



BALDOR® • *RELIANCE*

Product Information Packet

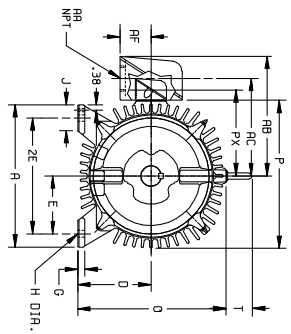
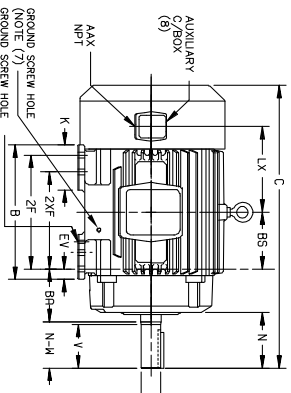
ECP82334T-4

20HP,1765RPM,3PH,60HZ,256T,TEFC,FOOT

| Product Detail | | | |
|----------------------------|-----------------|----------------------------|-------------------------|
| Model Number: | ECP82334T-4 | Environment: | Harsh / Mill & Chemical |
| Voltage: | 460 | HP: | 20 |
| Rpm: | 1765 | Efficiency: | Premium (XE) |
| Phase: | 3 | Frequency: | 60 |
| Inverter Duty: | * | Enclosure: | TEFC |
| Frame Group: | 250 | Frame Size: | 256T |
| Features: | Meets IEEE-841 | Mounting: | Foot Mounted |
| Service Factor: | 1.15 | Enclosure Group: | TEFC |
| List Price: | 2517.00 | Price Symbol: | SD |
| Speed Range: | 1201-1800 | Insulation Class: | F |
| Nema Design: | B | Encl Enhancement: | |
| Catalog Page: | M-22,B | Dimension Sheet: | 611760-570 |
| Connection Diagram: | 416820-25 | Electric Design: | W01073-C-J001 |
| Single HP: | 20 | Get Notes: | Meets IEEE-841 |
| Revision: | | Instruction Manual: | B-3620 |
| Application: | General Purpose | Epact: | Y |
| Scaled Drawing: | A84406 | Obsolete: | N |
| Last Data Source: | RAG,MADD | Bearing Type: | |
| Electrical Type: | P | Mounting Pos: | |
| Ambient: | 40 | Duty: | CONT |
| Amps: | 24.0 | Nominal Eff: | 93.0 |
| Kva Code: | G | Power Factor: | 83.8 |
| Poles: | 04 | Weight: | 0 |

611760-570-SH1

DUTY MASTER ALTERNATING CURRENT MOTORS
 SQUIREL-CAGE INDUCTION MOTOR
 ENCLASURE: TOTALLY ENCLOSED CAST IRON CONSTRUCTION
 COOLING: FAN COOLED
 MOUNTING: FOOT
 FRAMES 250T THRU 440TS
 841-XL WITH STANDARD OVERSIZED CONDUIT BOX



DIMENSIONS ARE IN INCHES. SEE SHEET 2 FOR DIMENSIONS IN MILLIMETERS.

| FRAME | A | D(2) | E | G | H | J | K | O | P | T | AA | AB | AC | AF | BA | EV | AUX C/BOX (B) | AX | UX |
|------------|-------|-------|------|------|-----|------|------|-------|-------|------|-------|-------|-------|------|------|------|---------------|-------|-------|
| 254T-256T | 12.50 | 6.25 | 5.00 | .75 | 5.6 | 2.50 | --- | 13.25 | 13.25 | 2.44 | 1-1/4 | 10.81 | 8.81 | 2.50 | 4.25 | 1.00 | 3/4 | 7.06 | 9.31 |
| 284T-286TS | 13.75 | 7.00 | 5.50 | .75 | 5.6 | 2.50 | --- | 14.75 | 14.88 | 2.44 | 1-1/2 | 12.62 | 10.19 | 3.00 | 4.75 | 1.00 | 3/4 | 7.63 | 10.50 |
| 324T-326TS | 15.50 | 8.00 | 6.25 | .88 | 6.9 | 2.75 | 4.50 | 16.69 | 17.00 | 2.44 | 2 | 15.44 | 11.69 | 3.62 | 5.25 | 1.38 | 3/4 | 8.75 | 10.50 |
| 364T-365TS | 17.00 | 9.00 | 7.00 | .88 | 6.9 | 2.75 | 3.88 | 18.50 | 19.50 | 2.94 | 3 | 18.00 | 13.81 | 4.12 | 5.88 | 1.38 | 3/4 | 9.12 | 11.62 |
| 404T-405TS | 19.00 | 10.00 | 8.00 | 1.12 | 8.1 | 3.25 | 4.62 | 21.31 | 22.50 | 2.94 | 3 | 19.25 | 15.06 | 4.12 | 6.62 | 1.13 | 3/4 | 9.62 | 14.44 |
| 444T-445TS | 21.00 | 11.00 | 9.00 | 1.12 | 8.1 | 3.25 | 5.25 | 23.38 | 25.25 | 3.25 | 3 | 22.19 | 17.44 | 6.00 | 7.50 | 1.25 | 3/4 | 11.12 | 15.25 |

| FRAME | SIZE | C | BS | B | ZF | (4) ZF | N | N-W(6) | U(3) | V | SA | LGTH. | WGT. |
|-------|-------|------|-------|-------|-------|--------|------|--------|------|------|------|-------|------|
| 254T | 24.56 | 5.00 | 12.00 | --- | 8.25 | 4.12 | 4.00 | 1.625 | 3.75 | 3.75 | 2.88 | 3.35 | |
| 256T | 24.56 | 5.00 | 12.00 | 10.00 | --- | 4.12 | 4.00 | 1.625 | 3.75 | 3.75 | 2.88 | 3.45 | |
| 284T | 27.44 | 5.50 | 13.00 | --- | 9.50 | 5.00 | 4.62 | 1.875 | 4.38 | 5.00 | 3.25 | 4.75 | |
| 284TS | 26.06 | 5.50 | 13.00 | --- | 9.50 | 3.62 | 3.25 | 1.825 | 3.00 | 3.75 | 1.88 | 4.75 | |
| 286T | 27.44 | 5.50 | 13.00 | 11.00 | --- | 5.00 | 4.62 | 1.875 | 4.38 | 5.00 | 3.25 | 4.80 | |
| 286TS | 26.06 | 5.50 | 13.00 | 11.00 | --- | 5.00 | 4.62 | 1.875 | 4.38 | 5.00 | 3.25 | 4.80 | |
| 294T | 30.44 | 6.00 | 14.75 | --- | 10.50 | 5.62 | 3.75 | 2.125 | 5.00 | 5.00 | 3.88 | 5.80 | |
| 294TS | 30.44 | 6.00 | 14.75 | --- | 10.50 | 5.62 | 3.75 | 1.875 | 3.50 | 5.00 | 2.00 | 5.80 | |
| 324T | 30.44 | 6.00 | 14.75 | 12.00 | --- | 5.62 | 5.25 | 2.125 | 5.00 | 5.00 | 3.88 | 6.30 | |
| 324TS | 28.94 | 6.00 | 14.75 | 12.00 | --- | 4.12 | 3.75 | 1.875 | 3.50 | 5.00 | 2.00 | 6.30 | |
| 364T | 33.44 | 6.12 | 15.00 | --- | 11.25 | 6.25 | 5.88 | 2.375 | 5.62 | 6.25 | 4.25 | 8.65 | |
| 364TS | 31.31 | 6.12 | 15.00 | --- | 11.25 | 4.12 | 3.75 | 1.875 | 3.50 | 5.00 | 2.00 | 8.65 | |
| 365T | 33.44 | 6.12 | 15.00 | 12.25 | --- | 6.25 | 5.88 | 2.375 | 5.62 | 6.25 | 4.25 | 8.90 | |
| 365TS | 31.31 | 6.12 | 15.00 | 12.25 | --- | 6.25 | 5.88 | 2.375 | 5.62 | 6.25 | 4.25 | 8.90 | |
| 404T | 38.31 | 6.88 | 16.00 | --- | 12.25 | 7.62 | 3.75 | 3.50 | 5.00 | 5.00 | 6.00 | 12.50 | |
| 404TS | 36.31 | 6.88 | 16.00 | --- | 12.25 | 4.50 | 4.25 | 2.125 | 4.00 | 5.00 | 2.75 | 12.11 | |
| 405T | 36.31 | 6.88 | 16.00 | 13.75 | --- | 7.50 | 7.25 | 2.875 | 7.00 | 7.50 | 5.62 | 12.60 | |
| 405TS | 35.31 | 6.88 | 16.00 | 13.75 | --- | 4.50 | 4.25 | 2.125 | 4.00 | 5.00 | 2.75 | 12.61 | |
| 444T | 40.62 | 8.25 | 19.00 | --- | 14.50 | 5.19 | 4.75 | 3.375 | 8.25 | 8.75 | 6.88 | 16.54 | |
| 444TS | 40.62 | 8.25 | 19.00 | --- | 14.50 | 5.19 | 4.75 | 3.375 | 8.25 | 8.75 | 6.88 | 16.54 | |
| 445T | 40.62 | 8.25 | 19.00 | 16.50 | --- | 8.94 | 8.50 | 3.375 | 8.25 | 8.75 | 6.88 | 18.00 | |
| 445TS | 40.62 | 8.25 | 19.00 | 16.50 | --- | 8.94 | 8.50 | 3.375 | 8.25 | 8.75 | 6.88 | 18.00 | |

- (1) SPECIAL DIMENSIONS APPLYING TO THIS ORDER ON THIS LINE.
- (2) "D" VARIES $\pm 250T - 320T + .00, - .03$
 $\pm 360T - 440T + .00, - .06$
 HP TO 1.625 DIA. + .000, - .0005
- (3) "U" VARIES $\pm .625$ AND LARGER + .000, - .001.
- (4) ALL FRAMES HAVE EIGHT MOUNTING HOLES FOR DUAL MOUNTING.
- (5) MOTOR WEIGHTS MAY VARY BY 15% DEPENDING UPON RATING.
- (6) "N-W" VARIES +.00, -.25.
- (7) GROUND SCREW HOLE 3/8-16 TAP 1 TO 200 HP ABOVE 200 HP 1/2-13
- (8) AUXILIARY CONDUIT BOX SUPPLIED ONLY WHEN REQUESTED
- (9) FRAME TYPE CERTIFIED FOR SALES ORDER

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2W-1, W-4-W-5W-7, OR C-1 MOUNTING IS SPECIFIED.

IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.

MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT MOTOR END OF SHAFT IS .0015 IN. PER INCH OF DIAMETER AND INCLUDING .625 DIA. AND .0015 T.I.R. BALL BEARINGS .002 T.I.R. ROLLER BEARINGS FOR LARGER DIAMETERS.

ORDER _____ ITEM _____ HP _____ CERTIFIED FOR _____ APPROVED BY _____ PH _____ HZ _____ VOLTS _____

SALES ORDER _____ TYPE _____ DATE _____

LHS-075-09L119

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

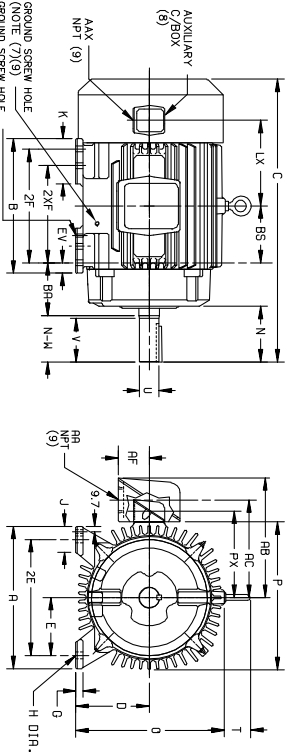
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| MTL: - | | |

BALDOR • DODGE • RELIANCE

DIM SHT TEFC 250T-440TS STD BRKT 841-XL C BOX ON TOP

611760-570-SH2

DUTY MASTER ALTERNATING CURRENT MOTORS
 SQUIREL-CAGE INDUCTION MOTOR
 ENCLASURE: TOTALLY ENCLOSED
 MOUNTING: FOOT
 COOLING: FAN COOLED
 FRAMES 250T THRU 440TS
 841-XL WITH STANDARD OVERSIZED CONDUIT BOX



DIMENSIONS ARE IN MILLIMETERS. SEE SHEET 1 FOR DIMENSIONS IN INCHES.

| FRAME | A | D(2) | E | G | H | J | K | O | P | T | W(6) | X | Y(9) | Z |
|-----------|-------|-------|-------|-------|-------|------|-------|-------|-------|------|------|-------|-------|-------|
| 254T-256T | 317.5 | 156.8 | 127.0 | 191.1 | 142.6 | 63.5 | --- | 336.6 | 336.6 | 62.0 | -1/4 | 274.6 | 223.8 | 63.5 |
| 284T-286T | 349.3 | 177.8 | 139.7 | 191.1 | 142.6 | 63.5 | --- | 374.7 | 376.0 | 62.0 | -1/2 | 320.5 | 258.8 | 76.2 |
| 324T-326T | 393.7 | 203.2 | 158.8 | 224.4 | 175.5 | 69.9 | 114.3 | 423.9 | 431.8 | 62.0 | 2 | 392.2 | 298.9 | 91.9 |
| 364T-366T | 431.8 | 228.6 | 177.8 | 224.4 | 175.5 | 69.9 | 114.3 | 469.9 | 485.3 | 74.7 | 3 | 457.2 | 350.8 | 104.6 |
| 404T-406T | 482.6 | 254.0 | 203.2 | 228.4 | 206.6 | 82.6 | 117.3 | 541.3 | 571.5 | 74.7 | 3 | 489.0 | 392.5 | 104.6 |
| 444T-446T | 533.4 | 279.4 | 228.6 | 228.4 | 206.6 | 82.6 | 133.4 | 593.9 | 641.4 | 82.6 | 3 | 563.6 | 443.0 | 152.4 |

| FRAME | C | BS | B | ZF | (2) | ZF | N | SHAFT AND KEY | SO. | LGTH | WEIGHT |
|-------|--------|-------|-------|-------|-------|-------|-------|---------------|-------|-------|--------|
| SIZE | | | | | | | | (3) | | | (K)(9) |
| 254T | 623.8 | 127.0 | 304.8 | --- | 209.6 | 104.6 | 101.6 | 41.28 | 95.3 | 9.53 | 73.2 |
| 256T | 623.8 | 127.0 | 304.8 | 254.0 | --- | 104.6 | 101.6 | 41.28 | 95.3 | 9.53 | 73.2 |
| 284T | 697.0 | 139.7 | 330.2 | --- | 241.3 | 127.0 | 117.3 | 47.63 | 111.3 | 12.70 | 82.6 |
| 286T | 697.0 | 139.7 | 330.2 | --- | 241.3 | 91.9 | 82.6 | 41.28 | 76.2 | 9.53 | 47.8 |
| 286T | 697.0 | 139.7 | 330.2 | 279.4 | --- | 127.0 | 117.3 | 47.63 | 111.3 | 12.70 | 82.6 |
| 324T | 773.2 | 152.4 | 374.7 | --- | 269.7 | 142.7 | 133.4 | 53.98 | 127.0 | 12.70 | 98.6 |
| 326T | 773.2 | 152.4 | 374.7 | 304.8 | --- | 142.7 | 133.4 | 53.98 | 127.0 | 12.70 | 98.6 |
| 326T | 773.2 | 152.4 | 374.7 | --- | 269.7 | 142.7 | 133.4 | 53.98 | 127.0 | 12.70 | 98.6 |
| 364T | 849.4 | 155.4 | 381.0 | --- | 285.8 | 158.8 | 149.4 | 60.33 | 142.7 | 15.88 | 108.0 |
| 364T | 849.4 | 155.4 | 381.0 | --- | 285.8 | 104.6 | 95.3 | 47.63 | 88.9 | 12.70 | 50.8 |
| 364T | 849.4 | 155.4 | 381.0 | --- | 285.8 | 104.6 | 95.3 | 47.63 | 88.9 | 12.70 | 50.8 |
| 365T | 795.3 | 155.4 | 381.0 | 311.2 | --- | 104.6 | 95.3 | 47.63 | 88.9 | 12.70 | 50.8 |
| 404T | 913.1 | 174.8 | 408.4 | --- | 311.2 | 190.5 | 164.2 | 53.03 | 177.8 | 18.03 | 142.7 |
| 406T | 913.1 | 174.8 | 408.4 | --- | 311.2 | 161.4 | 148.2 | 47.63 | 107.8 | 16.03 | 92.7 |
| 406T | 913.1 | 174.8 | 408.4 | 348.3 | --- | 114.3 | 108.0 | 53.98 | 101.6 | 12.70 | 69.9 |
| 440TS | 886.9 | 174.8 | 408.4 | --- | 368.3 | 227.1 | 215.9 | 85.73 | 209.6 | 22.23 | 174.8 |
| 444T | 1133.3 | 209.6 | 482.6 | --- | 368.3 | 131.8 | 120.7 | 60.33 | 114.3 | 15.88 | 76.2 |
| 444T | 1133.3 | 209.6 | 482.6 | --- | 368.3 | 131.8 | 120.7 | 60.33 | 114.3 | 15.88 | 76.2 |
| 445T | 1133.3 | 209.6 | 482.6 | 419.1 | --- | 227.1 | 215.9 | 85.73 | 209.6 | 22.23 | 174.8 |
| 445T | 1038.4 | 209.6 | 482.6 | 419.1 | --- | 131.8 | 120.7 | 60.33 | 114.3 | 15.88 | 76.2 |

- (1) SPECIAL DIMENSIONS APPLYING TO THIS ORDER ON THIS LINE.
- (2) "C" VARIES --- 250T - 320T +0, -8
 --- 360T - 440T +0, -1.5
 --- HP TO 1.625 DIA. +0.00, -0.03
- (3) "U" VARIES 1.625 AND LARGER +0.0, -0.03
- (4) ALL FRAMES HAVE EIGHT MOUNTING HOLES FOR DUAL MOUNTING.
- (5) MOTOR WEIGHTS MAY VARY BY 15% DEPENDING UPON RATING.
- (6) "N-W" VARIES +0, -6.4
- (7) GROUND SCREW HOLE 3/8-16 TAP 1 TO 200 HP ABOVE 200 HP 1/2-13, SEE NOTE (9)
- (8) AUXILIARY CONDUIT BOX SUPPLIED ONLY WHEN REQUESTED
- (9) DIMENSIONS ARE IN INCHES

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2W-1, W-4W-5W-7, OR C-1 MOUNTING IS SPECIFIED.
 F MOUNTING CLEARANCE DETAILS ARE REQUIRED. CONSULT FACTORY.
 MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF STD. SHAFT EXTENSION IS .03 TIR UP TO AND INCLUDING #22R AND .028 TIR FOR BALL BEARINGS .09 TIR. ROLLER BEARINGS FOR LARGER DIAMETERS.

FRAME _____ TYPE _____ CERTIFIED FOR _____
 ORDER _____ ITEM _____ HP _____ RPM _____ PH _____ HZ _____ VOLTS _____
 SALES ORDER _____ APPROVED BY _____ DATE _____

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

| | | |
|------------------------|------------------------------|-------------------|
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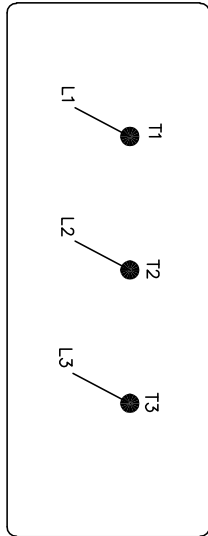
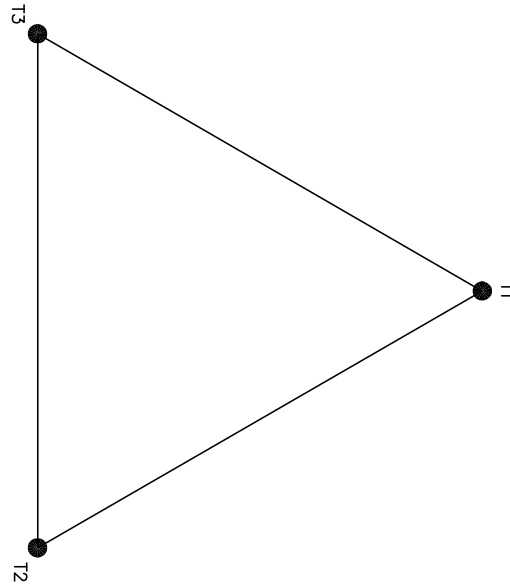
BALDOR • DODGE • RELIANCE

DIM SHT TEFC 250T-440TS STD BRKT 841-XL C BOX ON TOP

416820-025

A-C MOTOR
 CONNECTION DIAGRAM
 STANDARD 3 LEAD DELTA CONNECTED

416820-025



(N.P. 1575-BA)

| | | |
|--------------------------------------|------------------------------|-------------------|
| REV. DESC: REMOVE EXCESS INFORMATION | | |
| REV. LTR: B | VERSION: 02 | TDR: 000000477984 |
| FILE: \RAG\00001\809 | REVISED: 16:03:29 09/25/2008 | |
| MTL: - | BY: RAGZJR | |

Baldor • Dodge • Reliance

CONNECT DIAGRAM STD 3 LEAD DELTA CONNECTED
 SH 1 of 1

| | | | | | | |
|-----------|-------------|-------------------|-----------|---------------------------------------|-------------|-------|
| REL. S.O. | FRAME | HP | TYPE | PHASE/HERTZ | RPM | VOLTS |
| | 256T | 20 | P | 3/60 | 1765 | 460 |
| AMPS | DUTY | AMB °C/ INSUL. | S.F. | NEMA DESIGN | CODE LETTER | ENCL. |
| 24.0 | CONT | 40/F | 1.15 | B | G | FCXE |
| E/S | ROTOR | TEST S.O. | TEST DATE | STATOR RES. @25 °C (BETWEEN LINES) | | |
| 424423 | 418138040PE | --- | --- | .423 | | |

PERFORMANCE


| LOAD | HP | AMPERES | RPM | POWER FACTOR % | EFFICIENCY % |
|---------|------|---------|------|----------------|--------------|
| NO LOAD | 0 | 7.9 | 1800 | 5.33 | 0 |
| 1/4 | 5.01 | 9.9 | 1791 | 52.4 | 90.7 |
| 2/4 | 10.0 | 13.6 | 1783 | 73.5 | 93.5 |
| 3/4 | 15.0 | 18.5 | 1773 | 81.0 | 93.6 |
| 4/4 | 20.0 | 24.0 | 1763 | 83.8 | 93.0 |
| 5/4 | 25.0 | 29.9 | 1752 | 85.2 | 92.0 |

SPEED TORQUE

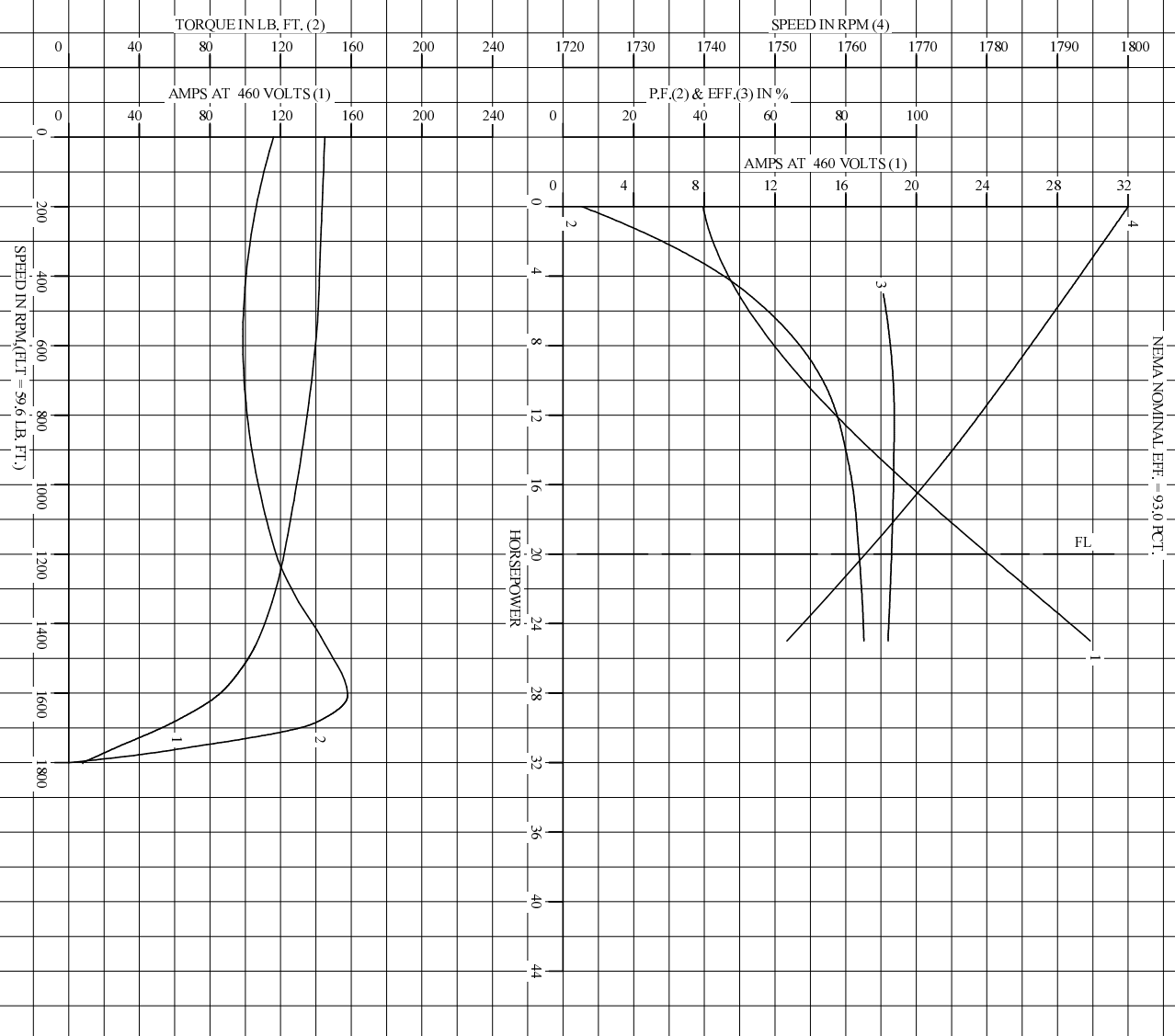
| | RPM | TORQUE % FULL LOAD | TORQUE LB.-FT. | AMPERES |
|--------------|------|--------------------|----------------|---------|
| LOCKED ROTOR | 0 | 195 | 116 | 145 |
| PULL UP | 585 | 166 | 98.7 | 140 |
| BREAKDOWN | 1606 | 265 | 158 | 84.5 |
| FULL LOAD | 1763 | 100 | 59.6 | 24.0 |

AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE

REMARKS: CALCULATED DATA
NEMA NOMINAL EFF. = 93.0 PCT.

| | | |
|---|--|---|
|  | DR. BY W. L. SMITH | A-C MOTOR PERFORMANCE DATA W01073-C-J001 ISSUE DATE 12/14/05 |
| | CK. BY J.J. HARRISON APP. BY W. L. SMITH DATE 12/14/05 | |

RPT. S.O. _____ RPM 1765 S.F. 1.15 ROTOR 418138040FE
 FRAME 256T VOLTS 460 NEMA DESIGN B TEST S.O. CALCULATED DATA
 HP 20 AMPS 24.0 CODE LETTER G TEST DATE ---
 TYPE P DUTY CONT ENCLOSURE FCXE STATOR RES. @ 25 °C .423
 PHASE/HERTZ 3/60 AMB °C/INSUL 40/F E/S 424423 OHMS (BETWEEN LINES)



AMPERS SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERS WILL VARY INVERSELY WITH THE RATED VOLTAGE.

BALDOR
 BALDOR • DOUGLASS • RELIANCE

DR. BY W.L. SMITH
 CK. BY J.H. HARRISON
 APP. BY W.L. SMITH
 DATE 12/14/05

A-C MOTOR
PERFORMANCE CURVES
 W01073-C-J001
 ISSUE DATE 12/14/05

Printed on 11/20/07 10:21 @ umgfhengdev1