ABB BALDOR RELIANCE

# Customer information packet

## EBM3546T-S

1/.75KWHP, 1770 1/MINRPM, 3PH, 60HZ, 143TY, 3
Class - None
Division - Not Applicable

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## Specifications

| | |
|---|---|
| **Enclosure** | TEFC |
| **Frame** | 143TY |
| **Frame Material** | Steel |
| **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** | 460.0 V @ 60 HZ |
| | 230.0 V @ 60 HZ |
| **Agency Approvals** | CE |
| | CURUSEEV |
| | NEMA PREMIUM |
| | UKCA |
| | WEEE |
| **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** | 3.200 A @ 230.0 V |
| | 3.200 A @ 208.0 V |
| | 1.600 A @ 460.0 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 |

## Part Detail

| | |
|---|---|
| **Revision** | F |
| **Type** | AC |
| **Mech. spec.** | 35X162 |
| **Base** | |
| **Status** | PRD/A |
| **Elec. spec.** | 35WGG004 |
| **Layout** | 35LYX162 |
| **Eff. date** | 01-07-2026 |
| **CD Diagram** | CD0005 |
| **Poles** | 04 |
| **Leads** | 9#18 Y |
| **Proprietary** | False |
| **Created date** | 01-10-2022 |

| | |
|---|---|
| **Front Shaft Indicator** | None |
| **Heater Indicator** | No Heater |
| **High Voltage Full Load Amps** | 1.6 a |
| **Insulation Class** | F |
| **Inverter Code** | Inverter Ready |
| **KVA Code** | N |
| **Lifting Lugs** | No Lifting Lugs |
| **Locked Bearing Indicator** | No Locked Bearing |
| **Motor Lead Quantity/Wire Size** | 9 @ 18 AWG |
| **Motor Lead Termination** | Flying Leads |
| **Motor Standards** | NEMA |
| **Motor Type** | 3520M |
| **Mounting Arrangement** | F3 |
| **Number of Poles** | 4 |
| **Overall Length** | 15.40 IN |
| **Power Factor** | 69 |
| **Product Family** | General Purpose |
| **Pulley End Bearing Type** | Ball |
| **Pulley Face Code** | Standard |
| **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** | 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**

| NP2934L | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **CAT.NO.** | EBM3546T-S | | | | | | | | |
| **SPEC.** | 35X162G004G1 | | | | | | | | |
| **HP** | 1/.75KW | | | | | | | | |
| **VOLTS** | 230/460 | | | | | | | | |
| **AMP** | 3.2/1.6 IP44 IC411 23KG | | | | | | | | |
| **R.P.M. (1/MIN)** | 1770 | | | | | | | | |
| **FRAME** | 143TY | **HZ** | 60 | | **PH** | 3 | | | |
| **SER.F.** | 1.15 | **CODE** | N | **DES** | B | **CL** | F | | |
| **NEMA-NOM-EFF** | 85.5 | **PF** | 69 | | | | | | |
| **RATING** | 40C AMB-S1 CONT | | | | | | | | |
| **CC** | 010A | | | | | | | | |
| **DE** | 6205 | **ODE** | 6205 | | | | | | |
| **ENCL** | TEFC | **SN** | | | | | | | |
| | IE3-60HZ-84.8(75%)81.6(50%) | | | | | | | | |

**Parts List**

| Part number | Description | Quantity |
|---|---|---|
| SA402055 | SA 35X162G004G1 | 1.000 ea |
| RA393318 | RA 35X162G004G1 | 1.000 ea |
| 34FN3002B01 | EXTERNAL FAN, PLASTIC, .637/.639 HUB W/ | 1.000 ea |
| NS2512A01 | INSULATOR, CONDUIT BOX X | 1.000 ea |
| 35CB4007 | KOBX,W/PRIMER (WAS REL# 79097-49-C) | 1.000 ea |
| 35GS3023 | GASKET FOR KOBX 35CB4007, CLSD CELL NEOP | 1.000 ea |
| 51XB1016A05 | 10-16X5/16HX WA SL SR TYB (F/S) | 2.000 ea |
| WD4101A13 | STEEL CAPLUG,BP-1 1/8, PLUG D3561S | 1.000 ea |
| 11XT1032G04 | 10-32 X 1/4" GRD SCREW | 1.000 ea |
| HW3001B01 | BRASS CUP WASHER, FOR #10 SCREW | 1.000 ea |
| HW5100A05 | WVY WSHR F/205 & 304 BRGS | 1.000 ea |
| 35EP3123A00 | MASTER DE,205 BRG,.998SH,#26 DRN | 1.000 ea |
| XY1032A02 | 10-32 HEX NUT DIRECTIONAL SERRATION | 4.000 ea |
| HW1001A10 | WASHER, #10 SPLT LK, ZN X | 4.000 ea |
| HW2501D13 | KEY, 3/16 SQ X 1.375 | 1.000 ea |
| BR2003D01 | SPLINED HUB 7/8 W/O KEY, W/SET SCREWS | 1.000 ea |
| 35FN3003A02 | EXFN, PLASTIC, 5.88 OD, .876 ID (REL) | 1.000 ea |
| 35FH4007A01 | FAN COVER FOR SHORT SERIES BRAKE, PRIMER | 1.000 ea |
| 51XW1032A06 | 10-32 X .38, TAPTITE II, HEX WSHR SLTD S | 4.000 ea |
| 35CB4519 | CB LID W/BLACK PRIMER | 1.000 ea |
| 35GS3019A01 | LEXIDE GASKET, FOR KOBX LID 35CB4519 | 1.000 ea |
| 51XW0832A07 | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 4.000 ea |
| WD4006A01 | WIRE JOINT,T&B RB-4 OR RB-44 | 1.000 ea |
| HW2501D13 | KEY, 3/16 SQ X 1.375 | 1.000 ea |
| HA7000A04 | KEY RETAINER 0.625 DIA SHAFTS | 1.000 ea |
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS | 2.000 ea |
| LB1418 | INTEGRAL BRK ADJ LABEL (REL# 41171617A) | 1.000 ea |
| MJ1000A02 | GREASE, POLYREX EM EXXON | 0.050 lb |
| MG1000N49 | MUNSELL 8.5BG 3.57/2.0, GLOSS 30, B/G, | 0.017 ga |
| LB1419 | CONNECTION LABEL | 1.000 ea |
| HA3100A71 | THRUBOLT 10-32 X 9.500 | 4.000 ea |

| | | |
|---|---|---|
| 43BK0200B02 | SSB-6-230/460(205) L HUB | 1.000 ea |
| LB1424A02 | BRAKE VOLT LABEL 230/460V SSB | 1.000 ea |
| LB1624 | COMBINED WARNING LABEL, ISO/ANSI PICTOGR | 1.000 ea |
| LC0005 | CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING | 1.000 ea |
| NP2934L | ALUM SUPER-E UL CE UKCA WEEE CC PREM | 1.000 ea |
| 36PA1001 | PKG GRP, PRINT PK1017A07 | 1.000 ea |
| PK3082 | STYROFOAM CRADLE | 1.000 ea |
| MN416A01 | TAG-INSTAL-MAINT no wire (2500 bx)11/25 | 1.000 ea |
| PE-0000001 | ZRTG PE ASSEMBLY | 1.000 ea |

**AC Induction Motor Performance Data**
Record # 91625
Typical performance - not guaranteed values

| **Winding:** 35WGG004-R001 | **Type:** 3520M | **Enclosure:** TEFC |
|---|---|---|

| **Nameplate Data** | | | | **460 V, 60 Hz: High Voltage Connection** | |
|---|---|---|---|---|---|
| **Rated Output (HP)** | | | 1 | **Full Load Torque** | 2.982 LB-FT |
| **Volts** | | | 230/460 | **Start Configuration** | direct on line |
| **Full Load Amps** | | | 3.2/1.6 | **Breakdown Torque** | 14.6 LB-FT |
| **R.P.M.** | | | 1770 | **Pull-up Torque** | 7.57 LB-FT |
| **Hz** | 60 | **Phase** | 3 | **Locked-rotor Torque** | 9.17 LB-FT |
| **NEMA Design Code** | B | **KVA Code** | N | **Starting Current** | 14.6 A |
| **Service Factor (S.F.)** | | | 1.15 | **No-load Current** | 1.2 A |
| **NEMA Nom. Eff.** | 85.5 | **Power Factor** | 69 | **Line-line Res. @ 25ºC** | 16.049 Ω |
| **Rating - Duty** | | | 40C AMB-CONT | **Temp. Rise @ Rated Load** | 36°C |
| **S.F. Amps** | | | 3.4/1.7 | **Temp. Rise @ S.F. Load** | 41°C |
| | | | | **Locked-rotor Power Factor** | 61.549 |
| | | | | **Rotor inertia** | 0.144 lb-ft² |

**Load Characteristics 460 V, 60 Hz, 1 HP**

| **% of Rated Load** | **25** | **50** | **75** | **100** | **125** | **150** | **S.F.** |
|---|---|---|---|---|---|---|---|
| **Power Factor** | 29 | 45 | 58 | 67 | 73 | 78 | 71 |
| **Efficiency** | 71.1 | 81.2 | 84.7 | 85.8 | 86 | 85.6 | 85.9 |
| **Speed** | 1794 | 1787.3 | 1781.1 | 1774.3 | 1767.4 | 1759.4 | 1770 |
| **Line amperes** | 1.22 | 1.31 | 1.46 | 1.64 | 1.86 | 2.11 | 1.77 |

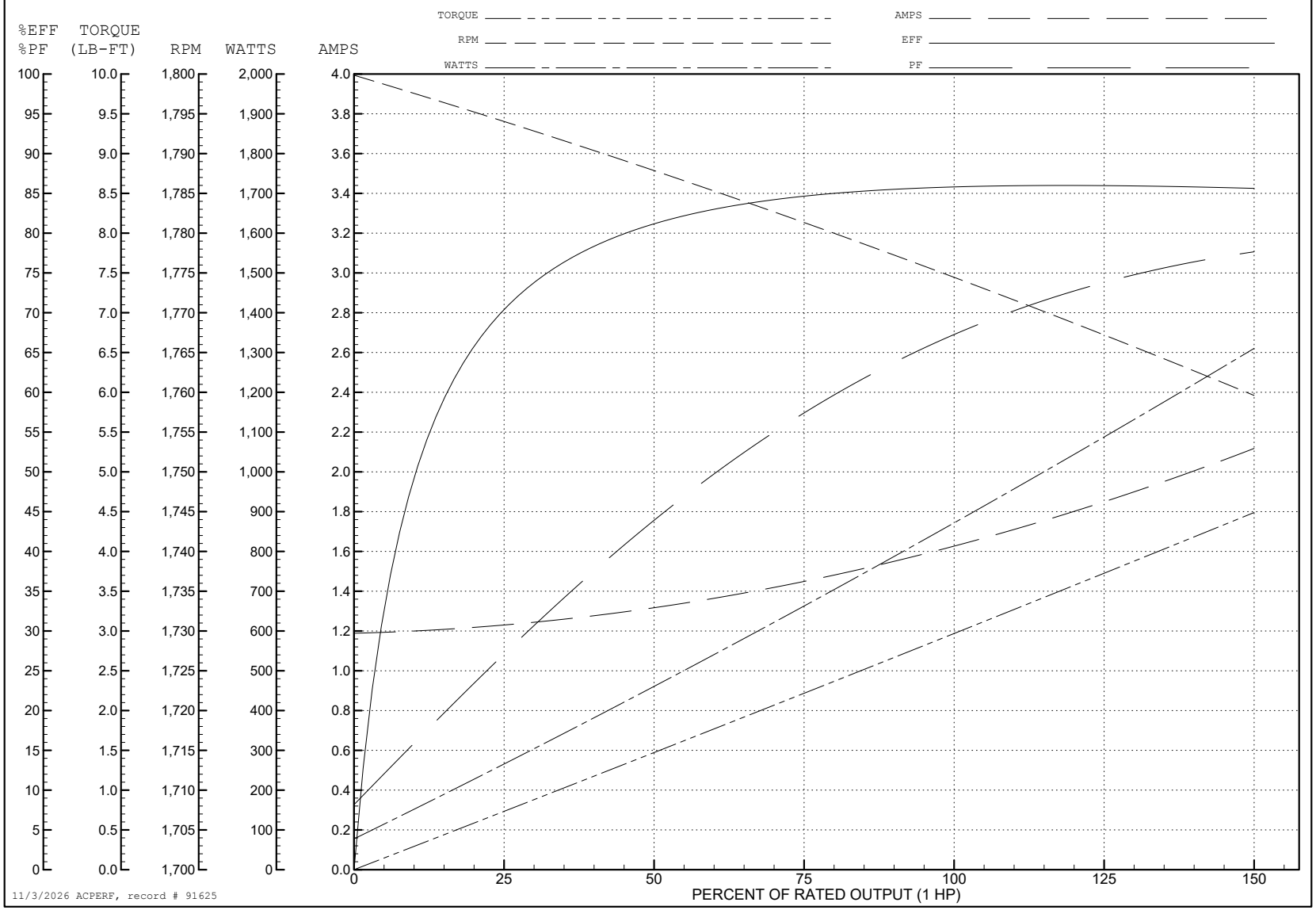
ABB Motors and Mechanical Inc.

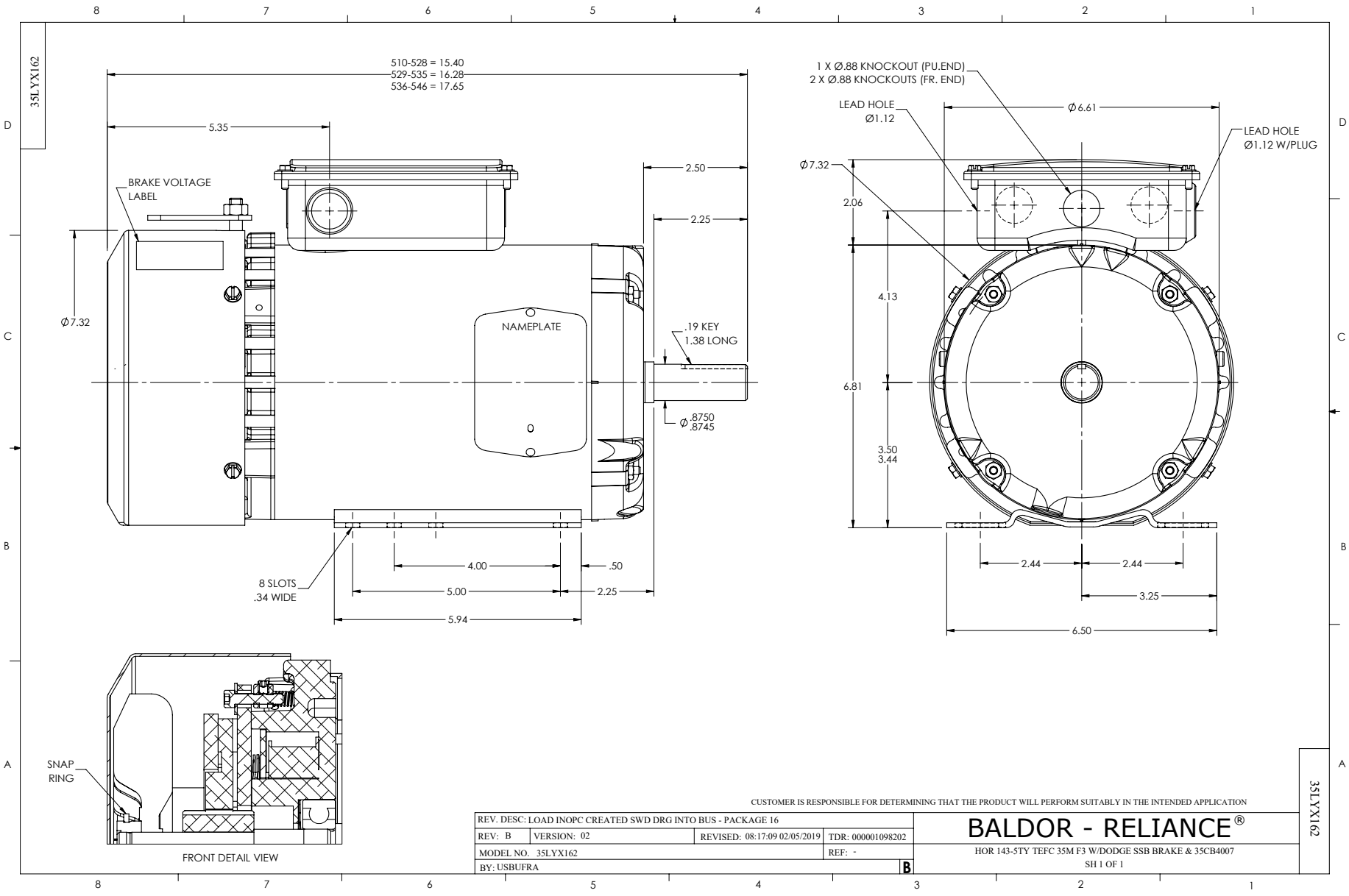
WINDING # 35WGG004

1 HP 3 PH 60 HZ 1770 RPM 460 V 3520M

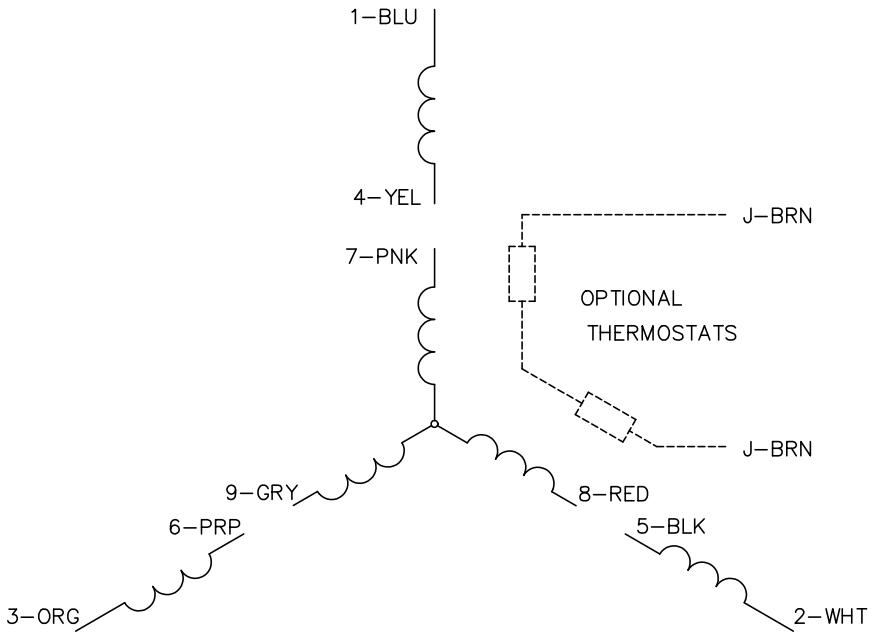
Typical performance - not guaranteed values.

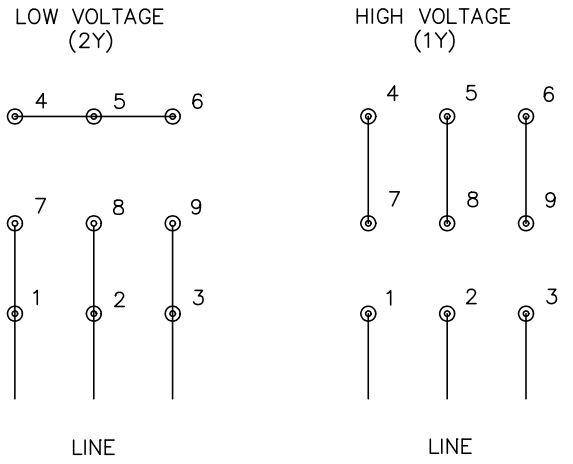
TORQUES(LB-FT): PO=14.6 PU=7.57 LR=9.17 LRA=14.6




35LYX162
510-528 = 15.40
529-535 = 16.28
536-546 = 17.65
5.35
2.50
2.25
BRAKE VOLTAGE LABEL
Ø7.32
NAMEPLATE
.19 KEY
1.38 LONG
Ø .8750
.8745
8 SLOTS
.34 WIDE
4.00
.50
5.00
2.25
5.94
1 X Ø.88 KNOCKOUT (PU.END)
2 X Ø.88 KNOCKOUTS (FR. END)
LEAD HOLE Ø1.12
Ø6.61
LEAD HOLE Ø1.12 W/PLUG
Ø7.32
2.06
4.13
6.81
3.50
3.44
2.44
2.44
3.25
6.50
SNAP RING
FRONT DETAIL VIEW
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOAD INOPC CREATED SWD DRG INTO BUS - PACKAGE 16
REV: B
VERSION: 02
REVISED: 08:17:09 02/05/2019
TDR: 000001098202
MODEL NO. 35LYX162
REF: -
BY: USBUFRA
B
BALDOR - RELIANCE®
HOR 143-5TY TEFC 35M F3 W/DODGE SSB BRAKE & 35CB4007
SH 1 OF 1
35LYX162

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 |