

BALDOR® • RELIANCE

Product Information Packet

M7170T

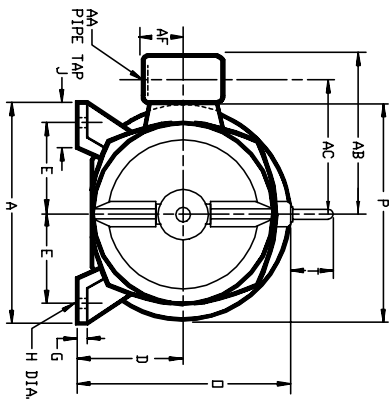
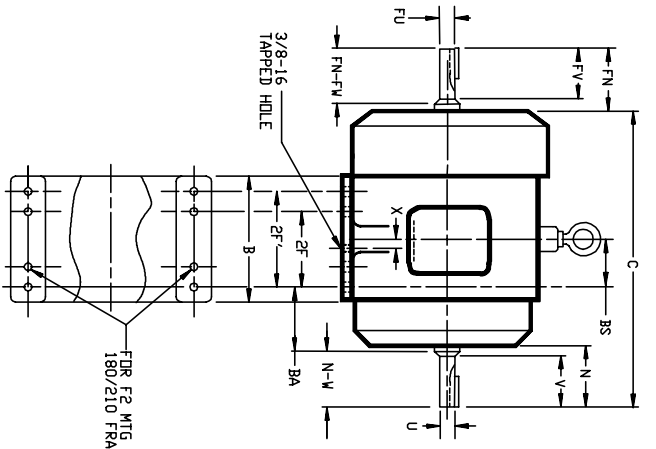
10HP,1800RPM,3PH,60HZ,215T,TEFC,FOOT,

Product Detail			
Model Number:	M7170T	Environment:	Hazardous Location
Voltage:	230/460	HP:	10/7.5
Rpm:	1750/1455	Efficiency:	EPAct (EM)
Phase:	3	Frequency:	60
Inverter Duty:	*	Enclosure:	TEFC
Frame Group:	210	Frame Size:	L215T
Features:	General Purpose	Mounting:	Foot Mounted
Service Factor:	1	Enclosure Group:	TEFC
List Price:	0	Price Symbol:	LS
Speed Range:	1201-1800	Insulation Class:	B
Nema Design:	B	Encl Enhancement:	
Catalog Page:	91	Dimension Sheet:	613053-501
Connection Diagram:	416820-1	Electric Design:	E02263-A-B001
Single HP:	10	Get Notes:	
Revision:		Instruction Manual:	B-3620
Application:	Division 1 / Zone 1 - Class I Group D/Class II	Special Groups F & G:	
Scaled Drawing:		Obsolete:	N
Last Data Source:	RAG	Bearing Type:	
Electrical Type:	P	Mounting Pos:	
Ambient:	40	Duty:	CONT
Amps:	24.4/12.2	Nominal Eff:	89.5
Kva Code:	G	Power Factor:	85.8
Poles:	04	Weight:	213

DUTY MASTER ALTERNATING CURRENT MOTORS

Distribution Code "M"

ENCLOSURE: TOTALLY ENCLOSED
 SQUIREL-CAGE INDUCTION
 X/T CONSTRUCTION
 UNDERWRITERS LISTED MOTOR
 COOLING: FAN COOLED
 MOUNTING: FOOT
 FRAMES X180T THRU X210T



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

FRAME	A	D ₃	E	G	H	J	D	P	T	AA	AB	AC	AA	AA	AB	AC	AA	AA	AB	AC	AA	BA
X180T-X180T	9.00	4.50	3.75	44	44	1.75	9.88	9.25	2.00	1	9.50	6.94	2.50	1-1/4	10.38	7.62	3.38	2.75	11.25	8.50	3.38	2.75
X210T-X210T	10.50	5.25	4.25	44	44	2.00	11.25	10.50	2.00	1	10.50	7.81	2.50	1-1/4	11.25	8.50	3.38	3.50	12.25	9.50	3.38	3.50

FRAME	FOOT MFG	C	BS	B	2F	2F'	N	N-V	UK2	V	SQL	LGTH	FN	FN-FW	FIX2	FV	SO	LGTH	X	WEIGHT
X180T	X182T	15.62	2.75	7.00	4.50	2.81	2.75	1.1250	2.50	.250	1.75	3.19	2.25	.8750	2.00	.188	1.36	1.00	80	
X180T	X184T	17.12	3.50	8.50	4.50	2.81	2.75	1.1250	2.50	.250	1.75	3.19	2.25	.8750	2.00	.188	1.36	2.25	110	
X210T	X213T	19.25	3.50	8.50	5.50	3.44	3.38	1.3750	3.12	.312	2.38	3.75	2.75	1.1250	2.50	.250	1.75	1.12	130	
X210T	X215T	20.12	3.94	9.12	5.50	3.44	3.38	1.3750	3.12	.312	2.38	3.75	2.75	1.1250	2.50	.250	1.75	2.56	140	
X210T	X215T	20.12	3.94	9.12	7.00	3.44	3.38	1.3750	3.12	.312	2.38	3.75	2.75	1.1250	2.50	.250	1.75	2.56	170	

- (1) SPECIAL DIMENSIONS ON THIS LINE
- (2) *D AND *FU MAY VARY +.0000, -.0005
- (3) *D' MAY VARY +.00, -.03
- (4) MOTOR WEIGHTS MAY VARY BY 15% FOR NON-STANDARD RATINGS
- (5) FOR UNDERWRITERS CLASSIFICATION SEE MOTOR DATA PLATE
- (6) OVERSIZE X/P TERMINAL BOX SUPPLIED ONLY WHEN SPECIFIED

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

MAXIMUM PERMISSIBLE SHAFT ROUNDT WHEN MEASURED AT END OF STANDARD SHAFT EXTENSION IS .002 I. I. R.

IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.

STANDARD DOUBLE SHAFT SUPPLIED ONLY WHEN SPECIFIED.

FRAME _____ TYPE _____ CERTIFIED FOR _____

ORDER _____ ITEM _____ HP _____ RPK _____ APPROVED BY _____

RELIANCE SALES ORDER _____ DATE _____

DR. BY: K. THOMAS
 CK. BY: K. THOMAS
 APP. BY: G. KILBORN
 DATE: 11-11-96

RELIANCE ELECTRIC

CLEVELAND, OHIO 44117 U. S. A.

10-541-00

SHEET 1 OF 2

DIMENSION SHEET

613053-501

ISSUE DATE: NOVEMBER 27, 2006

C/R R02655

DUTY MASTER ALTERNATING CURRENT MOTORS

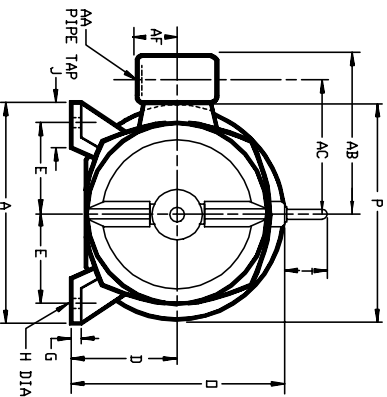
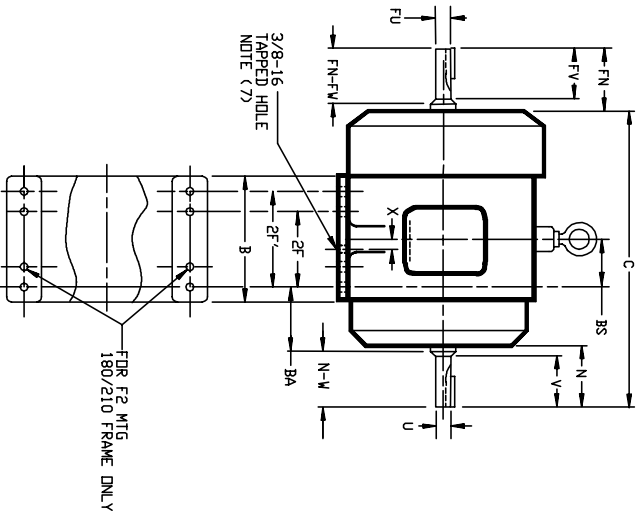
Distribution Code "M"

SQUIREL-CAGE INDUCTION
X/T CONSTRUCTION

ENCLOSURE: TOTALLY ENCLOSED
UNDERWRITERS LISTED MOTOR
MOUNTING: FOOT

COOLING: FAN COOLED

FRAMES X180T THRU X210T



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

FRAME	A	D ₃₃	E	G	H	J	D	P	T	AA	AP	AC	AB	AC	AB	AC	AB	AC	AB
X180T-X180T	228.6	114.3	95.3	11.2	21.1	2	44.5	251.0	50.8	1	241.3	117.6	3	53.5	1-1/4	263.7	195.5	85.6	69.9
X210T-X210T	266.7	133.4	108.0	11.2	21.1	2	50.8	285.8	50.8	1	266.7	198.4	3	53.5	1-1/4	295.8	215.9	85.6	88.9

FRAME	FLOUT	MIG	C	BS	B	2F	2F'	N	N-V	U(2)	V	SO ₂	LGTH	FN	FN-FV	FUR(2)	FV	SO ₁	LGTH	X	WEIGHT
X180T	X182T	M	396.7	63.9	177.8	114.3	139.7	71.4	69.9	28.575	63.5	6.35	44.5	81.0	57.2	22.225	50.8	4.78	35.1	25.4	36
X180T	X184T	M	434.8	68.9	215.9	114.3	139.7	71.4	69.9	28.575	63.5	6.35	44.5	81.0	57.2	22.225	50.8	4.78	35.1	25.4	39
X210T	X213T	M	489.0	68.9	215.9	135.7	177.8	87.4	85.9	34.925	79.2	7.92	60.5	95.3	69.9	28.575	63.5	6.35	44.5	28.4	59
X210T	X215T	M	511.0	100.0	231.6	135.7	177.8	87.4	85.9	34.925	79.2	7.92	60.5	95.3	69.9	28.575	63.5	6.35	44.5	65.0	77
X210T	X215T	M	511.0	100.0	231.6	135.7	177.8	87.4	85.9	34.925	79.2	7.92	60.5	95.3	69.9	28.575	63.5	6.35	44.5	65.0	82

- (1) SPECIAL DIMENSIONS ON THIS LINE
- (2) *U* AND *FV* MAY VARY +.0000, -.0127 mm
- (3) *D* MAY VARY +.00, -.76 mm
- (4) MOTOR WEIGHTS MAY VARY BY 15% FOR NON-STANDARD RATINGS
- (5) FOR UNDERWRITERS CLASSIFICATION SEE MOTOR DATA PLATE
- (6) DIVERSIFIED TERMINAL BOX SUPPLIED ONLY WHEN SPECIFIED
- (7) DIMENSIONS ARE IN INCHES. STANDARD DOUBLE SHAFT SUPPLIED ONLY WHEN SPECIFIED. TERMINAL BOX LOCATED ON OPPOSITE SIDE WHEN F-2, N-1, N-4, V-5, N-7 OR C-1 MOUNTING IS SPECIFIED. MAXIMUM PERMISSIBLE SHAFT ROUNDTOP WHEN MEASURED AT END OF STANDARD SHAFT EXTENSION IS .050 mm T. I. R. IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.

FRAME _____ TYPE _____ CERTIFIED FOR _____ VOLTS _____

ORDER _____ ITEM _____ HP _____ RPM _____ APPROVED BY _____ DATE _____

RELIANCE SALES ORDER _____

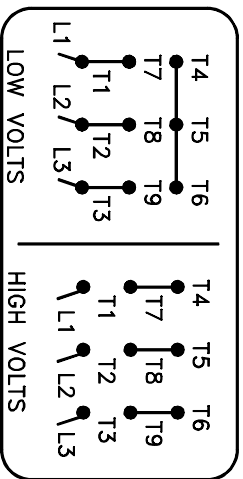
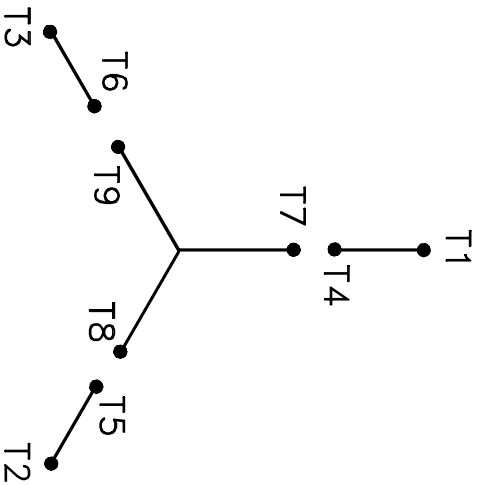
DR. BY: K. THOMAS
CK. BY: K. THOMAS
APP. BY: G. KILBORN
DATE: 11-11-86

RELIANCE ELECTRIC DIMENSION SHEET 613053-501
CLEVELAND, OHIO 44117 U.S.A. SHEET 2 OF 2 ISSUE DATE: NOVEMBER 27, 2006

C/R R0265

10-541-00

A-C MOTOR
 CONNECTION DIAGRAM
 STANDARD 9 LEAD Y CONNECTED



(N.P. 1575-A)

CUSTOMER _____

CUSTOMER ORDER NO. _____

RELIANCE S.O. NO. _____

C/R



DR. BY: N.W.
 CK. BY: J.C.V.
 APP. BY: H.E.L.
 DATE: 03/05/76

CONNECTION DIAGRAM

416820-1
 ISSUE DATE JUNE 15, 1976

E:\W-DIAG\416820\001 RAG

10-541-03

REL. S.O.	FRAME	HP	TYPE	PHASE/HERTZ	RPM	VOLTS
	215T	10	P	3/60	1750	230/460
AMPS	DUTY	AMB °C/ INSUL.	S.F.	NEMA DESIGN	CODE LETTER	ENCL.
24.4/12.2	CONT	40/B	1.00	B	G	TEFC
E/S	ROTOR	TEST S.O.	TEST DATE	STATOR RES. @25 °C (BETWEEN LINES)		
544997	418425-43PE	---	---	.339/1.35		

PERFORMANCE


LOAD	HP	AMPERES	RPM	POWER FACTOR %	EFFICIENCY %
NO LOAD	0	3.5	1800	9.13	0
1/4	2.50	4.5	1789	60.0	86.8
2/4	5.01	6.5	1777	79.6	90.5
3/4	7.50	9.2	1764	84.7	90.6
4/4	10.0	12.2	1749	85.8	89.5
5/4	12.5	15.6	1732	85.6	87.8

SPEED TORQUE

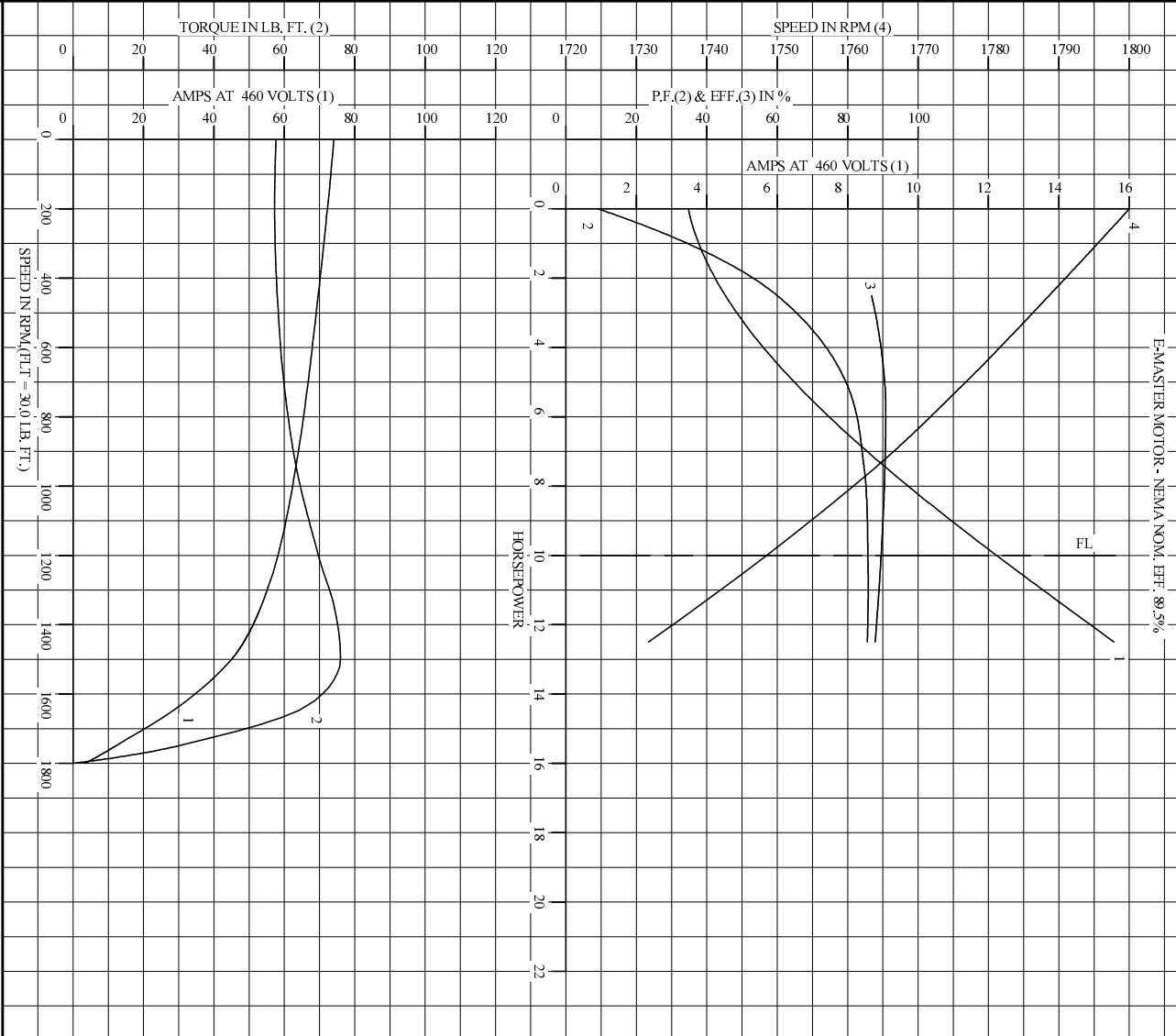
	RPM	TORQUE % FULL LOAD	TORQUE LB.-FT.	AMPERES
LOCKED ROTOR	0	192	57.6	74.1
PULL UP	0	192	57.6	74.1
BREAKDOWN	1500	253	76.0	45.0
FULL LOAD	1749	100	30.0	12.2

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

REMARKS: TYPICAL DATA
E-MASTER MOTOR - NEMA NOM. EFF. 89.5%

	DR. BY G. R. WEBB	A-C MOTOR PERFORMANCE DATA E02263-A-B001 ISSUE DATE 10/14/02
	CK. BY J.J. HARRISON APP. BY W. L. SMITH DATE 10/14/02	

RLT S.O. RPM 1750 S.F. 1.00 ROTOR 418425-43FE
 FRAME 215T VOLTS 230/460 NEMA DESIGN B TEST S.O. TYPICAL DATA
 HP 10 AMPS 24.4/12.2 CODE LETTER G TEST DATE ---
 TYPE P DUTY CONT ENCLOSURE TEFC STATOR RES. @ 25 °C .339/1.35
 PHASE/HERTZ 3/60 AMB °C/INSUL 40/B E/S 544997 OHMS (BETWEEN LINES)



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

BALDOR • DOUGLASS • RELIANCE

A-C MOTOR PERFORMANCE CURVES E02263-A-B001

DR. BY G.R. WEBB
 CK. BY J.HARRISON
 APP. BY W.L. SMITH
 DATE 10/14/02

ISSUE DATE 10/14/02

Printed on 11/8/07 12:57 @ usmghengdev1