

MK Diamond Products, Inc.
 1315 Storm Parkway
 Torrance, CA 90509-2803

SPECIFICATION SHEET		Date 12/4/17
MK Part Number 172426	MK Description MTR, 7.5HP 230/460V 3PH 1725RPM, EM3710T	Revision -
Manufacturer/Supplier P/N EM3710T	Manufacturer/Vendor Description 7.5HP,1770RPM,3PH,60HZ,213T,3738M,TEFC,F	
Manufacturer Information BALDOR	Supplier Information POWER REPS	Alternate Manufacturer OR EQUIVALENT

Specifications:

Nameplate NP3441LUA	
CAT.NO.	EM3710T
SPEC	37H244R872G2
HP	7.5
VOLTS	230/460
AMPS	19/9.5
RPM	1770
FRAME	213T HZ 60 PH 3
SF	1.15 CODE J DES A CLASS F
NEMA NOM. EFF	91.7 PF 80
RATING	40C AMB-CONT
CC	010A USABLE AT 208V 20
ENCL	TEFC SER
DE	6307 ODE 6206
VPWM INVERTER READY	
CT6-60H(10:1)VT3-60H(20:1)	50HZ 7.5HP 190/380V 22.4/11.2A
	SF1.0

See .pdf pages for more info

Rev	Description	Date	Approved
-	INITIAL RELEASE, ECO# 2346	12/4/17	SSH



BALDOR • RELIANCE

Product Information Packet

EM3710T

7.5HP, 1770RPM, 3PH, 60HZ, 213T, 3738M, TEFC, F

Part Detail							
Revision:	C	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	37WGR872	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	37H244	Layout:	37LYH244	Poles:	04	Created Date:	12-09-2015
Base:	RG	Eff. Date:	08-22-2017	Leads:	9#14		

Specs			
Catalog Number:	EM3710T	Insulation Class:	F
Enclosure:	TEFC	Inverter Code:	Inverter Ready
Frame:	213T	KVA Code:	J
Frame Material:	Steel	Lifting Lugs:	Standard Lifting Lugs
Output @ Frequency:	7.500 HP @ 60 HZ	Locked Bearing Indicator:	No Locked Bearing
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 14 AWG
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	230.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	3738M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	UR	Power Factor:	80
	CSA EEV	Product Family:	General Purpose
	CSA	Pulley End Bearing Type:	Ball
Auxillary Box:	No Auxillary Box	Pulley Face Code:	Standard
Auxillary Box Lead Termination:	None	Pulley Shaft Indicator:	Standard
Base Indicator:	Rigid	Rodent Screen:	None
Bearing Grease Type:	Polyrex EM (-20F +300F)	RoHS Status:	ROHS COMPLIANT
Blower:	None	Shaft Extension Location:	Pulley End

Product Information Packet: EM3710T - 7.5HP,1770RPM,3PH,60HZ,213T,3738M,TEFC,F

Current @ Voltage:	19.000 A @ 230.0 V	Shaft Ground Indicator:	No Shaft Grounding
	20.000 A @ 208.0 V	Shaft Rotation:	Reversible
	9.500 A @ 460.0 V	Shaft Slinger Indicator:	No Slinger
Design Code:	A	Speed Code:	Single Speed
Drip Cover:	No Drip Cover	Motor Standards:	NEMA
Duty Rating:	CONT	Starting Method:	Direct on line
Electrically Isolated Bearing:	Not Electrically Isolated	Thermal Device - Bearing:	None
Feedback Device:	NO FEEDBACK	Thermal Device - Winding:	None
Front Face Code:	Standard	Vibration Sensor Indicator:	No Vibration Sensor
Front Shaft Indicator:	None	Winding Thermal 1:	None
Heater Indicator:	No Heater	Winding Thermal 2:	None

Nameplate NP3441LUA

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RPM	1770		
FRAME	213T	HZ 60	PH 3
SF	1.15	CODE J	DES A CLASS F
NEMA NOM. EFF	91.7	PF 80	
RATING	40C AMB-CONT		
CC	010A	USABLE AT 208V 20	
ENCL	TEFC	SER	
DE	6307	ODE	6206
VPWM INVERTER READY			
CT6-60H(10:1)VT3-60H(20:1)	50HZ 7.5HP 190/380V 22.4/11.2A		
			SF1.0

Parts List		
Part Number	Description	Quantity
SA311600	SA 37H244R872G2	1.000 EA
RA299025	RA 37H244R872G2	1.000 EA
37FN3002C01	EXFN, PLASTIC, 6.00 OD, 1.155 ID	1.000 EA
HW3200A01	3/8-16X3/4 I-BLT WELDED F/S	1.000 EA
37CB3006	37 CB CASTING W/1.38 LEAD HOLE @ 6:00	1.000 EA
37GS1000SP	GASKET, CONDUIT BOX STD., .06 THICK LEXI	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 EA
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA
37EP3101A01	FR ENDPLATE, FOR ROUTING PURPOSES	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 EA
37PE3100A01	PUEP ASSEMBLY - ROUTING PUPROSES	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 EA
07FH4007SP	PRIMED	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 EA
37CB4516	LIPPED LID FOR 37 FRAME NEC KOBX	1.000 EA
37GS1008	37 GS FOR CB LID - LEXIDE	1.000 EA
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 EA
HW2501F21	KEY, 5/16 SQ X 2.375	1.000 EA
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON (Use 4824-15A)	0.050 LB

Parts List (continued)		
Part Number	Description	Quantity
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
HA3104A17	5/16-18X13.250 T-BLT/OHIO	4.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.028 GA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP3441LUA	ALUM SUPER-E VPWM INV READY UL CSA-EEV C	1.000 EA
37PA1039	PALLET PACK GRP, PRINT PK1026A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1100/bx) 11/14	1.000 EA

Accessories		
Part Number	Description	Multiplier
37-3301	C FACE KIT	P1

AC Induction Motor Performance Data
Record # 54275 - Typical performance - not guaranteed values

Winding: 37WGR872-R001	Type: 3738M	Enclosure: TEFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	7.5			Full Load Torque	22.2 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	19/9.5			Breakdown Torque	70.9 LB-FT
R.P.M.	1770			Pull-up Torque	32.6 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	43 LB-FT
NEMA Design Code	A	KVA Code	J	Starting Current	70.9 A
Service Factor (S.F.)	1.15			No-load Current	4.31 A
NEMA Nom. Eff.	91.7	Power Factor	80	Line-line Res. @ 25°C	1.41 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	63°C
S.F. Amps				Temp. Rise @ S.F. Load	77°C
				Locked-rotor Power Factor	37.2
				Rotor inertia	0.934 LB-FT ²

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	42	64	75	80	83	84	82
Efficiency	87.1	91.6	92	92	91.1	89.8	91.5
Speed	1793	1786	1778	1770	1760	1750	1764
Line amperes	4.83	6.02	7.6	9.5	11.6	13.9	10.8

Performance Graph at 460V, 60Hz, 7.5HP Typical performance - Not guaranteed values





