PRODUCT INFORMATION PACKET

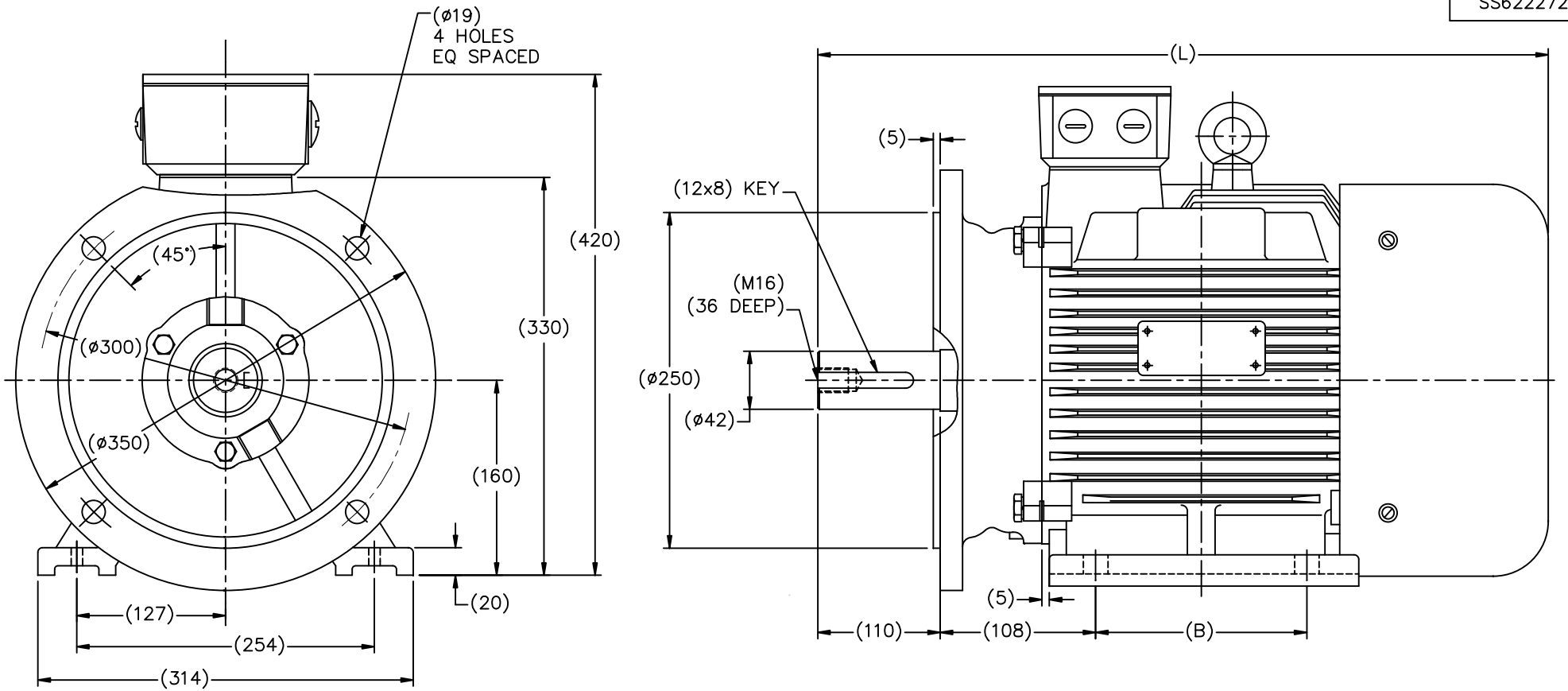
Model No: C160T11FZ41A
Catalog No: 193347.60
..10HP-7.5kW..1180RPM.DF160MD.TEFC.230/460V.3PH.60HZ.CONT.40C.1.15SF.B3/B5.....
TEFC

Nameplate Specifications

Output HP	**10 Hp**	Output KW	**7.5 kW**
Frequency	**60 Hz**	Voltage	**230/460 V**
Current	**28.8/14.4 A**	Speed	**1183 rpm**
Service Factor	**1.15**	Phase	**3**
Efficiency	**91.7 %**	Duty	**Continuous**
Insulation Class	**F**	Design Code	**B**
KVA Code	**G**	Frame	**160M**
Enclosure	**Totally Enclosed Fan Cooled**	Overload Protector	**No**
Ambient Temperature	**40 °C**	Drive End Bearing Size	**6309**
Opp Drive End Bearing Size	**6209**	UL	**Recognized**
CSA	**Y**	CE	**Y**
IP Code	**55**		

Technical Specifications

Electrical Type	**Squirrel Cage Inverter Rated**	Starting Method	**Wye Start Delta Run Or Inverter**
Poles	**6**	Rotation	**Reversible**
Mounting	**Rigid base**	Motor Orientation	**HORIZONTAL**
Drive End Bearing	**BALL**	Opp Drive End Bearing	**BALL**
Frame Material	**Cast Iron**	Shaft Type	**IEC**
Overall Length	**23.62 in**	Shaft Diameter	**1.625 in**
Shaft Extension	**4.33 in**	Assembly/Box Mounting	**F3**
Outline Drawing	**B-SS622272**	Connection Diagram	**004172.01**



Cat. No	MODEL	B	L
193348.60	DF160M1D-2R	210	600
193351.60	DF160M2D-2R	210	600
193349.60	DF160MD-4R	210	600
193354.60	DF160LD-2R	254	645
193352.60	DF160LD-4R	254	645
193347.60	DF160MD-6R	210	600

(MAY NOT BE DRAWN TO SCALE)

(DIMENSIONS ARE IN MILLIMETERS)

NO.	REVISION	BY & DATE	CHK

TOLERANCES UNLESS SPECIFIED

DEC.	METRIC
.X	±2.5
.XX	±.76
.XXX	±.127
.XXXX	±.0127
ANG	±7'30"

REGAL-BELOIT CORPORATION

DRAWN HLB 12-10-2010
CHK DJK 12-17-2010
APPD SB 12-18-2010
SCALE 1=18
REF
FMF HEBEI
PREV

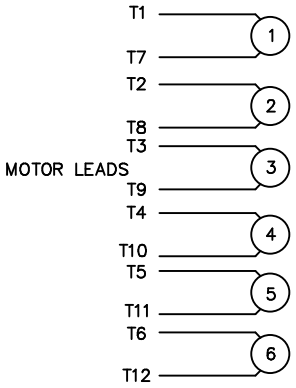
TITLE OUTLINE
DF160MD,LD-2,4,6R

MAT'L.
FINISH
CAD FILE SS622272
RFP 12-18-2010
DIST

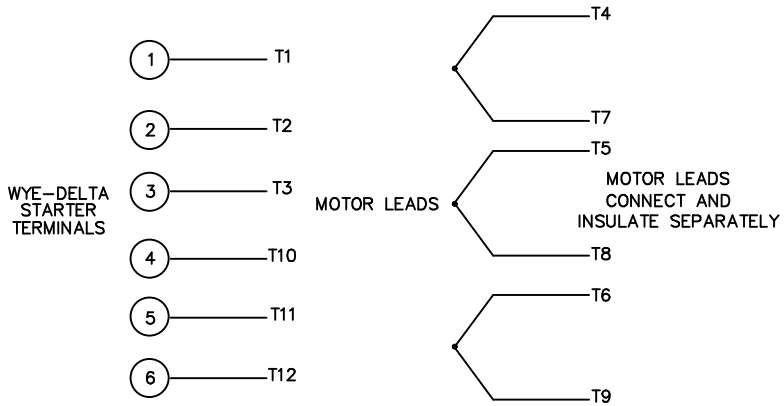
SIZE B
DRAWING NO. SS622272
PAGE OF
REV.

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

LOW VOLTAGE CONNECTION

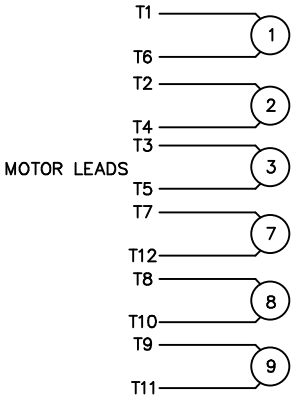


HIGH VOLTAGE CONNECTION



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

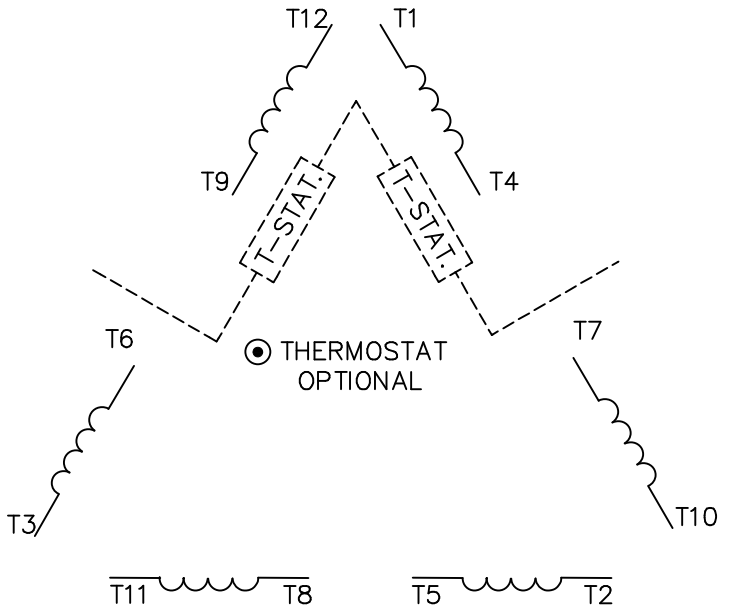
PART WINDING START USABLE ON 4 & 6 POLE MOTORS
LOW VOLTAGE CONNECTION ONLY



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

REFER TO THE CUTLER – HAMMER OR EQUIV. FOR PROPER SELECTION OF OVERLOAD HEATER COILS.

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	

NO.	REVISION	BY & DATE	CHK
03	REV'D LOW VOLTAGE CONN. LEADS PER ELEC.	BJB 06/07/00	
02	ADDED T–STAT. NOTES PER ELECTRICAL	KMM 06/02/98	
01	REDRAWN TO CAD	DBT 06/02/97	

TOLERANCES UNLESS SPECIFIED

DEC.	INCHES
.X	±.1
.XX	±.01
.XXX	±.005
.XXXX	±.0005
ANG	±1/2°

LEESON ELECTRIC MOTORS GEARMOTORS AND DRIVES

TITLE DELTA – WYE CONNECTION DIAGRAM

MAT'L.

FINISH

CAD FILE 00417201

RFP

DIST

DRAWN	WLW 09/08/77
CHK	RPB 09/12/77
APPD	JCW 09/12/77
SCALE	1=1
REF	
FMF	
PREV	

SIZE A | DRAWING NO. 004172–01 | REV. 03

6/28/2007 3:22:15 PM -

LEESON

CERTIFICATION DATA SHEET

1051 CHEYENNE AVE.
GRAFTON, WI 53024
PH. 262-377-8810

CATALOG #: 193347.60

CONN. DIAGRAM: 004172.01

OUTLINE: B-SS622272

MOUNTING: F3

WINDING #: T12906015 3

TYPICAL MOTOR PERFORMANCE DATA

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
10&7 1/2	7.50&5.60	1200	1183&985	160M	TEFC	G	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60/50	230/460&190/380	28.8/14.4&26.8/13.4	Y START D RUN OR INV	CONTINUOUS	F5	1.15/1.15	40

FULL LOAD EFF:	91.7&91.7	3/4 LOAD EFF:	91.7	1/2 LOAD EFF:	91	GTD. EFF	ELEC. TYPE
FULL LOAD PF:	71.5&73.6	3/4 LOAD PF:	65.7	1/2 LOAD PF:	54.7	91	SQ CAGE INV RATED

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
44.3 LB-FT	160.4 / 80.2	83.2 LB-FT 185 %	105 LB-FT 234 %	35

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
- dBA	- dBA	3.559 LB-FT^2	3.6 LB-FT^2	15 SEC.	2	- LBS.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
FF-FLANGE-300	STANDARD	RIGID	HORIZONTAL	PREMIUM SEVERE DUTY	NONE	FALSE	NONE	BLUE - LEESON (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
BALL	BALL	POLYREX EM	STANDARD IEC	NONE	NONE	AISI 1045 (C-240)	CAST IRON
6309	6209						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
TSTATS (N/C)	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

*

NOTE

INVERTER TORQUE: CONSTANT 10:1
INV. HP SPEED RANGE: NONE

ENCODER: NONE
NONE NONE
NONE NONE PPR

BRAKE: NONE NONE
NONE P/N NONE
NONE NONE
NONE FT-LB NONE V NONE Hz

7/19/2018

Data Sheet

Date: 1/17/2018

193347.60

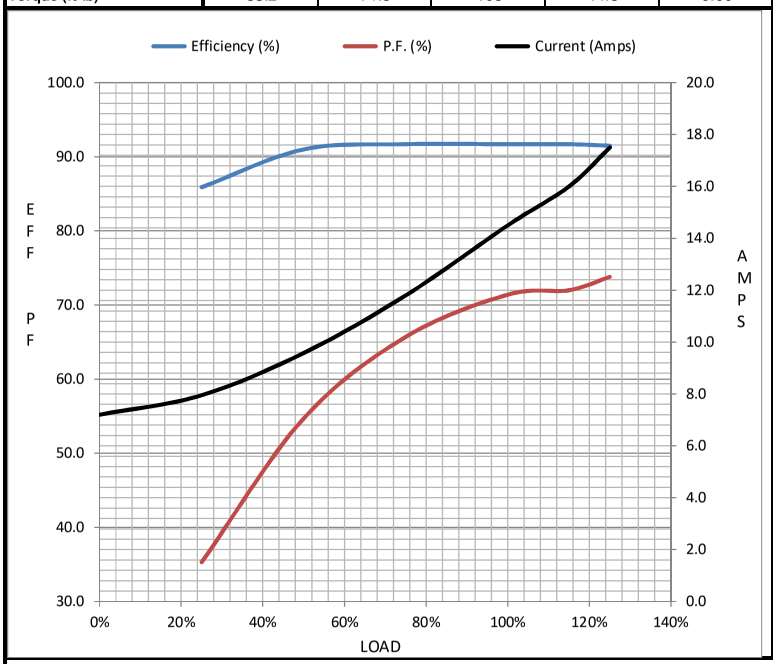
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	7.2	8.0	9.6	11.8	14.5	16.0	17.5	80.2	
Torque (ft-lb)	0.00	11.3	22.5	33.8	44.3	51.0	56.3	83.2	
RPM	1200	1196	1192	1188	1185	1,180	1177	0	
Efficiency (%)		85.9	91.0	91.7	91.7	91.7	91.5		
P.F. (%)	11.2	35.3	54.7	65.7	71.4	72.0	73.8	0.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1100	1185	1200
Current (Amps)	80.2	75.0	10.5	14.5	7.2
Torque (ft-lb)	83.2	71.5	105	44.3	0.00



Information Block

HP	10.0	
Sync. RPM	1200	
Frame	256	
Enclosure	TEFC	
Construction	TFC	
Voltage	230/460#190/380	V
Frequency	60	Hz
Design	B	
LR Code letter	G	
Service Factor	1.15	
Temp Rise @ FL	38	° C
Duty	CONT	
Ambient	40	° C
Elevation	1,000	feet
Rotor/Shaft wk²	3.6	Lb-Ft²
Ref Wdg	T12906015 NONE	
Sound Pressure @ 1M	999	dBA
VFD Rating	CONSTANT 10:1	
Outline Dwg	B-SS622272	
Conn. Diag	004172.01	

Additional Specifications:

0

0

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.0000	0.0000	0.0000	0.0000	0.0000

Speed -Torque Curve