

PRODUCT INFORMATION PACKET



Model No: LM80085

Catalog No: LM80085

Fire Pump Motor, 40 & 30 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 3600 & 3000 RPM, 324TS Frame,
TEFC



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Nameplate Specifications

Phase	3	Output HP	40 & 30 Hp
Output KW	30.0 & 22.4 kW	Voltage	230/460 & 190/380 V
Speed	3545 & 2948 rpm	Service Factor	1.15 & 1.15
Frame	324TS	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	91.7 & 91.7 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	92/46 & 83/41.5 A	Power Factor	88
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	312	Opp Drive End Bearing Size	311
UL	No	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

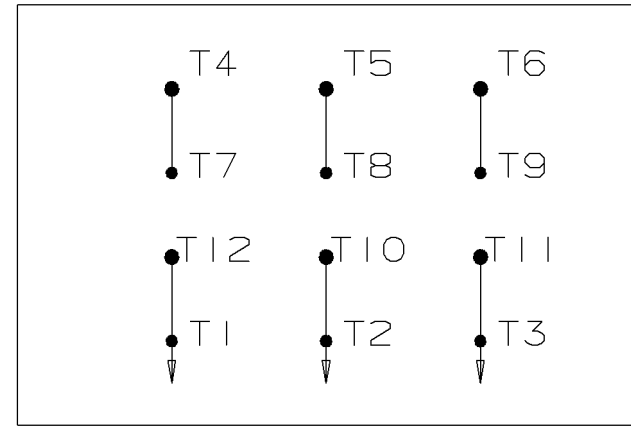
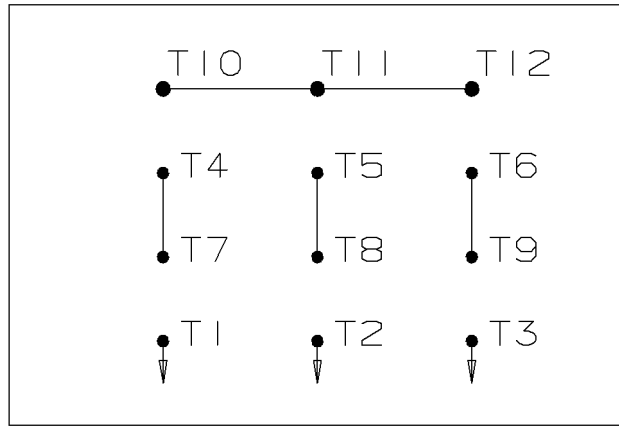
Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Wye Start Delta Run
Poles	2	Rotation	Reversible
Resistance Main	.21 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	TS	Overall Length	27.47 in
Frame Length	14.75 in	Shaft Diameter	1.875 in
Shaft Extension	3.75 in	Assembly/Box Mounting	F1/F2 CAPABLE
Connection Drawing	A-EE7358-LN	Outline Drawing	B-SS311064LN-1475

WYE START

HIGH VOLTAGE

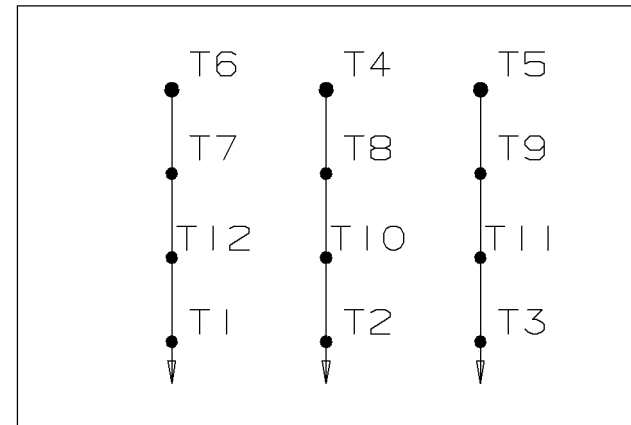
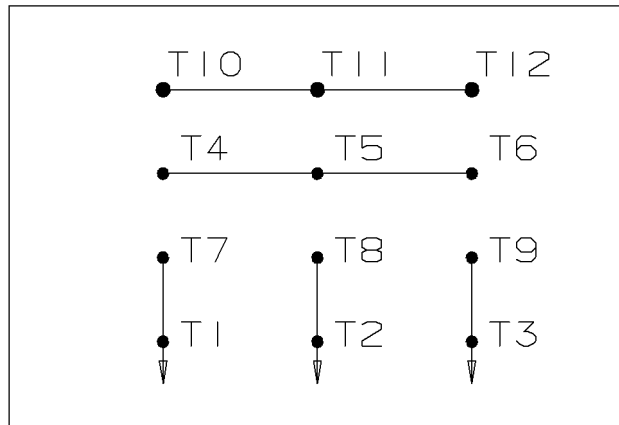
DELTA RUN



WYE START

LOW VOLTAGE

DELTA RUN



4/2 CKTY Δ

					✓ UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOL. ON XX± .02 XXX± .005 XXXX± .0005 ANGLES± 7'30"			
						MAX. SURFACE ROUGHNESS UNLESS OTHERWISE NOTED	DRAWN BY DRS	12-07-1999
					FINISH	CHKD BY ML	12-07-1999	
					MATERIAL	APPD BY TB	12-07-1999	
REV	DATE	CHANGE	NAME	PART NAME CONNECTION DIAGRAM			DRWG NO A- EE7358-LN	
					PURCHASED	CADD FILE NO.	EE7358-LN	



CERTIFICATION DATA SHEET

2100 WASHINGTON ST.
GRAFTON, WI
PH. 262-277-8810

CONN. DIAGRAM: A-EE7358-LN

OUTLINE: B-SS311064LN-1475

CATALOG #: LM80085

WINDING #: K2862145 2

MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
40&30	30.0&22.4	3600	3545&2948	324TS	TEFC	G	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60/50	230/460&190/380	92/46&83/41.5	WYE START DELTA RUN	CONTINUOUS	F3	1.15/1.15	40

FULL LOAD EFF:	91.7&91.7	3/4 LOAD EFF:	91.7	1/2 LOAD EFF:	90.2	GTD. EFF	90.2	ELEC. TYPE	SQ CAGE IND RUN
FULL LOAD PF:	88&89	3/4 LOAD PF:	86	1/2 LOAD PF:	80				

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
59.2 LB-FT	564 / 282	87 LB-FT 146 %	162 LB-FT 272 %	75

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
78 dBA	88 dBA	2.6 LB-FT^2	- LB-FT^2	15 SEC.	2	440 LBS.

*** SUPPLEMENTAL INFORMATION ***

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

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
BALL	BALL	POLYREX EM	TS	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
312	311						

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

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INVERTER TORQUE: NONE
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

Data Sheet

Date: 1/22/2018

LM80085



Data @ **460 V**

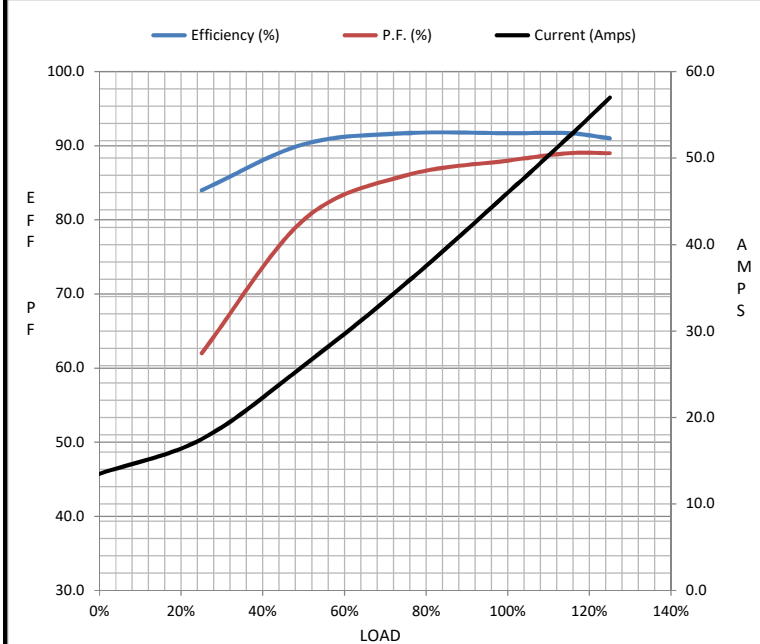
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	13.5	17.5	26.0	35.5	46.0	52.5	57.0	282
Torque (ft-lb)	0.00	14.5	29.5	44.2	59.2	68.5	74.5	87.0
RPM	3600	3585	3572	3560	3545	3,535	3528	0
Efficiency (%)		84.0	90.2	91.7	91.7	91.7	91.0	
P.F. (%)	10.0	62.0	80.0	86.0	88.0	89.0	89.0	34.0

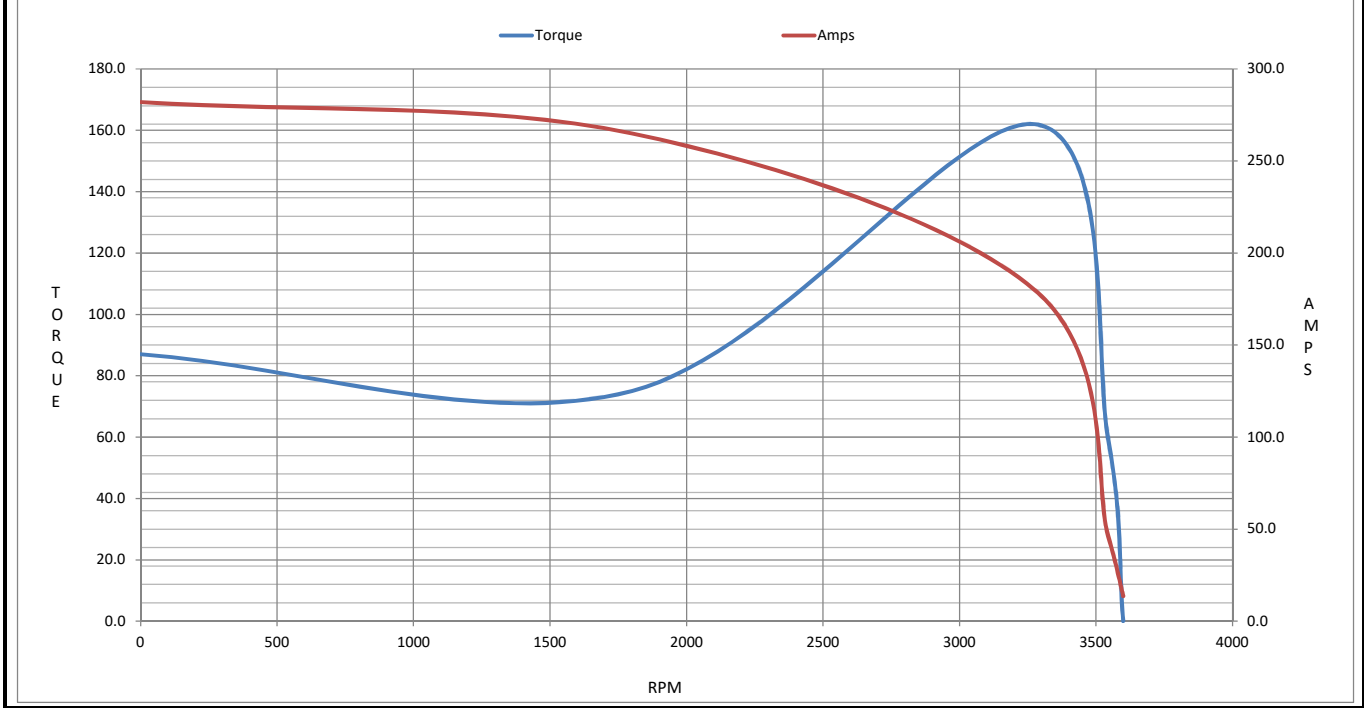
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3275	3545	3600
Current (Amps)	282	265	180	46.0	13.5
Torque (ft-lb)	87.0	75.0	162	59.2	0.00

Information Block				
HP	40.0			
Sync. RPM	3600			
Frame	324			
Enclosure	TEFC			
Construction	TFP			
Voltage	230/460#190/380 V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	75 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	2.60 Lb-Ft ²			
Ref Wdg	K2862145 NONE			
Sound Pressure @ 1M	78 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS311064LN-1475			
Conn. Diag	A-EE7358-LN			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.1490	0.0920	0.6250	0.4260	20.0580



Speed - Torque Curve



EC Declaration of Conformity

The undersigned representing
the manufacturer:

Regal Beloit America
100 East Randolph St.
Wausau, WI 54401

and the authorized representative
established within the Community:

Marathon Electric UK
6F Thistleton Road Ind. Estate
Market Overton
Oakham, Rutland LE15 7PP UK

are committed to providing customers with products that comply with applicable regulations and international protocols to which they are subject, including the requirements of the European Parliament Directive on the Harmonization of the laws relating to electrical equipment designed for use within certain voltage limits (2014/35/EU).

Regal Beloit America declares that the following product(s), to which this declaration relates, are in conformity with the relevant sections of the EC standards listed below.

This statement supersedes any statements previously issued pertaining to the product(s) listed below and is subject to change without notice.

Model No : LM80085

(Model No. may contain prefix and/or suffix characters)

Catalog No : LM80085

Rework No : N/A

Directives :

Low Voltage Directive 2014/35/EU

Harmonized Standards Used :

EN 60034-1: 2010 (IEC 60034-1: 2010)

EN 60034-5: 2001/A1:2007 (IEC 60034-5: 2000/A1:2006)

Authorized Representative:



Michael A. Logsdon
Vice President, Technology

Authorized Representative in the Community:



Julian Clark
Marketing Engineer

Created on 09/01/2022

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