

**BALDOR® • RELIANCE™**

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# Customer information packet

## ERM3158TA

3HP, 3450RPM, 3PH, 60HZ, 56HZ, 3530M, OPEN, F1

Class - None

Division - Not Applicable

## Specifications

Enclosure	OPEN
Frame	145TY
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	3.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
XP Class and Group	None
XP Division	Not Applicable
Agency Approvals	CSA CSA EEV UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Resilient
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	7.600 A @ 230.0 V 8.000 A @ 208.0 V 3.800 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	85.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Terminal Panel
Front Shaft Indicator	None

## Part detail

Revision	M
Type	AC
Mech. spec.	35J829
Base	
Status	PRD/A
Elec. spec.	35WGP988
Layout	35LYJ829
Eff. date	11-27-2018
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	07-02-2010

Heater Indicator	No Heater
High Voltage Full Load Amps	3.8 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Terminal Panel
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3530M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	13.64 IN
Power Factor	87
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Resilient Mount
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3450 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Do Not Use Eve-Not Valid
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	Automatic Thermal Overload

**Winding Thermal 2**

**None**

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**Nameplate**

<b>NP1259L</b>									
<b>CAT.NO.</b>	ERM3158TA								
<b>SPEC.</b>	35J829P988G1								
<b>HP</b>	3								
<b>VOLTS</b>	230/460								
<b>AMP</b>	7.6/3.8								
<b>RPM</b>	3450								
<b>FRAME</b>	143TY	<b>HZ</b>	60	<b>PH</b>	3				
<b>SER.F.</b>	1.15	<b>CODE</b>	K	<b>DES</b>	B	<b>CL</b>	F		
<b>NEMA-NOM-EFF</b>	85.5	<b>PF</b>	87						
<b>RATING</b>	40C AMB-CONT								
<b>CC</b>	010A	<b>USABLE AT 208V</b>	8						
<b>DE</b>	6205	<b>ODE</b>	6203						
<b>ENCL</b>	OPEN	<b>SN</b>							

**AC Induction Motor Performance Data**

Record # 59451

Typical performance - not guaranteed values

Winding: 35WGP988-R004		Type: 3530M	Enclosure: OPSB	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>	
Rated Output (HP)	3	Full Load Torque	4.5 LB-FT	
Volts	230/460	Start Configuration	direct on line	
Full Load Amps	7.6/3.8	Breakdown Torque	18.1 LB-FT	
R.P.M.	3450	Pull-up Torque	11.3 LB-FT	
Hz	60 Phase	Locked-rotor Torque	15.1 LB-FT	
NEMA Design Code	B KVA Code	Starting Current	32.5 A	
Service Factor (S.F.)	1.15	No-load Current	1.55 A	
NEMA Nom. Eff.	85.5 Power Factor	Line-line Res. @ 25°C	5.8893 Ω	
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	33°C	
S.F. Amps		Temp. Rise @ S.F. Load	40°C	
		Locked-rotor Power Factor	57.8	
		Rotor inertia	0.0822 LB-FT <sup>2</sup>	

**Load Characteristics 460 V, 60 Hz, 3 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	50	72	82	87	90	91	89
Efficiency	76.1	84.3	86	85.8	84.7	83	85.1
Speed	3569.1	3541.6	3510.6	3478.3	3442.7	3400.2	3457
Line amperes	1.77	2.29	2.97	3.73	4.58	5.53	4.24

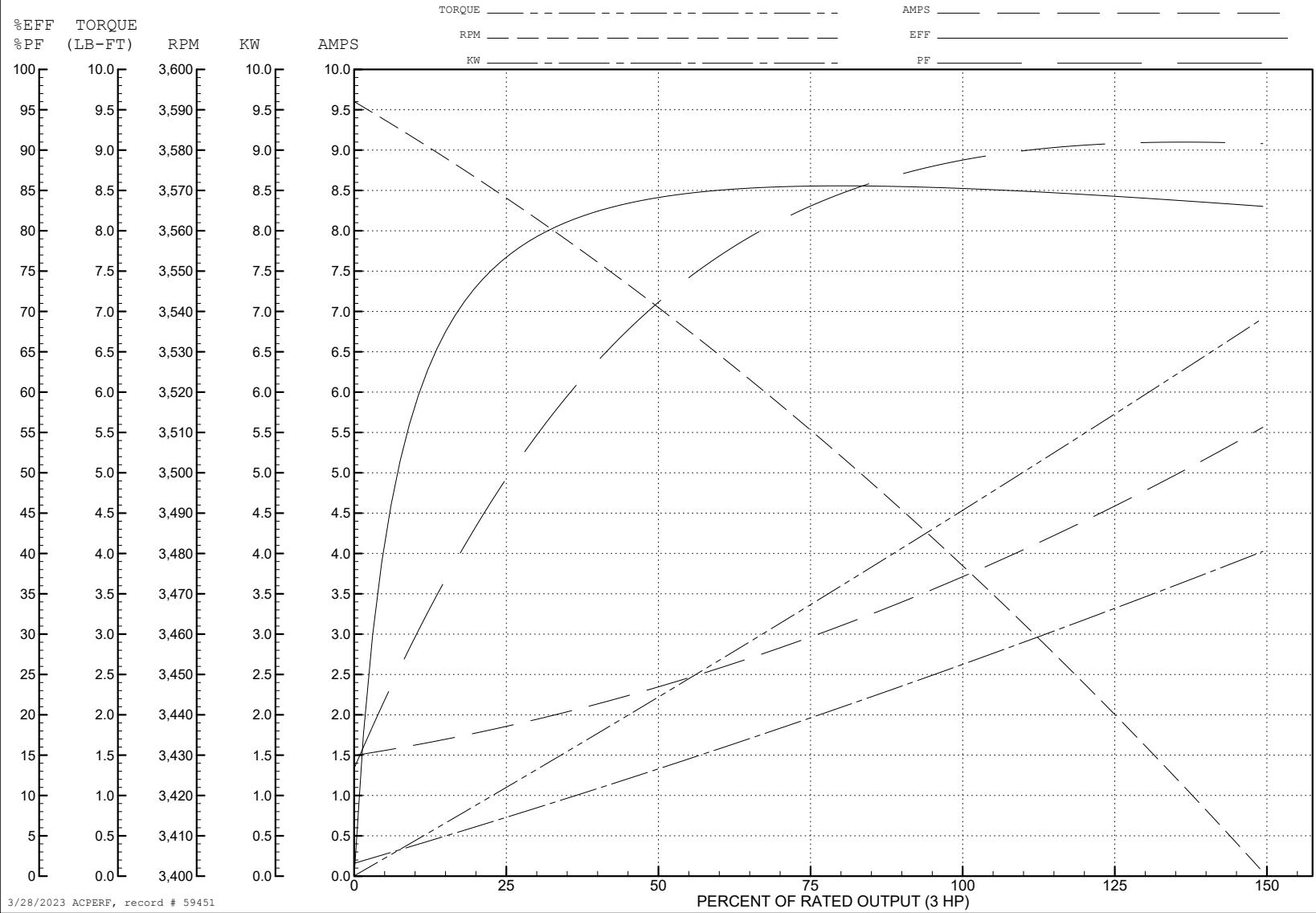
ABB Motors and Mechanical Inc.

WINDING # 35WGP988

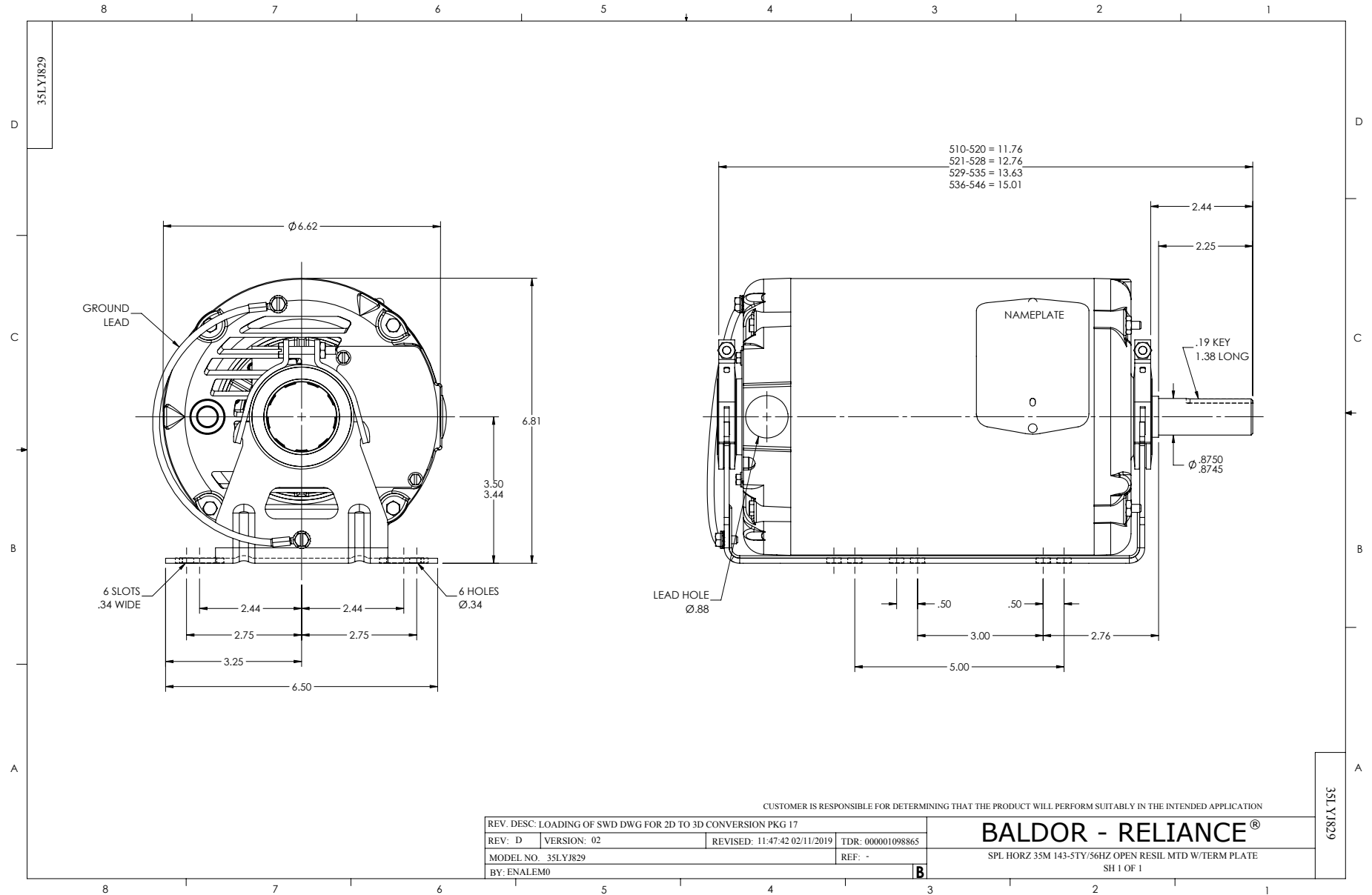
3 HP 3 PH 60 HZ 3450 RPM 460 V 3530M

Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=18.1 PU=11.3 LR=15.1 LRA=32.5



3/28/2023 ACPERF, record # 59451

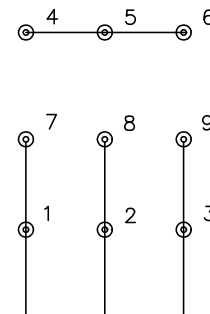




CD0005



LOW VOLTAGE  
(2Y)



LINE

HIGH VOLTAGE  
(1Y)



LINE

NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
S00000		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS