

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

SPECIFICATION SHEET			Date
MK Part Number 170063	MK Description MTR, 15HP, 230V/3PH, 1800RPM C-FACE W/BASE	Revision -	
Manufacturer P/N 171587.00	Manufacturer Description MOTOR, 15 HP		
Manufacturer Information LESSON	Vendor Information SIERRA INDUSTRIAL ENGINEERING	Alternate Manufacturer Or Equivalent	
Specifications:			
<p>Leeson 171587.00 See following pages for specs</p> <p>Baldor CEM2333T See following pages for specs</p>			
Rev	Description	Date	Approved
-	INITIAL RELEASE, ECO#2009	6/18/12	RMR



ELECTRIC MOTORS, GEARMOTORS AND DRIVES

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Product Features

List Price : -

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Catalog No 171587.00	Model C254T17FK8A
Product type AC MOTOR	Stock Stock
Description 15 HP 1800 230/460 TEFC 254TC	

Information shown is for current motor's design

[View Outline](#) | [View Connection](#)

Engineering Data

Volts 208-230	Volts 460	Volts 190/380
F.L. Amps 40-37	F.L. Amps 18.5	F.L. Amps 30.5/15.3
S. F Amps 46-42	S. F Amps 21	S. F Amps 34.5/17.3
RPM 1800	Hertz 60	
HP 15	Duty CONTINUOUS	TYPE TFC
KW 11.2		
Frame 254TC	Serv. Factor 1.15	Phase 3
Max Amb 40	Design B	Code H
Insul Class F	Protection NOT	Therm.Prot.
Eff 100% 92.4	Eff 75%	PF 82.5
UL Y-(LEESON UL REC)	CSA Yes	Bearing OPE 6308
CC Number CC005A	CE Yes	Bearing PE 6309
Load Type	Inverter Type	Speed Range NONE
RPM 1500	Hertz 50	
HP 10	Duty CONTINUOUS	TYPE TFC
KW 7.5		
Frame 254TC	Serv. Factor 1.15	Phase 3
Max Amb 40	Design B	Code H
Insul Class F	Protection NOT	Therm.Prot.
Eff 100% 92.4	Eff 75%	PF 80
UL Y-(LEESON UL REC)	CSA Yes	Bearing OPE 6308
CC Number CC005A	CE Yes	Bearing PE 6309
Load Type	Inverter Type	Speed Range NONE
Motor Wt. 284 LB	Enclosure TEFC	Lubrication POLYREX EM
Nameplate B-93458-E-LN-FHKL R-A-A-B	Mounting RIGID	Rotation REV
Assembly	Shaft Dia.	Ext. Diag. 00417203
Cust Part No	Outline SS622044LE	Ext. Diag2

Packaging N
Carton Label
Iris

Paint GREEN - LEESON
WATTS AVER

Winding T12904005
GROUP: 3
Test Card

Form Factor
Torque
AB Code
Resistance
Connection

RMS Amps
Peak
Peak@DegC

Const Torque Speed
Range

Rework Status

Rework TYPE

Hazardous Loc DIVISION 2

Explosion Proof
Class
Class

Temp Op Code
GROUP:
GROUP:

Brake Motors

FORCE
VDC
ADC

Brake Coil OHMs @25 C

Performance

Torque UOM
Torque
CURRENT (amps)
Efficiency (%)
PowerFactor

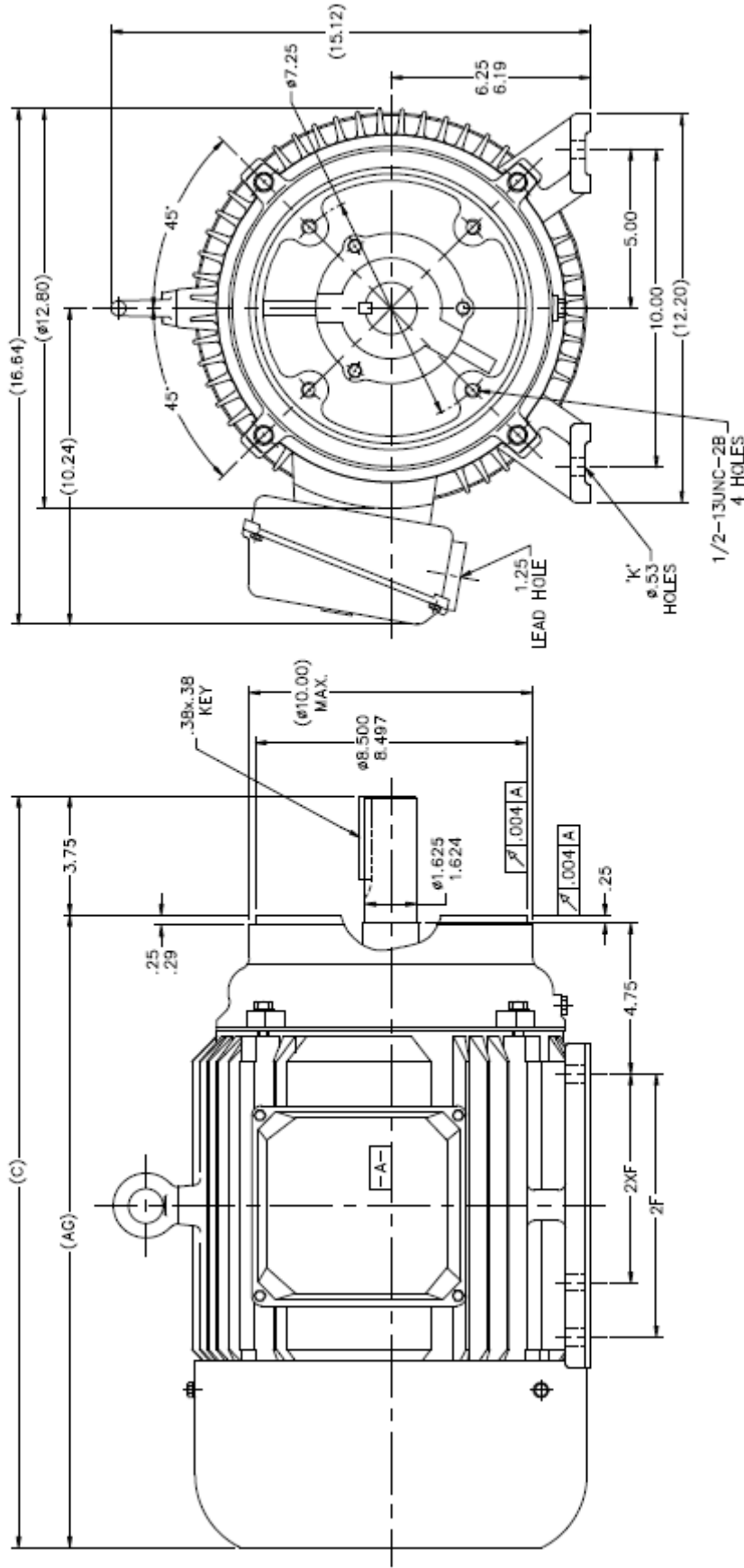
Inertia (WK²)

Load Curve Data @60/50 Hz, 460 Volts, 15 Horsepower

Load	Amps	KW	RPM	Torque	EFF	PF	Rise By Resis	Frame Rise
0.0	8.0	0.38	1800	0.0	0.0	6.0	0.0	-
0.25	9.3	3.2	1794	11.0	86.5	43.5	0.0	-
0.5	11.5	6.1	1788	22.0	91.7	67.5	0.0	-
0.75	14.6	9.1	1780	33.2	92.4	78.0	0.0	-
1.0	18.5	12.1	1775	44.4	92.4	82.5	45.0	-
1.15	21.0	14.0	1770	51.3	91.7	84.0	60.0	-
1.25	22.5	15.2	1765	55.7	91.7	84.5	0.0	-
1.5	27.1	18.42	1760	67.2	91.0	85.5	0.0	-

SOURCE: CALCULATED GROUP: 3

SS622044LE



NOT DRAWN TO SCALE

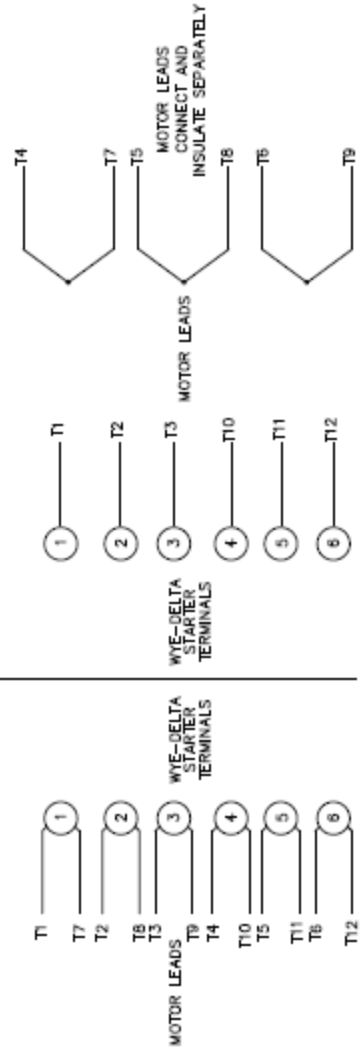
UNITS		INCHES		MILLIMETERS		TITLES		MATERIAL		REVISION		BY & DATE		REV.	
NO.	DESCRIPTION	NO.	DESCRIPTION	NO.	DESCRIPTION	NO.	DESCRIPTION	NO.	DESCRIPTION	NO.	DESCRIPTION	NO.	DESCRIPTION	NO.	DESCRIPTION
---	N254TC-2	23.75	20.00	---	8.26	---	4	---	---	---	---	---	---	---	---
---	N254TC-4	23.75	20.00	---	8.26	---	4	---	---	---	---	---	---	---	---
---	N256TC-2	25.48	21.73	---	10.00	---	6	---	---	---	---	---	---	---	---
---	N256TC-4	25.48	21.73	---	10.00	---	6	---	---	---	---	---	---	---	---
DASH	FRAME	C	AG	B	2F	2XF	K	BS	---	---	---	---	---	---	---
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<p>LEESON</p> <p>ELECTRIC MOTORS GEARMOTORS AND DRIVES</p> <p>TITLE OUTLINE</p> <p>254/5TC FRAME - CFACE</p> <p>SCALE 3/4"</p> <p>REV. 250012070-3703</p> <p>DATE FILE 06/22/04LE</p>												<p>REV. OF</p> <p>REV.</p>			
<p>SS622044LE</p>												<p>REV. OF</p> <p>REV.</p>			

004172-01

WYE - DELTA STARTING USEABLE ON 2,4 AND 6 POLE MOTORS.

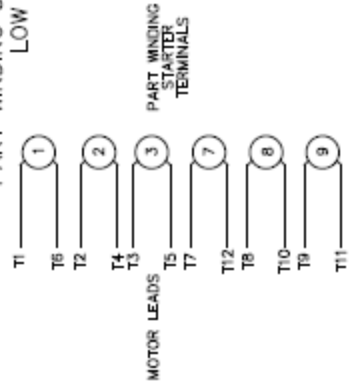
LOW VOLTAGE CONNECTION

HIGH VOLTAGE CONNECTION



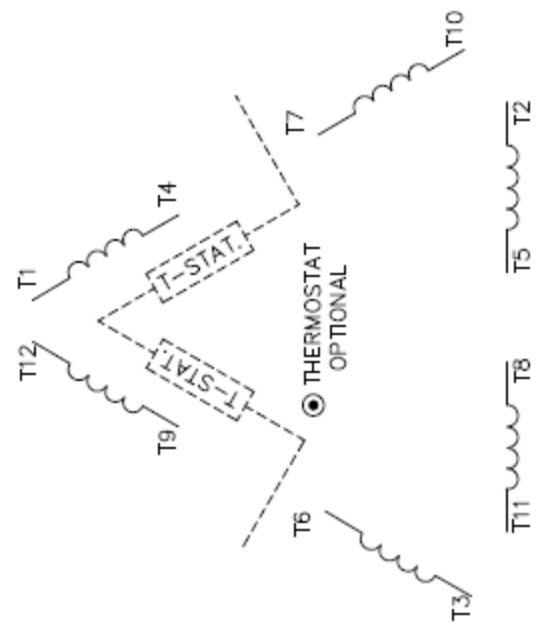
REFER TO THE WYE-DELTA STARTER CONNECTION INSTRUCTIONS FOR PROPER CONNECTION OF POWER LINES TO STARTER.

PART WINDING START USEABLE ON 4 & 6 POLE MOTORS LOW VOLTAGE CONNECTION ONLY



REFER TO THE PART WINDING STARTER INSTRUCTIONS FOR PROPER CONNECTION OF POWER LINES TO STARTER.

LINE LEADS



ROTATION CAN BE REVERSED BY INTERCHANGING ANY TWO LINE LEADS
 ● RED LEADS OR P1, P2, FOR N/C THERMOSTAT

ACROSS THE LINE START & RUN

	LINE 1	LINE 2	LINE 3	JOIN & INSULATE SEPARATELY
HIGH VOLT	T1, T12	T2, T10	T3, T11	(T4, T7) (T5, T8) (T6, T9)
LOW VOLT	T1, T6 T7, T12	T2, T4 T8, T10	T3, T5 T9, T11	



ELECTRIC MOTORS
GEARMOTORS
AND DRIVES

DRAWN	MLW 09/08/77
CHK	RFB 09/12/77
APPD	JCW 09/12/77
SCALE	1=1
RFB	
FMF	
PREV	

TITLE DELTA - WYE CONNECTION DIAGRAM
 MATL
 FINISH

NO.	REVISION	BY & DATE	CHK	ANG	± 1/2"
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CAD FILE		00417201	SIZE		DRAWING NO.
RFP			A		004172-01
DIST					REV.
					03



BALDOR® • RELIANCE

Product Information Packet

CEM2333T

15HP, 1765RPM, 3PH, 60HZ, 254TC, 0944M, TEFC, F

Part Detail							
Revision:	H	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Prod. Type:	0944M	Elec. Spec:	09WGZ910	CD Diagram:	CD0005
Enclosure:	TEFC	Mfg Plant:		Mech. Spec:	09C102	Layout:	09LYC102
Frame:	254TC	Mounting:	F1	Poles:	04	Created Date:	11-09-2012
Base:	RG	Rotation:	R	Insulation:	F	Eff. Date:	06-06-2016
Leads:	9#12					Replaced By:	
Literature:		Elec. Diagram:					

Nameplate NP3441LUA	
CAT.NO.	CEM2333T
SPEC.	09C102Z910G1
HP	15
VOLTS	230/460
AMP	36.2/18.1
RPM	1765
FRAME	254TC HZ 60 PH 3
SER.F.	1.15 CODE H DES A CL F
NEMA-NOM-EFF	92.4 PF 83
RATING	40C AMB-CONT
CC	010A USABLE AT 208V 38
DE	6309 ODE 6208
ENCL	TEFC SN
VPWM INVERTER READY	
CT6-60H(10:1)VT3-60H(20:1)	
50Hz 15HP 190/380V 43.2/21.6A	
SF1.0	

Parts List		
Part Number	Description	Quantity
SA254029	SA 09C102Z910G1	1.000 EA
RA240840	RA 09C102Z910G1	1.000 EA
S/P107-000-005	SUPER-E PROC'S(254/6 FR.) ZK PLANT - POL	1.000 EA
HW1002A63	WASHER, 5/8 HI-COLLAR SPRLCKWASHER	1.000 EA
09CB3002	CB W/1.38 LEAD HOLE FOR 37, 39, 307 & 30	1.000 EA
09GS1000	GASKET-CONDUIT BOX, 1/16 THICK LEXIDE	1.000 EA
10XN2520K12	1/4-20 X.75 GRD 5	2.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 EA
09EP1300A155	PUEP MACH W/309 BRG & "O" DRAIN, SLINGER	1.000 EA
HW4600B44	V-RING SLINGER 1.500 X 1.810 X .28 VITON	1.000 EA
WD1000B17	T&B CX35TN TERMINAL	1.000 EA
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA
09EP1100A194	ENDPLATE, MACH	1.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
XY3816A12	3/8-16 FINISHED NUT	4.000 EA
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 EA
10XN2520K28	1/4-20 X 1.75" HX HD SCRWGRADE 5, ZINC P	2.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 EA
10XN2520K36	1/4-20 X 2.25" HX HD SCRWGRADE 5, ZINC P	4.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 EA
HA3113A02	THRUBOLT 3/8-16 X 16.750	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
HA2081A05	SPACER TUBE, 309 FAN HSG, 2.00 LONG	4.000 EA
XY3816A12	3/8-16 FINISHED NUT	4.000 EA

Parts List (continued)		
Part Number	Description	Quantity
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
09CB3501	CONDUIT BOX LID FOR 09CB3001 & 09CB3002	1.000 EA
09GS1013	09 GS FOR 09CB3501 LID - LEXIDE	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 EA
HW2501G25	KEY, 3/8 SQ X 2.875	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 11/14	1.000 EA
HW4500A05	1669B ALEM/UNIV860 GR FTG X	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HA4066A01	PUSH IN T-DRAIN FITTING (BLACK)	1.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.080 LB
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HA4066A01	PUSH IN T-DRAIN FITTING (BLACK)	1.000 EA
09FH4000SP	FAN COVER, STAMPED	1.000 EA
09FN3001D01	EXTERNAL FAN, PLASTIC	1.000 EA
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 EA
51XB1214A20	12-14X1.25 HWSSLD SERTYB	1.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.050 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
LC0005E02	SPL CONN.DIA./WARN.LABEL(LC0005/LB1119)	1.000 EA
NP3441LUA	ALUM SUPER-E VPWM INV READY UL	1.000 EA

09PA1000	PACKAGING GROUP COMBINED PRINT	1.000 EA
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AC Induction Motor Performance Data
Record # 40347 - Typical performance - not guaranteed values

Winding: 09WGZ910-R001	Type: 0944M	Enclosure: TEFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	15			Full Load Torque	44.5 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	36.2/18.1			Breakdown Torque	153 LB-FT
R.P.M.	1765			Pull-up Torque	69.5 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	86.5 LB-FT
NEMA Design Code	A	KVA Code	H	Starting Current	127 A
Service Factor (S.F.)	1.15			No-load Current	7.56 A
NEMA Nom. Eff.	92.4	Power Factor	83	Line-line Res. @ 25°C	0.59555 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	54°C
S.F. Amps				Temp. Rise @ S.F. Load	67°C
				Rotor inertia	1.92 LB-FT2

Load Characteristics 460 V, 60 Hz, 15 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	45	69	79	83	85	87	84
Efficiency	88.2	92.2	92.7	92.4	91.5	90.4	91.9
Speed	1791.3	1783.1	1774	1765.2	1754.6	1743.1	1759
Line amperes	8.62	11	14.5	18.1	22.6	26.9	20.8

Performance Graph at 460V, 60Hz, 15.0HP Typical performance - Not guaranteed values

