PRODUCT INFORMATION PACKET

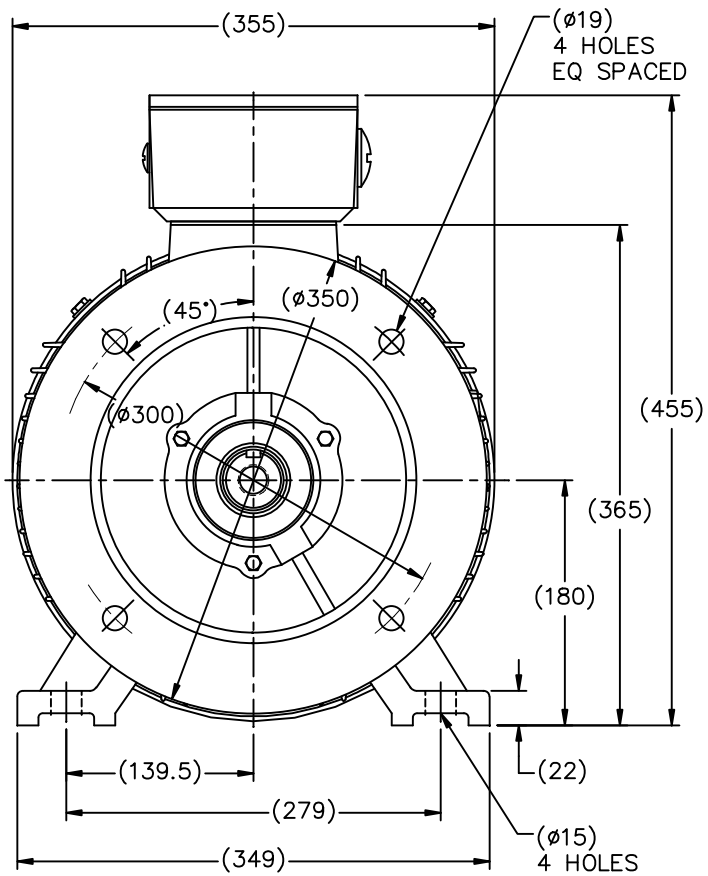
Model No: C180T11FZ21A
Catalog No: 193353.60
..20HP-15kW..1180RPM.DF180LD.TEFC.230/460V.3PH.60HZ.CONT.40C.1.15SF.B3/B5.....
TEFC

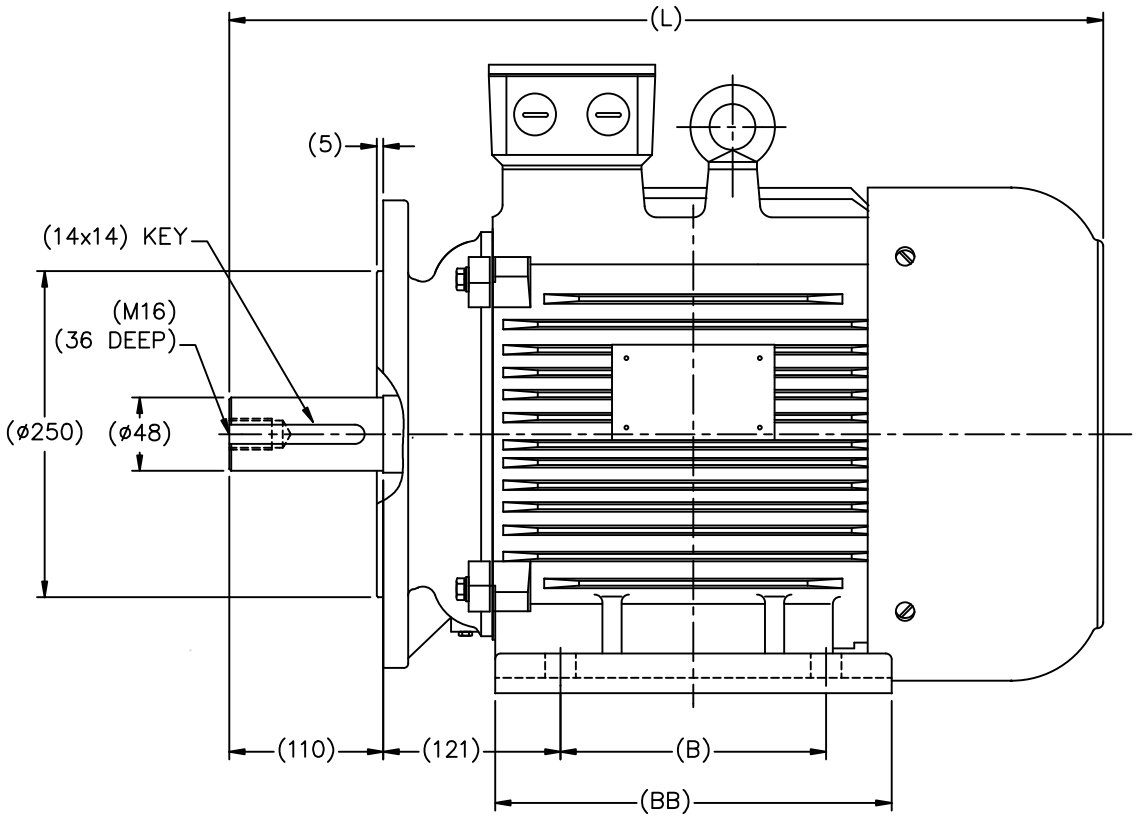
Nameplate Specifications

Output HP	**20 Hp**	Output KW	**14.9 kW**
Frequency	**60 Hz**	Voltage	**230/460 V**
Current	**53.5/26.8 A**	Speed	**1185 rpm**
Service Factor	**1.15**	Phase	**3**
Efficiency	**92.4 %**	Duty	**Continuous**
Insulation Class	**F**	Design Code	**B**
KVA Code	**G**	Frame	**180L**
Enclosure	**Totally Enclosed Fan Cooled**	Overload Protector	**No**
Ambient Temperature	**40 °C**	Drive End Bearing Size	**6311**
Opp Drive End Bearing Size	**6311**	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	**26.77 in**	Shaft Diameter	**1.875 in**
Shaft Extension	**4.33 in**	Assembly/Box Mounting	**F3**
Outline Drawing	**B-SS622264**	Connection Diagram	**004172.01**





Cat.No	FRAME	B	BB	L
193356.60	DF180MD-2R	241	311	680
193355.60	DF180MD-4R	241	311	680
193357.60	DF180LD-4R	279	349	718
193353.60	DF180LD-6R	279	349	718

(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 12-07-2010
CHK DJK 12-17-2010
APPD SB 12-18-2010
SCALE 1=18
REF
FMF HEBEI
PREV

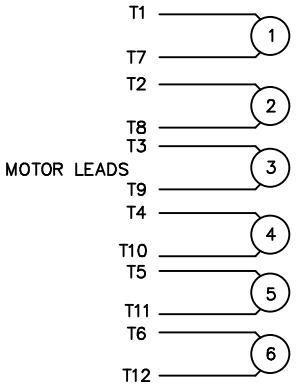
TITLE OUTLINE
DF180MD,LD-2,4,6R

MAT'L.
FINISH
CAD FILE SS622264
RFP 12-22-2010
DIST

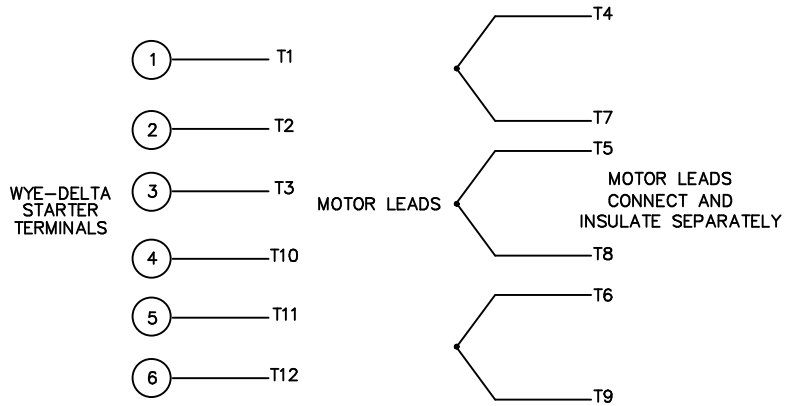
SIZE B | DRAWING NO. SS622264 | PAGE OF | REV.

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

LOW VOLTAGE CONNECTION

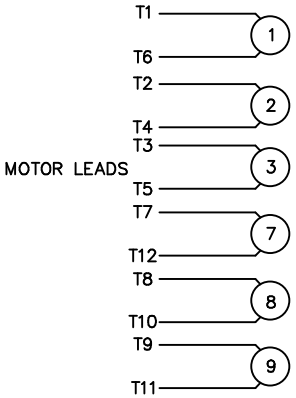


HIGH VOLTAGE CONNECTION



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

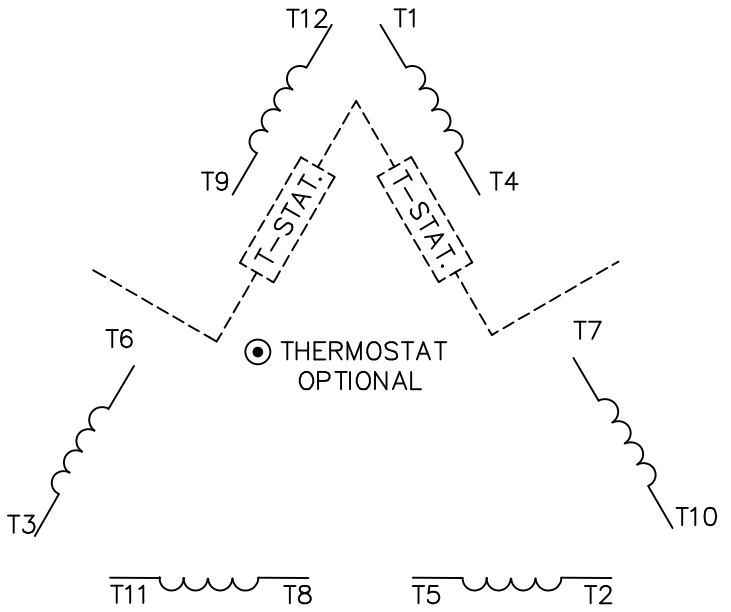
PART WINDING START USABLE ON 4 & 6 POLE MOTORS
LOW VOLTAGE CONNECTION ONLY



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 -

Data Sheet

Date: 1/31/2018

193353.60

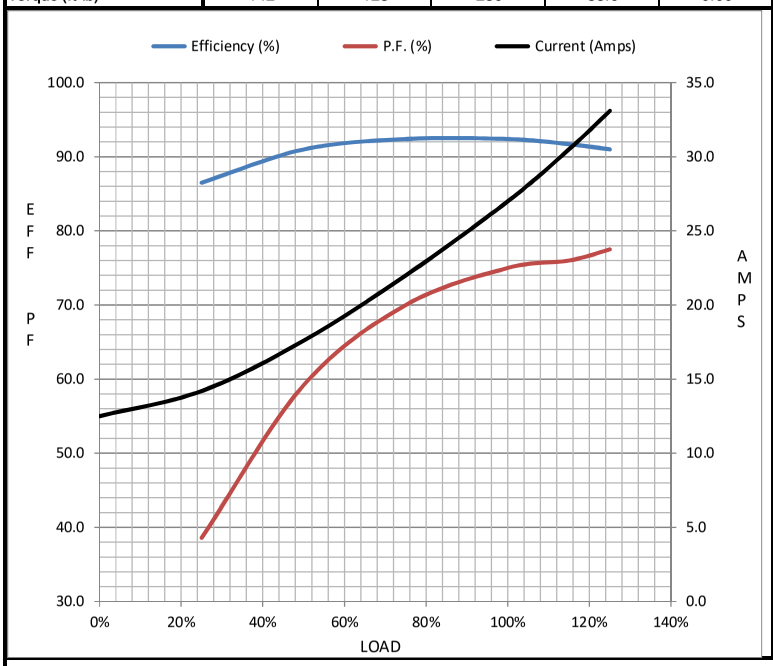
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	12.5	14.2	17.6	22.0	27.0	30.5	33.1	145	
Torque (ft-lb)	0.00	22.0	45.0	67.0	88.0	103	112	142	
RPM	1200	1197	1192	1190	1185	1,180	1180	0	
Efficiency (%)		86.5	91.0	92.4	92.4	91.7	91.0		
P.F. (%)	5.1	38.6	59.2	70.0	75.0	76.0	77.5	0.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	850	1110	1185	1200
Current (Amps)	145	135	99.0	27.0	12.5
Torque (ft-lb)	142	123	230	88.0	0.00



Information Block

HP	20.0	
Sync. RPM	1200	
Frame	286	
Enclosure	TEFC	
Construction	TFC	
Voltage	230/460#200/400	V
Frequency	60	Hz
Design	B	
LR Code letter	G	
Service Factor	1.15	
Temp Rise @ FL	55	° C
Duty	CONT	
Ambient	40	° C
Elevation	1,000	feet
Rotor/Shaft wk²	6.6	Lb-Ft²
Ref Wdg	T14506013 FR	
Sound Pressure @ 1M	56	dBA
VFD Rating	CONSTANT 10:1	
Outline Dwg	B-SS622264	
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