

BALDOR® • **RELIANCE**

Product Information Packet

CTM1764T

30HP, 1775RPM, 3PH, 60HZ, 286T, TEFC, FOOT,

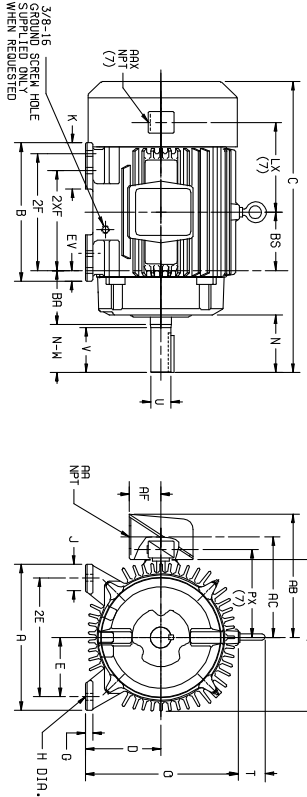
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Part Detail			
Model Number:	CTM1764T	Environment:	Harsh / Mill & Chemical
Voltage:	460/ 460	HP:	30/7.5
RPM:	1775/885	Efficiency:	Premium (XE)
Phase:	3	Frequency:	60
Inverter Duty:	*	Enclosure:	TEFC
Frame Group:	280	Frame Size:	286T
Features:	Cooling Tower Duty	Mounting:	Foot Mounted
Service Factor:	1.15	Enclosure Group:	TEFC
Weight:	455	Price Symbol:	L1
Speed Range:		Insulation Class:	F
Nema Design:		Encl. Enhancement:	P28G6658
Catalog Page:	M-41,B	Dimension Sheet:	611740-501
Connection Diagram:	416820-196	Electric Design:	E03374-D-P001
Single HP:	30	Get Notes:	Cooling Tower Duty
Revision:		Instruction Manual:	MN408
Application:	2 Speed 1Wdg. Variable Torque	Epact:	Y
Scaled Drawing:	A83554	Obsolete:	N
Last Data Source:	RGG2,MADD	Bearing Type:	
Electrical Type:	PM	Mounting Pos.:	
Ambient:	40	Duty:	CONT
Amps:	36.6/14.1	Nominal Eff.:	91.7
Kva Code:	H	Power Factor:	
Poles:	04	Literature:	

DUTY MASTER ALTERNATING CURRENT MOTORS

ENCLOSURE: TOTALLY ENCLOSED
 SQUIRREL-CAGE INDUCTION
 CAST IRON CONSTRUCTION
 COOLING: FAN COOLED
 MOUNTING: FOOT

FRAMES 250T THRU 440T



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

FRAME	A	D(2)	E	G	H	J	K	O	P	T	CAST IRON TERMINAL BOX (7)AUX. CONDUIT BOX		BA	EV					
SIZE	BS	B	2E	(4)	N	N-W(6)	U(3)	V	SQ.	LGTH. (8)	W	H	D	T					
254T-266T	12.50	6.25	5.00	7.5	5.6	2.50	---	13.25	13.25	2.44	1-1/4	10.61	8.81	2.50	3/4	6.31	9.12	4.25	1.00
266T-286T	13.25	7.00	5.50	7.5	5.6	2.50	---	14.25	14.88	2.44	1-1/2	12.62	10.19	3.00	3/4	6.38	10.50	4.25	1.00
286T-304T	15.50	8.00	6.25	8.8	6.9	2.25	4.50	16.69	17.00	2.44	2	15.44	11.69	3.62	3/4	8.00	10.50	5.25	1.38
304T-324T	17.00	9.00	7.00	8.8	6.9	2.25	3.88	18.50	19.50	2.94	5	18.00	13.81	4.12	3/4	8.38	11.62	5.88	1.38
324T-344T	19.00	10.00	8.00	11.21	8.1	3.25	4.62	21.31	22.50	2.94	5	19.25	15.06	4.12	3/4	9.62	14.44	6.62	1.13
344T-445T	21.00	11.00	9.00	11.21	8.1	3.25	5.25	23.38	25.25	3.25	3	22.19	17.44	6.00	3/4	11.12	15.25	7.50	1.25

FRAME	C	BS	B	2E	(4)	N	N-W(6)	U(3)	V	SQ.	LGTH. (8)	W	H	D	T	BA	EV
254T	24.98	6.00	12.00	6.25	4.12	4.00	1.625	3.75	3.75	2.88	3.5	2.88	3.5	2.88	3.5	2.88	3.5
266T	27.28	6.50	13.00	6.25	4.12	4.00	1.875	3.92	3.92	3.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
286T	29.44	7.00	14.00	6.25	4.12	4.00	2.125	4.08	4.08	3.12	2.25	2.25	2.25	2.25	2.25	2.25	2.25
304T	31.50	7.50	15.00	6.25	4.12	4.00	2.375	4.25	4.25	3.25	2.50	2.50	2.50	2.50	2.50	2.50	2.50
324T	33.50	8.00	16.00	6.25	4.12	4.00	2.625	4.42	4.42	3.38	2.75	2.75	2.75	2.75	2.75	2.75	2.75
344T	35.50	8.50	17.00	6.25	4.12	4.00	2.875	4.58	4.58	3.50	3.00	3.00	3.00	3.00	3.00	3.00	3.00
404T	38.31	6.88	16.00	6.25	4.12	4.00	2.125	3.92	3.92	3.00	2.25	2.25	2.25	2.25	2.25	2.25	2.25
404T	38.31	6.88	16.00	6.25	4.12	4.00	2.125	3.92	3.92	3.00	2.25	2.25	2.25	2.25	2.25	2.25	2.25
404T	38.31	6.88	16.00	6.25	4.12	4.00	2.125	3.92	3.92	3.00	2.25	2.25	2.25	2.25	2.25	2.25	2.25
405T	38.31	6.88	16.00	6.25	4.12	4.00	2.125	3.92	3.92	3.00	2.25	2.25	2.25	2.25	2.25	2.25	2.25
405T	38.31	6.88	16.00	6.25	4.12	4.00	2.125	3.92	3.92	3.00	2.25	2.25	2.25	2.25	2.25	2.25	2.25
405T	38.31	6.88	16.00	6.25	4.12	4.00	2.125	3.92	3.92	3.00	2.25	2.25	2.25	2.25	2.25	2.25	2.25
444T	44.62	8.25	19.00	6.25	4.12	4.00	2.375	4.25	4.25	3.25	2.50	2.50	2.50	2.50	2.50	2.50	2.50
444T	44.62	8.25	19.00	6.25	4.12	4.00	2.375	4.25	4.25	3.25	2.50	2.50	2.50	2.50	2.50	2.50	2.50
444T	44.62	8.25	19.00	6.25	4.12	4.00	2.375	4.25	4.25	3.25	2.50	2.50	2.50	2.50	2.50	2.50	2.50
445T	40.88	8.25	19.00	6.25	4.12	4.00	2.125	3.92	3.92	3.00	2.25	2.25	2.25	2.25	2.25	2.25	2.25

- (1) SPECIAL DIMENSIONS APPLYING TO THIS ORDER ON THIS LINE.
- (2) "G" VARIES --- 2.50T +.00, -.03
 --- 3.60T +.00, -.06
 --- 4.625 D.I.A. +.0000, -.0005
- (3) "U" VARIES --- 1.625 D.I.A. +.0000, -.0005
 --- 6.625 AND LARGER +.000, -.0001.
- (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) AUXILIARY CONDUIT BOX SUPPLIED WHEN SPECIFIED
 CONDUIT BOXES 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 .002 T.I.R. UP TO
 AND INCLUDING 1.625 DIA. AND .003 T.I.R. 1.625 DIA.
 TO 5 INCH DIA.

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

IHS-105-0474119

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

REV. DESC: REMOVING TITLEBLOCK	VERSION: 01	TDR: 000000448517
REV. LTR: A	REVISED: 14:06:59 11/07/2007	BY: CONBPM
FILE: \RAG\00004\525		
MTL: -		

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DIM SHT 250T-440T TEFC FT MTG STD T & TS SGL EXT XT

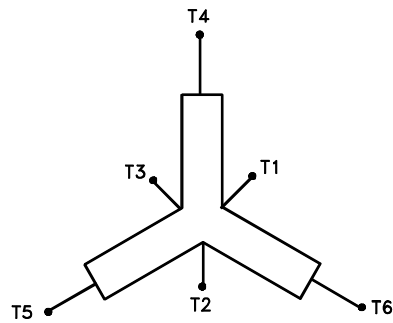
611740-501-SH1

416820-196

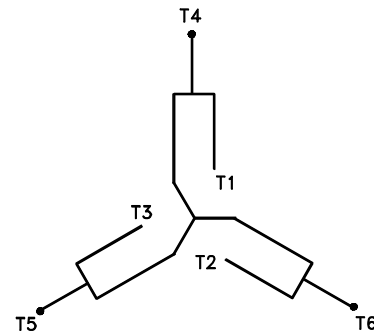
A-C MOTOR
CONNECTION DIAGRAM

SINGLE WINDING

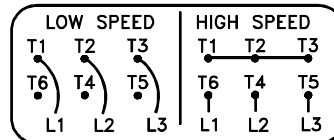
MULTI-SPEEDS



CONSTANT TORQUE



VARIABLE TORQUE



(N. P. 1634-DE)

416820-196

REV. DESC: LOADED TO BUS, C/R 395572		
REV. LTR: -	VERSION: 00	TDR: 000000538207
FILE: \MGA\00000\767	REVISED: 09:43:37 05/03/2010	
MTL: -	BY: RAGRA	

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CONN DIAG - SINGLE WINDING, MULTI-SPEEDS

SH 1 of 1

REL. S.O.	FRAME	HP	TYPE	PHASE/HERTZ	RPM	VOLTS
	286T	30/7.5	PM	3/60	1775/885	460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
36.6/14.1	CONT	40/B	1.15	-	H	FCXE
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C (BETWEEN LINES)		
588707	418139-041-AE	---	---	.292/1.16		

PERFORMANCE


LOAD	HP	AMPERES	RPM	POWER FACTOR %	EFFICIENCY %
NO LOAD	0 / 0	13.8 / 8.5	1800 / 900	6.04 / 5.91	0 / 0
1/4	7.52 / 1.88	16.2 / 9.1	1794 / 897	49.2 / 25.1	88.4 / 76.9
2/4	15.0 / 3.75	21.3 / 10.2	1788 / 894	71.5 / 40.4	92.2 / 85.3
3/4	22.5 / 5.62	28.3 / 11.9	1782 / 891	80.2 / 50.6	92.7 / 87.7
4/4	30.0 / 7.50	36.6 / 14.1	1775 / 887	83.2 / 56.5	92.3 / 88.1
5/4	37.5 / 9.38	46.1 / 16.8	1767 / 883	83.3 / 59.5	91.4 / 87.6

SPEED TORQUE

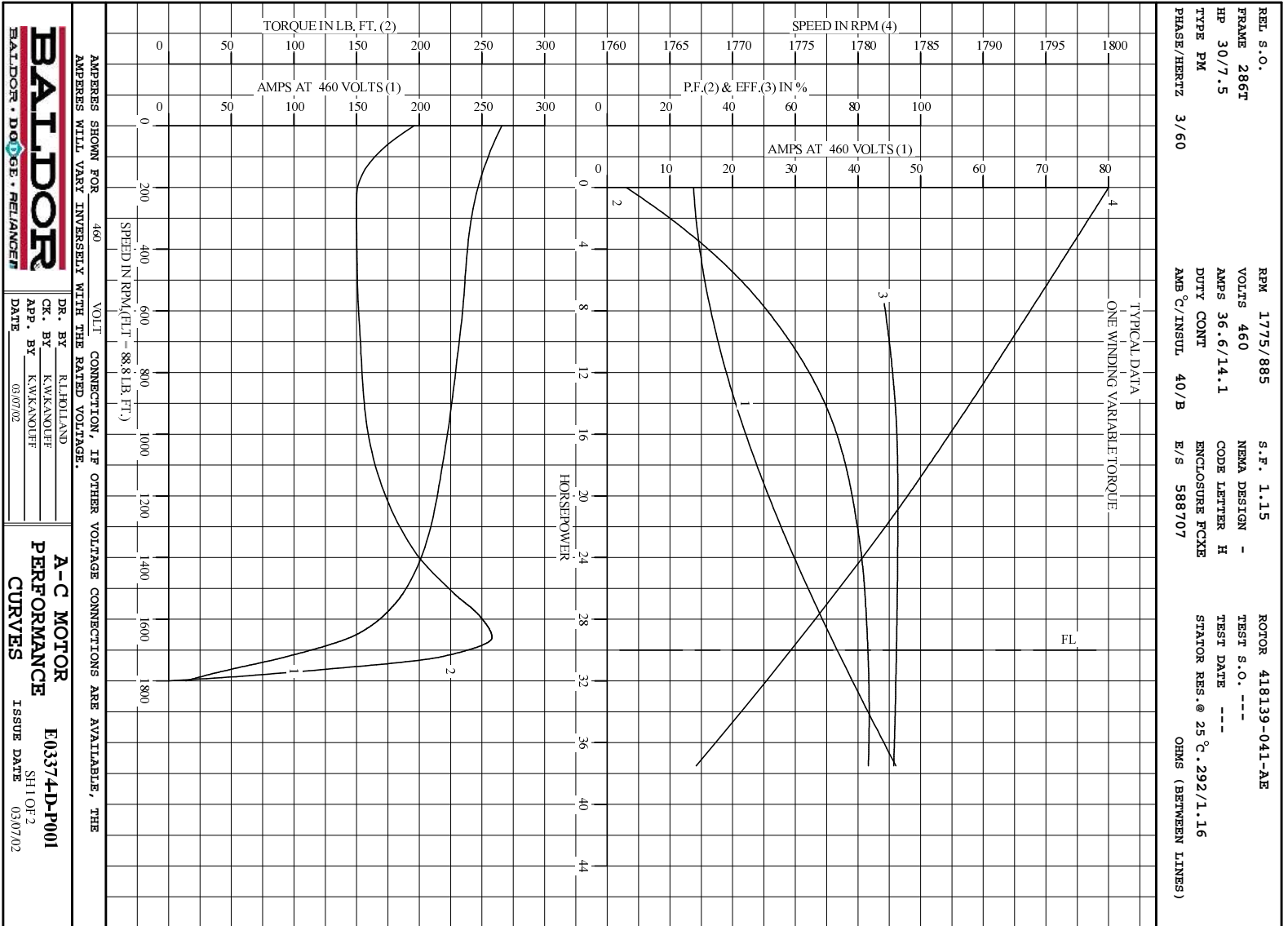
	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0 / 0	221 / 140	196 / 62.3	266 / 52.0
PULL UP	229 / 336	169 / 119	150 / 52.7	245 / 48.4
BREAKDOWN	1659 / 843	291 / 191	258 / 84.6	145 / 32.9
FULL LOAD	1775 / 887	100 / 100	88.8 / 44.4	36.6 / 14.1

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

REMARKS: TYPICAL DATA
ONE WINDING VARIABLE TORQUE

	DR. BY R.L.HOLLAND	A-C MOTOR PERFORMANCE DATA E03374-D-P001 ISSUE DATE 03/07/02
	CK. BY K.W.KANOUFF APP. BY K.W.KANOUFF DATE 03/07/02	

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DR. BY ALHOLLAND
 CK. BY KWKANDUFF
 APP. BY KWKANDUFF
 DATE 03/07/02

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PERFORMANCE
CURVES
 E03374D-P001
 SH 1 OF 2
 ISSUE DATE 03/07/02

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