

PRODUCT INFORMATION PACKET

Model No: 180LTFC6538

Catalog No: R343A

30 HP General Purpose, 3 phase, 1800 RPM, 230/460 V, 180L Frame, TEFC
Cast Iron TEFC Motors





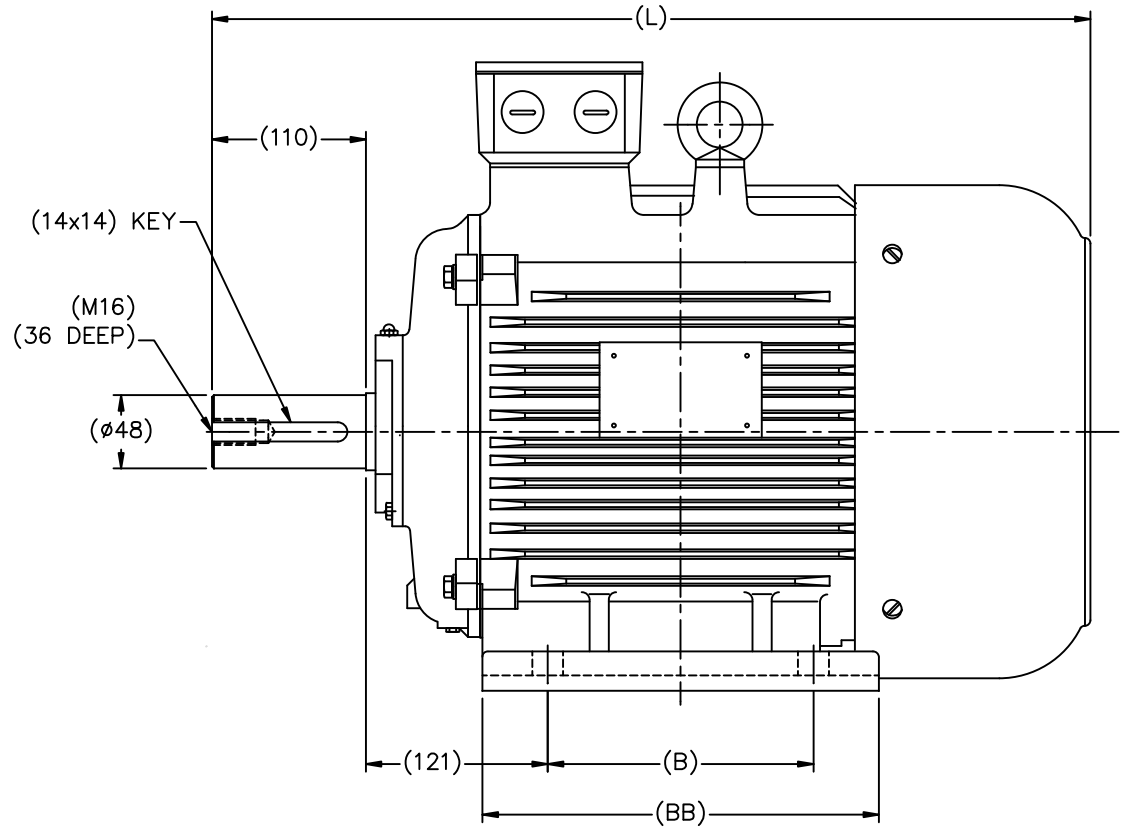
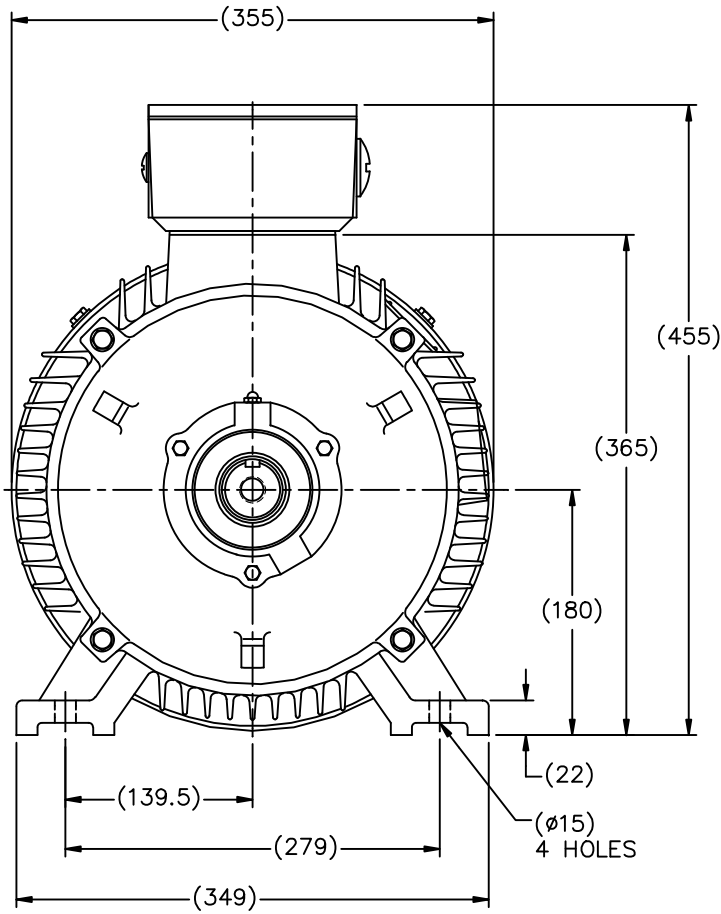
Nameplate Specifications

Output HP	30 Hp	Output KW	22.4 kW
Frequency	60 Hz	Voltage	230/460 V
Current	70.0/35.0 A	Speed	1770 rpm
Service Factor	1.15	Phase	3
Efficiency	94.1 %	Power Factor	85
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	H
Frame	180L	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6211
UL	No	CSA	N
CE	Y	IP Code	55

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Part Wdg Start & Wye Start Delta Run Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.052 Ohms	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	1.888 in	Shaft Extension	4.31 in
Assembly/Box Mounting	F3		
Outline Drawing	B-SS622257	Connection Drawing	004172.03ME

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created:05/01/2021



(MAY NOT BE DRAWN TO SCALE)

(DIMENSIONS ARE IN MILLIMETERS)

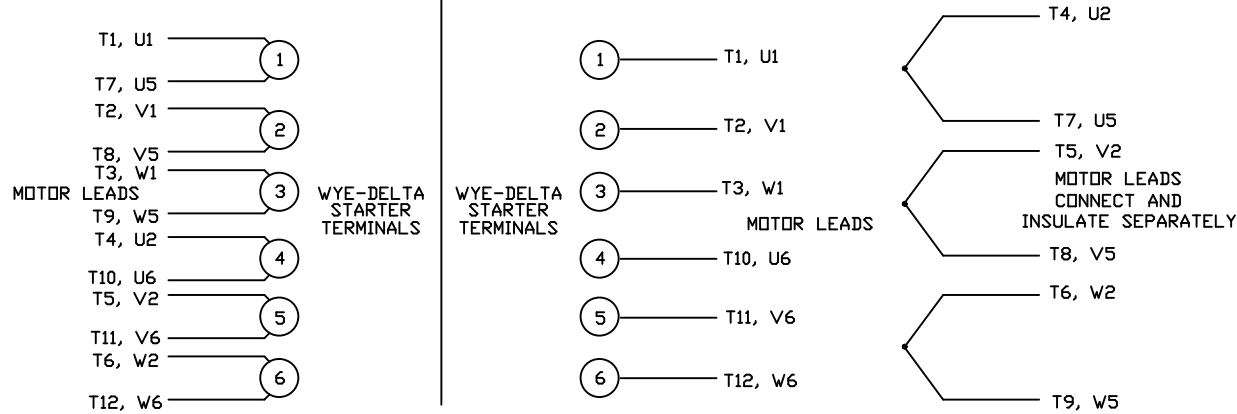
Cat.No	FRAME	B	BB	L
193324.60 193322.60	DF180M	241	311	680
193325.60 193320.60	DF180L	279	349	718

TOLERANCES UNLESS SPECIFIED		REGAL-BELOIT CORPORATION		DRAWN HLB 12-06-2010	
DEC.	METRIC	REGAL-BELOIT CORPORATION		CHK	DJK 12-17-2010
.X	±2.5	TITLE OUTLINE		APPD	SB 12-13-2010
.XX	±.76	DF180M,L-4,6		SCALE	1=18
.XXX	±.127	MAT'L		REF	
.XXXX	±.0127	FINISH		FMF	HEBEI
NO.	REVISION	BY & DATE	CHK	ANG	±7'30"
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT			RFP	12-22-2010	CAD FILE SS622257
			DIST		
				SIZE	DRAWING NO. PAGE OF REV.
				B	SS622257

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

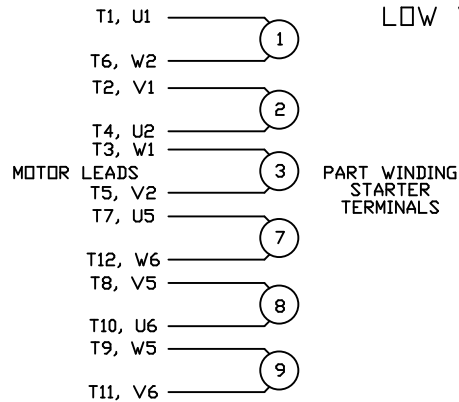
LOW VOLTAGE CONNECTION

HIGH VOLTAGE CONNECTION



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

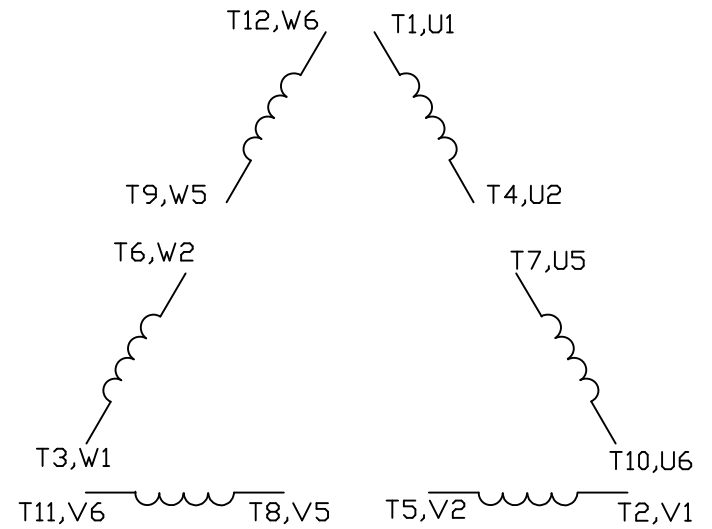
PART WINDING START USABLE ON 4 & 6 POLE MOTORS
LOW VOLTAGE CONNECTION ONLY



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

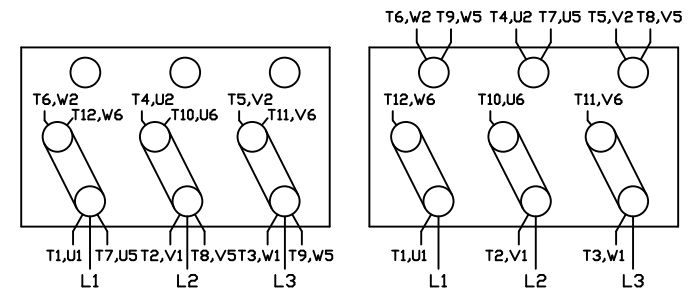


ROTATION CAN BE REVERSED BY INTERCHANGING ANY TWO LINE LEADS

12 LEAD DELTA CONNECTION ACROSS THE LINE START (FOR Y START DELTA RUN, REMOVE THE JUMPERS)

LOW VOLTAGE (MUST BE REWIRED AS SHOWN)

HIGH VOLTAGE (FACTORY WIRED FOR HIGH VOLTAGE AS SHOWN)



TOLERANCES UNLESS SPECIFIED

DEC. INCHES

.X ±.1

.XX ±.01

.XXX ±.005

.XXXX ±.0005

ANG ±1/2*



TITLE DELTA - WYE CONNECTION DIAGRAM IEC CAST IRON MOTORS

MAT'L.

FINISH

DRAWN CJW 08/28/02

CHK

APPD

SCALE 1=1

REF

FMF

PREV

NO. REVISION BY & DATE

CHK

RFP

DIST

CAD FILE 00417203ME

SIZE DRAWING NO.

A 004172-03ME

REV.

THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT

CERTIFICATION DATA SHEET

Model#: 180LTFC6538 AA **WINDING#:** T14504006 NONE 1
CONN. DIAGRAM: 004172.03ME **ASSEMBLY:** F3
OUTLINE: B-SS622257

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
30&25	22.4&18.7	1800	1770&1480	180L	TEFC	H	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#200/ 400	70/35&69/34.5	PWS & YDRUN OR INV	CONTINUOU S	F2	1.15/1.15	40	3300

FULL LOAD EFF:	3/4 LOAD EFF:	1/2 LOAD EFF:	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
94.1&93	93.6	93			
FULL LOAD PF: 85&83	3/4 LOAD PF: 81.4	1/2 LOAD PF: 71.7	93	SQ CAGE INV RATED	29 / 14.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
89 LB-FT	480 / 240	172 LB-FT 193	247 LB-FT 278	46

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
75 dBA	85 dBA	4.7 LB-FT^2	- LB-FT^2	20 SEC.	2	432 LBS.

***** SUPPLEMENTAL INFORMATION *****

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

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL	POLYREX EM	STANDARD IEC	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6311	6211						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
NONE	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

INVERTER TORQUE: CONSTANT 20:1
INV. HP SPEED RANGE: 1.5 X BASE SPEED
ENCODER: NONE
NONE NONE
NONE NONE PPR
BRAKE: NONE NONE
NONE P/N NONE
NONE NONE
NONE FT-LB NONE V NONE Hz

*
N
O
T
E
S
*

DATE: 06/27/2017 01:01:22 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 20-06-2017
 Customer: _____
 Attention: _____
 Submitted by: FAREEDA DUDEKULA



180LTC6538

Submittal

Data @ 460 V

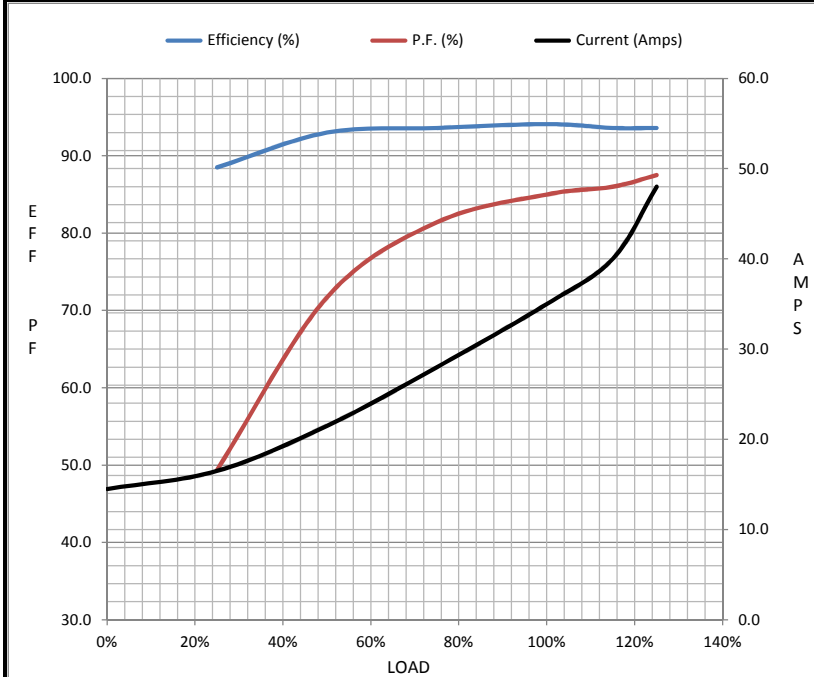
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	14.5	16.5	21.5	28.0	35.0	40.0	48.0	240
Torque (ft-lb)	0.00	21.9	44.1	66.4	89.0	103	112	172
RPM	1800	1792	1783	1775	1770	1,767	1762	0
Efficiency (%)		88.5	93.0	93.6	94.1	93.6	93.6	
P.F. (%)	5.7	49.4	71.7	81.4	85.0	86.0	87.5	0.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1700	1770	1800
Current (Amps)	240	215	150	35.0	14.5
Torque (ft-lb)	172	155	247	89.0	0.00

Information Block				
HP	30.0			
Sync. RPM	1800			
Frame	286			
Enclosure	TEFC			
Construction	TFC			
Voltage	230/460#200/40(V)			
Frequency	60 Hz			
Design	A			
LR Code letter	H			
Service Factor	1.15			
Temp Rise @ FL	46 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	4.7 Lb-Ft ²			
Ref Wdg	T14504006 NONE			
Sound Pressure @ 1M	75 dBA			
VFD Rating	CONSTANT 20:1			
Outline Dwg	B-SS622257			
Conn. Diag	004172.03ME			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0000	0.0000	0.0000	0.0000	0.0000



Speed - Torque Curve

