORQUES(LB-FT): PO=12.7 PU=7.92 LR=8.7 LRA=12.2




05LYG784
(510-528) = 12.54
5.54
AUX NP
(WHEN REQ'D)
GREASE FITTING
(EA. END)
2.50
2.25
Ø7.19
.19 KEY
1.38 LONG
Ø .8750
.8745
GROUND LUG
(THIS SIDE ONLY)
8 HOLES
.Ø38
4.00
2.25
4.00
5.00
.44
5.88
10.38
6.38
4.00
2.04
7.48
3.50
3.44
LEAD HOLE
1.09 DIA.
2.75
2.75
5.19
3.33
6.65
AEGIS INTERNAL
SHAFT GRD.
PU END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOADING OF INOPC SWD MODEL & DRAWING FOR PKG 30
REV: B
VERSION: 02
REVISED: 12:22:51 07/18/2019
TDR: 000001114686
MODEL NO. 05LYG784
REF: -
BY: ENALEM0
B
BALDOR - RELIANCE®
HORZ 143-5T TEFC 305M W/AEGIS INT GRD (510-528)
SH 1 of 1
05LYG784

CD0005




NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0005

| | | | |
|---|---|---|---|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS | | | BALDOR ELECTRIC Co. |
| REV. LTR: E | BY: JLP | REVISED: 01/19/99 10:15 | TDR: 0171435 |
| CD0005 | | FILE: AAA00005140 | MDL: – |
| | | MTL: – | 3PH, DV, 9 LEADS |