

PRODUCT INFORMATION PACKET



Model No: LM28880

Catalog No: LM28880

Elevator Duty Motor, 20 & 25 HP, 3 Ph, 60 & 60 Hz, 230/460 & 230/460 V, 1800 & 1800 RPM,
256T Frame, DP



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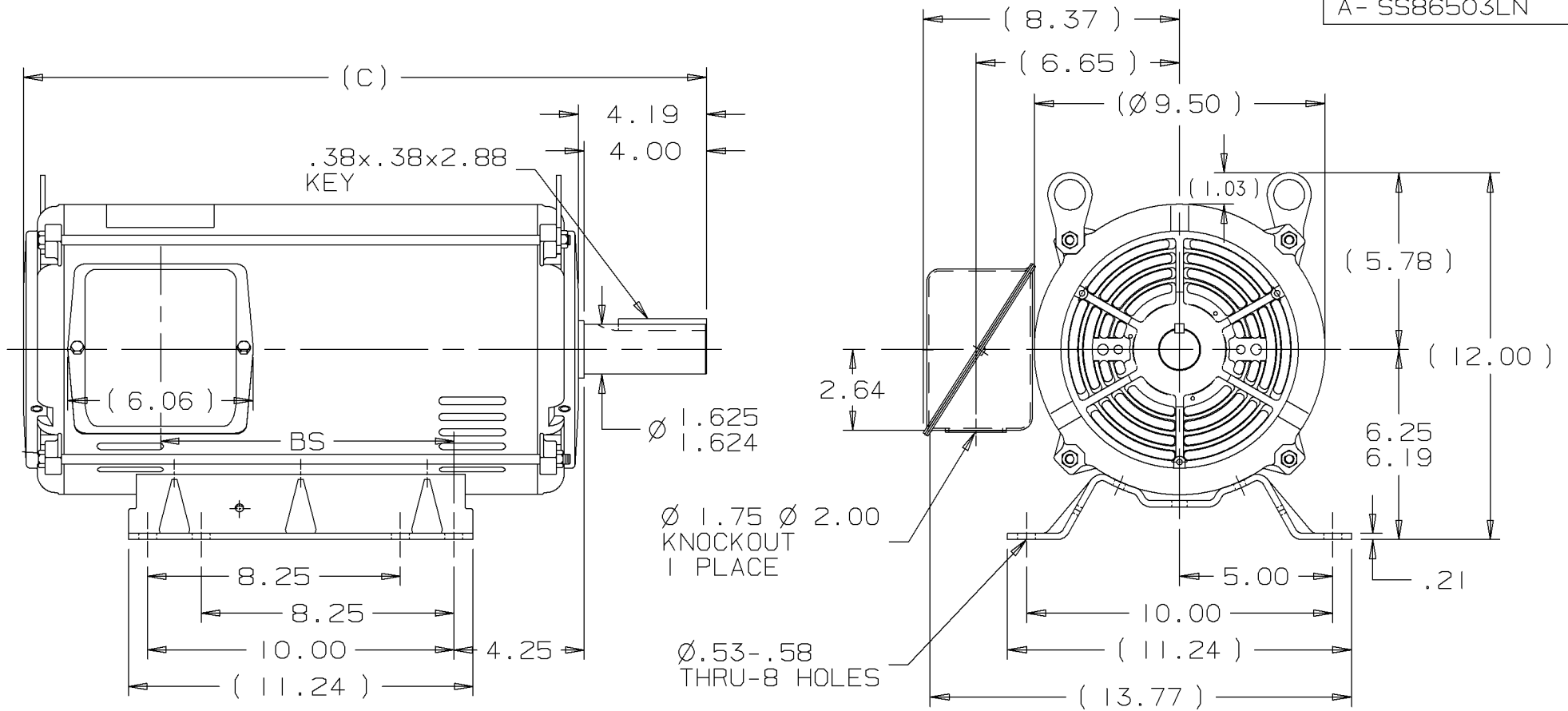


Nameplate Specifications

Phase	3	Output HP	20 & 25 Hp
Output KW	14.9 & 18.7 kW	Voltage	230/460 & 230/460 V
Speed	1760 & 1760 rpm	Service Factor	1.0 & 1.0
Frame	256T	Enclosure	Drip Proof
Thermal Protection	No Protection	Efficiency	91 & 90.2 %
Ambient Temperature	40 °C	Frequency	60 & 60 Hz
Current	52/26 & 64/32 A	Power Factor	79.3
Duty	120/80 Starts/Hour	Insulation Class	F
Design Code	INV	KVA Code	F
Drive End Bearing Size	309	Opp Drive End Bearing Size	208
UL	Recognized	CSA	Y
CE	Y	IP Code	12
Number of Speeds	1		

Technical Specifications


Electrical Type	Squirrel Cage Induction Run	Starting Method	Wye Start Delta Run
Poles	4	Rotation	Reversible
Resistance Main	.428 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	T	Overall Length	22.32 in
Frame Length	15.45 in	Shaft Diameter	1.625 in
Shaft Extension	4 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	SS86503LN-1545	Connection Drawing	EE7358-LN



DASH	FR.	C	BS	MOUNTING
1370	254T	20.57	7.68	F1 OR F2
1545	254T/256T	22.32	9.43	F1 OR F2

NOTES:

1. NAMEPLATE TO BE READ FROM C'BOX SIDE OF MOTOR.
2. BOX CAN BE MOUNTED IN 90° STEPS.
3. BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°. (EXCEPT AS NOTED.)
4. F2 MOUNT -USES 2ND HOLE ON 1370 FRAME.

						UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOL. ON XX±.02 XXX±.005 XXXX±.0005 ANGLES± 7'30"	
2	01-31-2000	UPDATED CONDUIT BOX PER	CN 28427	TJB			MAX. SURFACE ROUGHNESS UNLESS OTHERWISE NOTED
					FINISH		DRAWN BY TRB 07-20-1999
1	07-20-1999	NEW DRAWING		TRB	MATERIAL		CHKD BY ML 07-20-1999
							APPD BY GK 07-20-1999
REV	DATE	CHANGE		NAME	PART NAME OUTLINE 250 FR. - BB - DR.PR.		DRWG NO A-SS86503LN

L | PURCHASED

CADD FILE NO.

SS86503LN

ERROR: syntaxerror
OFFENDING COMMAND: --nostringval--

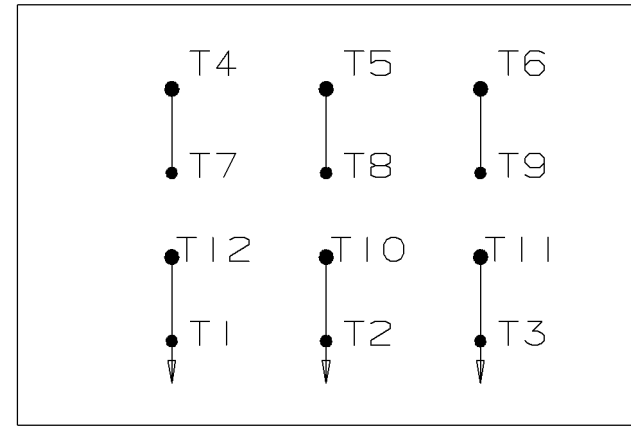
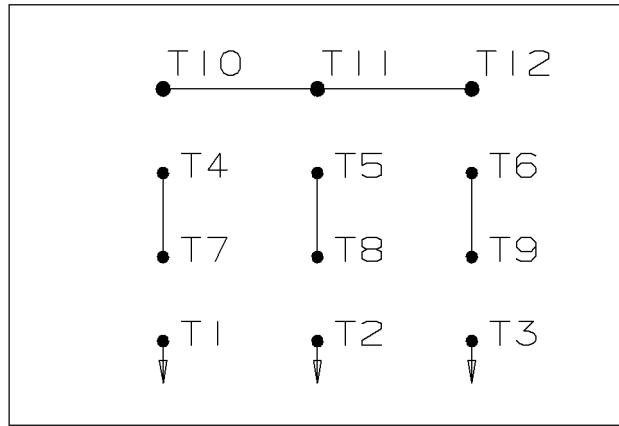
STACK:

/RS
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WYE START

HIGH VOLTAGE

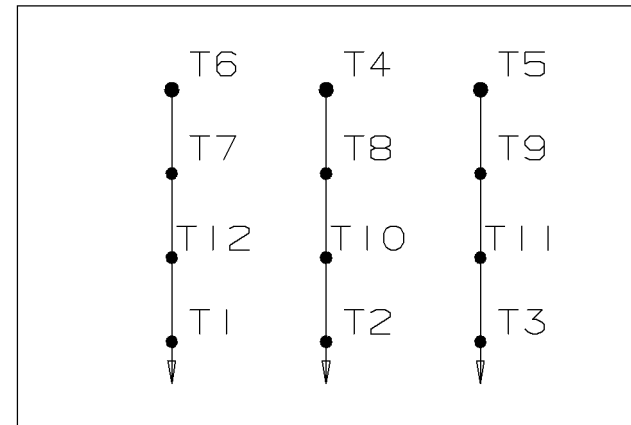
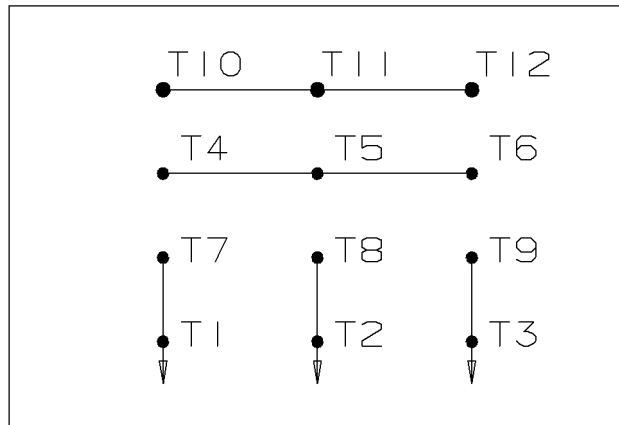
DELTA RUN



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	



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

CERTIFICATION DATA SHEET

CONN. DIAGRAM: A-EE7358-LN
OUTLINE: A-SS86503LN-1545
WINDING #: K2154280 R5 13

CATALOG : LM28880

MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
20&25	14.9&18.7	1800	1760&1760	256T	DP	F	INV

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60/60	230/460&230/460	52/26&64/32	WYE START DELTA RUN	120/80 STARTS/HOUR	F3	1.0/1.0	40

FULL LOAD EFF:	91&90.2	3/4 LOAD EFF:	91.7	1/2 LOAD EFF:	90.2	GTD. EFF	ELEC. TYPE
FULL LOAD PF:	79.3&81.5	3/4 LOAD PF:	74	1/2 LOAD PF:	63	89.5	SQ CAGE IND RUN

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
59.5 LB-FT	320 / 160	145 LB-FT 244 %	175 LB-FT 294 %	0

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
70 dBA	80 dBA	1.7 LB-FT^2	- LB-FT^2	- SEC.	-	185 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	GRAY - LINCOLN

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
BALL	BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	ROLLED STEEL
309	208						

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
FT-LB V NONE Hz

Data Sheet

Date: 1/31/2018

LM28880



Data @ 460 V

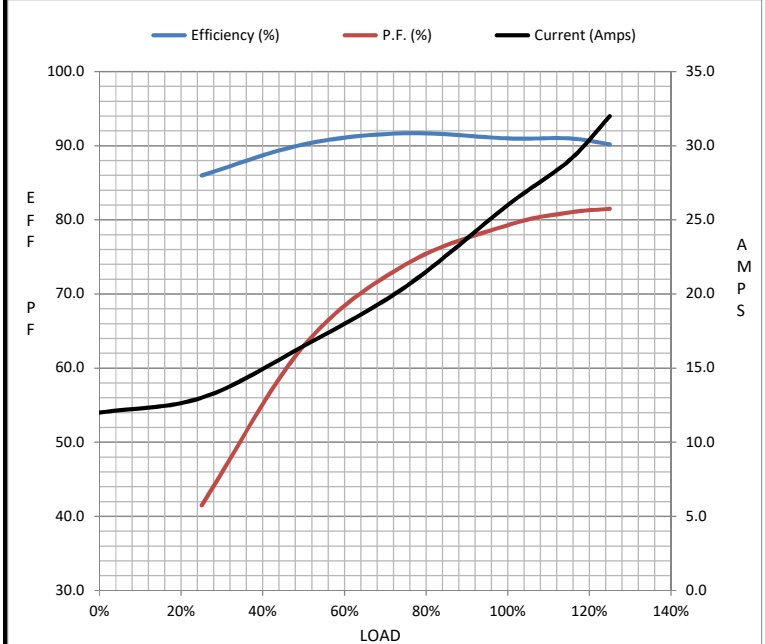
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	12.0	13.0	16.5	20.5	26.0	29.0	32.0	160
Torque (ft-lb)	0.00	15.0	29.5	44.5	59.5	68.5	75.0	145
RPM	1800	1790	1785	1770	1760	1755	1750	0
Efficiency (%)		86.0	90.2	91.7	91.0	91.0	90.2	
P.F. (%)	5.5	41.5	63.0	74.0	79.3	81.0	81.5	43.0

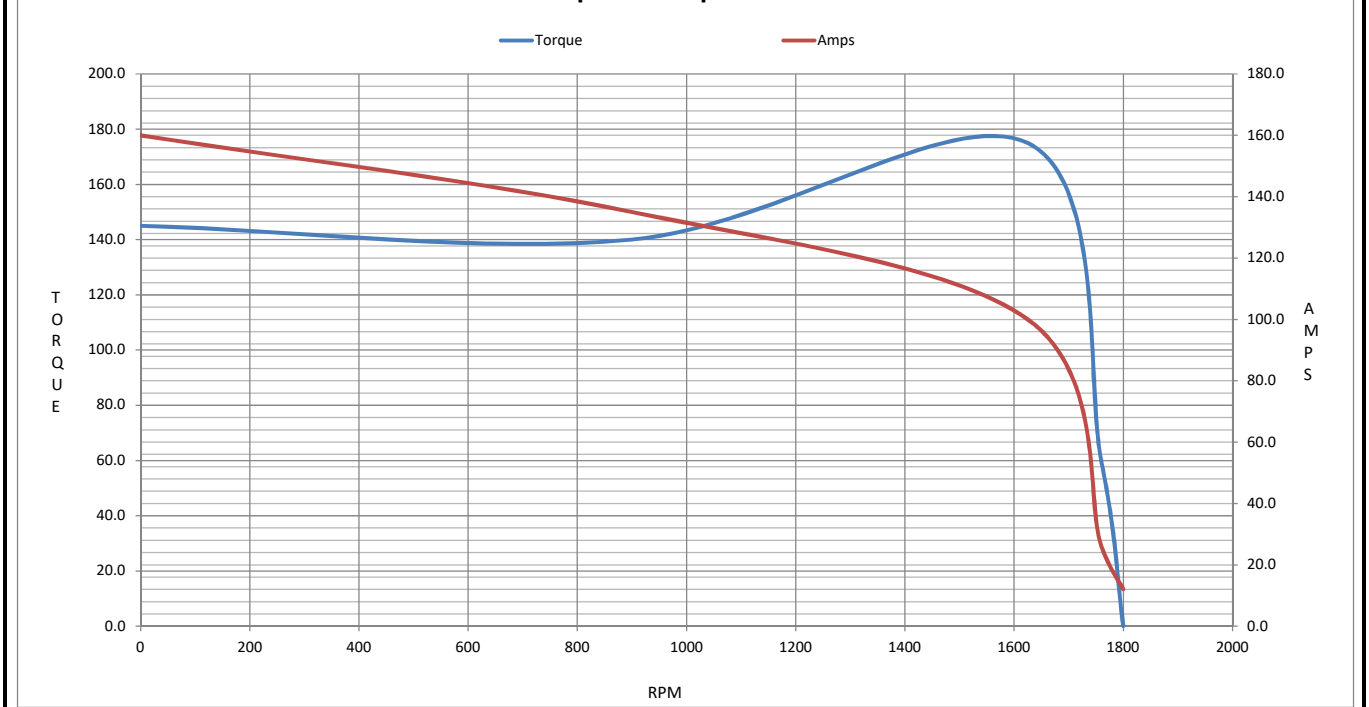
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1625	1760	1800
Current (Amps)	160	135	100	26.0	12.0
Torque (ft-lb)	145	140	175	59.5	0.00

Information Block				
HP	20.0			
Sync. RPM	1800			
Frame	256			
Enclosure	DP			
Construction	TDX			
Voltage	230/460#230/460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	H			
Service Factor	1.15			
Temp Rise @ FL	0 °C			
Duty	60 MIN			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	1.70 Lb-Ft ²			
Ref Wdg	K2154280 R5			
Sound Pressure @ 1M	70 dBA			
VFD Rating	NONE			
Outline Dwg	A-SS86503LN-1545			
Conn. Diag	A-EE7358-LN			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.9410	0.8260	3.2500	4.7710	67.3080



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 : LM28880

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

Catalog No : LM28880

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

CE 22