



# **BALDOR® • *RELIANCE***

## **Product Information Packet**

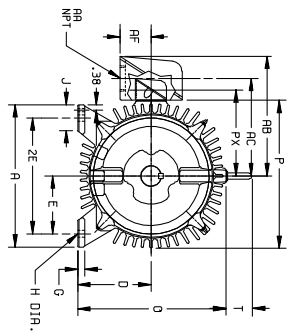
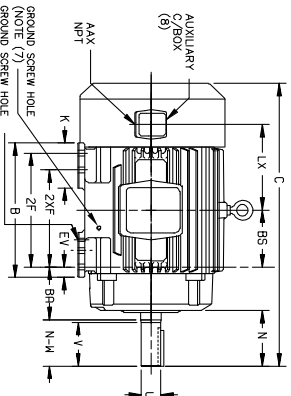
### **ECP82276T-4**

**7.50HP,1175RPM,3PH,60HZ,254T,TEFC,FOOT**

Product Detail			
<b>Model Number:</b>	ECP82276T-4	<b>Environment:</b>	Harsh / Mill & Chemical
<b>Voltage:</b>	460	<b>HP:</b>	7.5
<b>Rpm:</b>	1175	<b>Efficiency:</b>	Premium (XE)
<b>Phase:</b>	3	<b>Frequency:</b>	60
<b>Inverter Duty:</b>	*	<b>Enclosure:</b>	TEFC
<b>Frame Group:</b>	250	<b>Frame Size:</b>	254T
<b>Features:</b>	Meets IEEE-841	<b>Mounting:</b>	Foot Mounted
<b>Service Factor:</b>	1.15	<b>Enclosure Group:</b>	TEFC
<b>List Price:</b>	2467.00	<b>Price Symbol:</b>	SD
<b>Speed Range:</b>	901-1200	<b>Insulation Class:</b>	F
<b>Nema Design:</b>	B	<b>Encl Enhancement:</b>	
<b>Catalog Page:</b>	M-22,B	<b>Dimension Sheet:</b>	611760-570
<b>Connection Diagram:</b>	416820-25	<b>Electric Design:</b>	W01077-C-J003
<b>Single HP:</b>	7.5	<b>Get Notes:</b>	Meets IEEE-841
<b>Revision:</b>		<b>Instruction Manual:</b>	B-3620
<b>Application:</b>	General Purpose	<b>Epact:</b>	Y
<b>Scaled Drawing:</b>	A84405	<b>Obsolete:</b>	N
<b>Last Data Source:</b>	RAG,MADD	<b>Bearing Type:</b>	
<b>Electrical Type:</b>	P	<b>Mounting Pos:</b>	
<b>Ambient:</b>	40	<b>Duty:</b>	CONT
<b>Amps:</b>	9.90	<b>Nominal Eff:</b>	91.0
<b>Kva Code:</b>	H	<b>Power Factor:</b>	77.6
<b>Poles:</b>	06	<b>Weight:</b>	347

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	AE	BA	EV	AUX C/BOX (B)	AX	LX	PX	
254T-256T	12.50	5.00	.75	5.61	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	5.61	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	(4) N	N-W(6) U(3)	V	SA. LGTH.	WEIGHT LBS. (5)
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	1.625	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	4.90
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	4.12	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	12.25	---	6.25	5.88	2.375	5.62	6.25	2.00	8.90
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	2.00	8.90
404T	36.31	6.88	16.00	---	12.25	7.62	3.75	2.875	3.50	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	7.25	2.125	4.00	5.00	2.75	12.61
444T	40.62	8.25	19.00	---	14.50	8.94	8.50	3.375	8.25	8.75	6.88	16.70
444TS	40.62	8.25	19.00	---	14.50	5.19	4.75	2.375	4.50	6.25	3.00	16.54
445T	40.62	8.25	19.00	16.50	---	8.94	8.50	3.375	8.25	8.75	6.88	16.80
445TS	40.62	8.25	19.00	16.50	---	5.19	8.50	2.375	4.50	6.25	3.00	16.44

- (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. + .0000, - .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) MAIN DRAIN VALVE SUPPLIED ONLY WHEN REQUESTED
- 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.
- MANUALLY PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF SHAFT INCLUDING EXTENSION BEARING AND INCLUDING .625 DIA. AND .0015 T.I.R. BALL BEARINGS .002 T.I.R. ROLLER BEARINGS FOR LARGER DIAMETERS.

ORDER TYPE \_\_\_\_\_ HP \_\_\_\_\_ CERTIFIED FOR \_\_\_\_\_ APPROVED BY \_\_\_\_\_ PH \_\_\_\_\_ HZ \_\_\_\_\_ VOLTS \_\_\_\_\_

SALES ORDER \_\_\_\_\_ ITEM \_\_\_\_\_ DATE \_\_\_\_\_

LHS-075-09L119

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

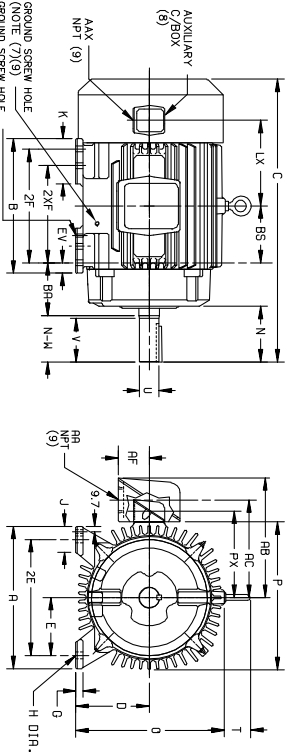
REV. DESC: EDIT HEADER	VERSION: 02	TDR: 000000453739
REV. LTR: B	REVISED: 16:08:01 01/15/2008	BY: RAGMNL
FILE: \RAG\00005\357		
MTL: -		

**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	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-326TS	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-367S	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-407S	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-447S	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	2F	(2) 2F	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
256T	623.8	127.0	304.8	254.0	---	104.6	101.6	41.28	95.3	73.2
284T	697.0	139.7	330.2	---	241.3	127.0	117.3	47.63	111.3	12.70
284TS	661.9	139.7	330.2	---	241.3	91.9	82.6	41.28	76.2	9.53
286T	697.0	139.7	330.2	279.4	---	127.0	117.3	47.63	111.3	12.70
286TS	661.9	139.7	330.2	279.4	---	91.9	82.6	41.28	76.2	9.53
324T	773.2	152.4	374.7	---	266.7	142.7	133.4	53.98	127.0	12.70
324TS	738.1	152.4	374.7	---	266.7	104.6	95.3	47.63	88.9	12.70
326T	773.2	152.4	374.7	304.8	---	142.7	133.4	53.98	127.0	12.70
326TS	738.1	152.4	374.7	---	266.7	104.6	95.3	47.63	88.9	12.70
364T	849.4	155.4	381.0	---	285.8	158.8	149.4	60.33	142.7	15.88
364TS	795.3	155.4	381.0	---	285.8	104.6	95.3	47.63	88.9	12.70
365T	849.4	155.4	381.0	311.2	---	158.8	149.4	60.33	142.7	15.88
365TS	795.3	155.4	381.0	---	285.8	104.6	95.3	47.63	88.9	12.70
404T	973.1	174.8	408.4	---	311.2	190.5	184.2	73.03	177.8	18.03
404TS	938.1	174.8	408.4	---	311.2	158.8	149.4	60.33	142.7	15.88
406T	973.1	174.8	408.4	348.3	---	190.5	184.2	73.03	177.8	18.03
406TS	886.9	174.8	408.4	---	311.2	158.8	149.4	60.33	142.7	15.88
444T	1133.3	209.6	482.6	---	368.3	227.1	215.9	85.73	209.6	22.23
444TS	1038.4	209.6	482.6	---	368.3	131.8	120.7	60.33	114.3	15.88
445T	1133.3	209.6	482.6	419.1	---	227.1	215.9	85.73	209.6	22.23
445TS	1038.4	209.6	482.6	---	368.3	131.8	120.7	60.33	114.3	15.88

- (1) SPECIAL DIMENSIONS APPLYING TO THIS ORDER ON THIS LINE.
- (2) "C" VARIES  $\begin{cases} 250T - 320T +0.0, -0.8 \\ 360T - 440T +0.0, -1.5 \end{cases}$
- (3) "U" VARIES  $\begin{cases} 1.625 \text{ DIA.} +0.000, -0.013 \\ 1.625 \text{ DIA.} +0.000, -0.03 \end{cases}$
- (4) ALL FRAMES HAVE EIGHT MOUNTING HOLES FOR DUAL MOUNTING.
- (5) MOTOR WEIGHTS MAY VARY BY 15% DEPENDING UPON RATING.
- (6) "N-W" VARIES +0.0, -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.  
 IF 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 .05 TIR. ROLLER BEARINGS FOR LARGER DIAMETERS.

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

2HS-075-098119

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

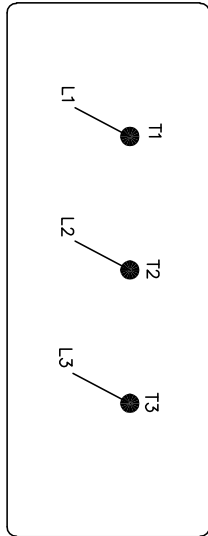
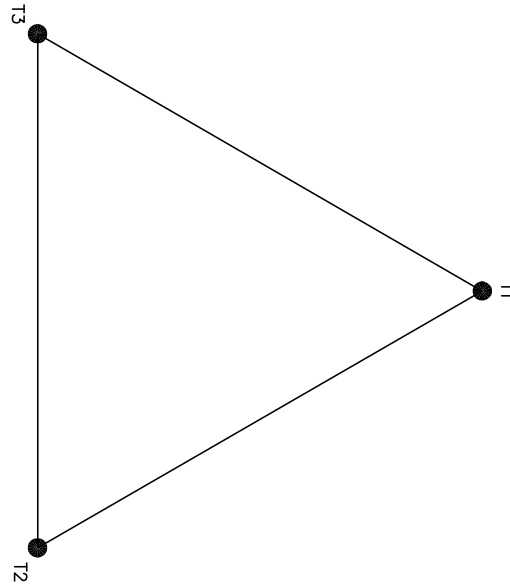
REV. DESC: EDIT HEADER	VERSION: 02	TDR: 000000453739
REV. LTR: B	REVISED: 16:04:46 01/15/2008	BY: RAGMNL
FILE: \RAG\00005\369		
MTL: -		

**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
	254T	7.5	P	3/60	1175	460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
9.9	CONT	40/F	1.15	B	H	FCKE
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES.@25 °C (BETWEEN LINES)		
424637	418138075XE	---	---	1.39		

PERFORMANCE


LOAD	HP	AMPERES	RPM	POWER FACTOR %	EFFICIENCY %
NO LOAD	0	4.4	1200	5.77	0
1/4	1.88	5.1	1194	40.1	86.2
2/4	3.75	6.3	1189	61.1	90.7
3/4	5.62	8.0	1183	72.0	91.4
4/4	7.50	9.9	1177	77.6	91.0
5/4	9.37	12.0	1170	80.8	90.1

SPEED TORQUE

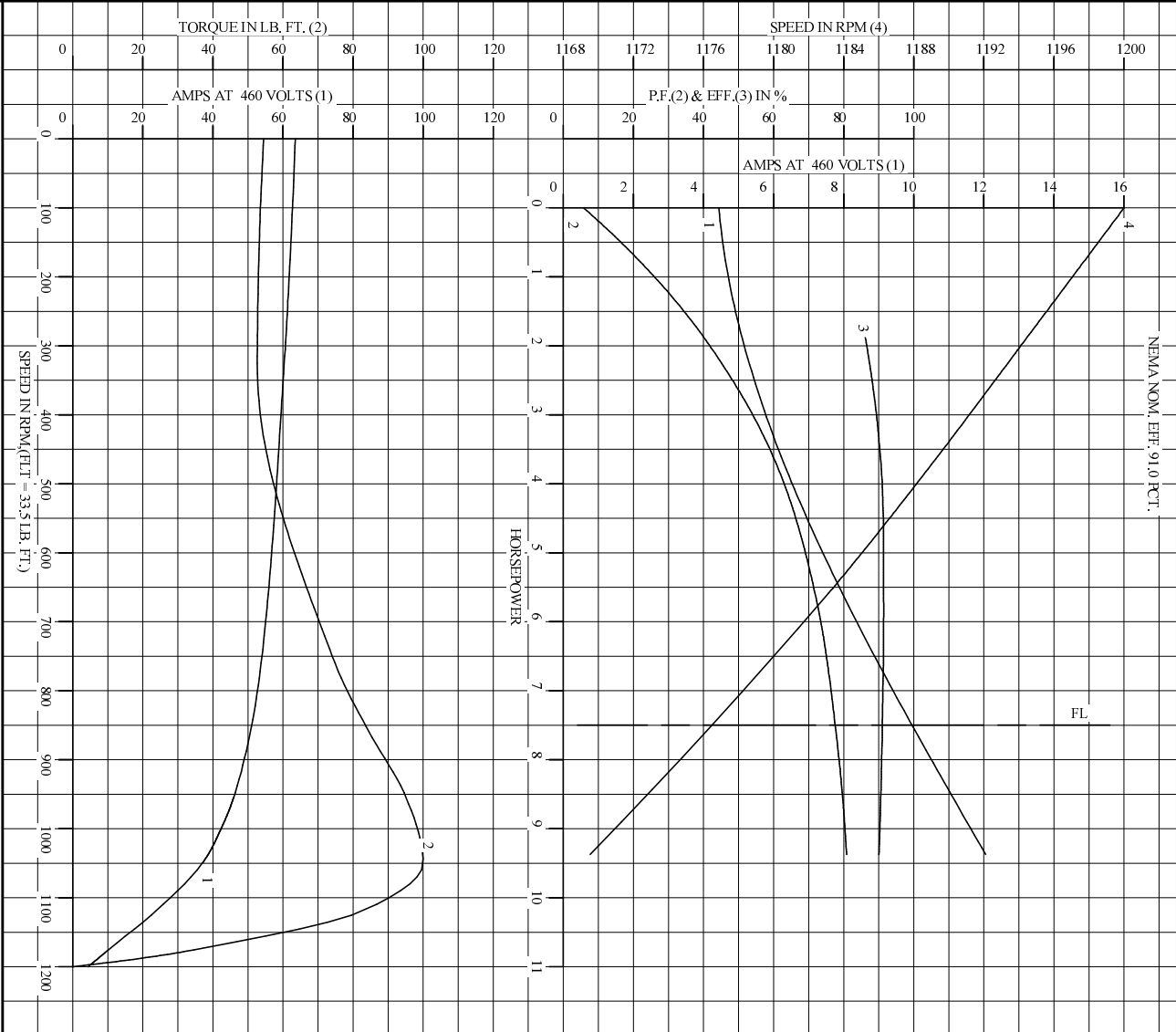
	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0	163	54.5	63.5
PULL UP	330	157	52.7	60.3
BREAKDOWN	1050	299	100	37.0
FULL LOAD	1177	100	33.5	9.9

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 NOM. EFF. 91.0 PCT.

	DR. BY W. L. SMITH	<b>A-C MOTOR</b> <b>PERFORMANCE DATA</b>
	CK. BY J.J.HARRISON APP. BY W. L. SMITH DATE 01/02/06	
W01077-C-J003 ISSUE DATE 01/02/06		

RET. S.O. \_\_\_\_\_ RPM 1175 S.F. 1.15 ROTOR 418138075XE  
 FRAME 254T VOLTS 460 NEMA DESIGN B TEST S.O. CALCULATED DATA  
 HP 7.5 AMPS 9.9 CODE LETTER H TEST DATE ---  
 TYPE P DUTY CONT ENCLOSURE FCXE STATOR RES. @ 25 °C 1.39  
 PHASE/HERTZ 3/60 AMB °C/INSUL 40/F E/S 424637 OHMS (BETWEEN LINES)



DR. BY W.L. SMITH  
 CK. BY J.H. ARBISON  
 APP. BY W.L. SMITH  
 DATE 01/02/06

**A-C MOTOR**  
**PERFORMANCE** W01077-C-J003  
**CURVES** ISSUE DATE 01/02/06