

# **BALDOR**® • ***RELIANCE***

## **Product Information Packet**

# **ERM3158TA**

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

Part Detail							
Revision:	J	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	35WGP988	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	35J829	Layout:	35LYJ829	Poles:	02	Created Date:	07-02-2010
Base:	RS	Eff. Date:	06-19-2017	Leads:	9#18		

Specs			
Catalog Number:	ERM3158TA	Heater Indicator:	No Heater
Enclosure:	OPEN	Insulation Class:	F
Frame:	145TY	Inverter Code:	Inverter Ready
Frame Material:	Steel	KVA Code:	K
Output @ Frequency:	3.000 HP @ 60 HZ	Lifting Lugs:	No Lifting Lugs
Synchronous Speed @ Frequency:	3600 RPM @ 60 HZ	Locked Bearing Indicator:	No Locked Bearing
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 18 AWG
	230.0 V @ 60 HZ	Motor Lead Exit:	Terminal Panel
XP Class and Group:	None	Motor Lead Termination:	Flying Leads
XP Division:	Not Applicable	Motor Type:	3530M
Agency Approvals:	UR	Mounting Arrangement:	F1
	CSA EEV	Power Factor:	87
	CSA	Product Family:	General Purpose
Auxillary Box:	No Auxillary Box	Pulley End Bearing Type:	Ball
Auxillary Box Lead Termination:	None	Pulley Face Code:	Resilient Mount
Base Indicator:	Resilient	Pulley Shaft Indicator:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Rodent Screen:	None
Blower:	None	Shaft Extension Location:	Pulley End

<b>Current @ Voltage:</b>	3.800 A @ 460.0 V	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
	7.600 A @ 230.0 V	<b>Shaft Rotation:</b>	Reversible
	8.000 A @ 208.0 V	<b>Shaft Slinger Indicator:</b>	No Slinger
<b>Design Code:</b>	B	<b>Speed Code:</b>	Single Speed
<b>Drip Cover:</b>	No Drip Cover	<b>Motor Standards:</b>	NEMA
<b>Duty Rating:</b>	CONT	<b>Starting Method:</b>	Direct on line
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Thermal Device - Bearing:</b>	None
<b>Feedback Device:</b>	NO FEEDBACK	<b>Thermal Device - Winding:</b>	Do Not Use Eve-Not Valid
<b>Front Face Code:</b>	Terminal Panel	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Front Shaft Indicator:</b>	None	<b>Winding Thermal 1:</b>	Automatic Thermal Overload
		<b>Winding Thermal 2:</b>	None

Nameplate NP1259L											
CAT.NO.	ERM3158TA										
SPEC.	35J829P988G1										
HP	3										
VOLTS	230/460										
AMP	7.6/3.8										
RPM	3450										
FRAME	145TY					HZ	60		PH	3	
SER.F.	1.15					CODE	K	DES	B	CL	F
NEMA-NOM-EFF	85.5					PF	87				
RATING	40C AMB-CONT										
CC	010A							USABLE AT 208V	8		
DE	6205					ODE	6203				
ENCL	OPEN					SN					

**AC Induction Motor Performance Data**

Record # 59451 - Typical performance - not guaranteed values

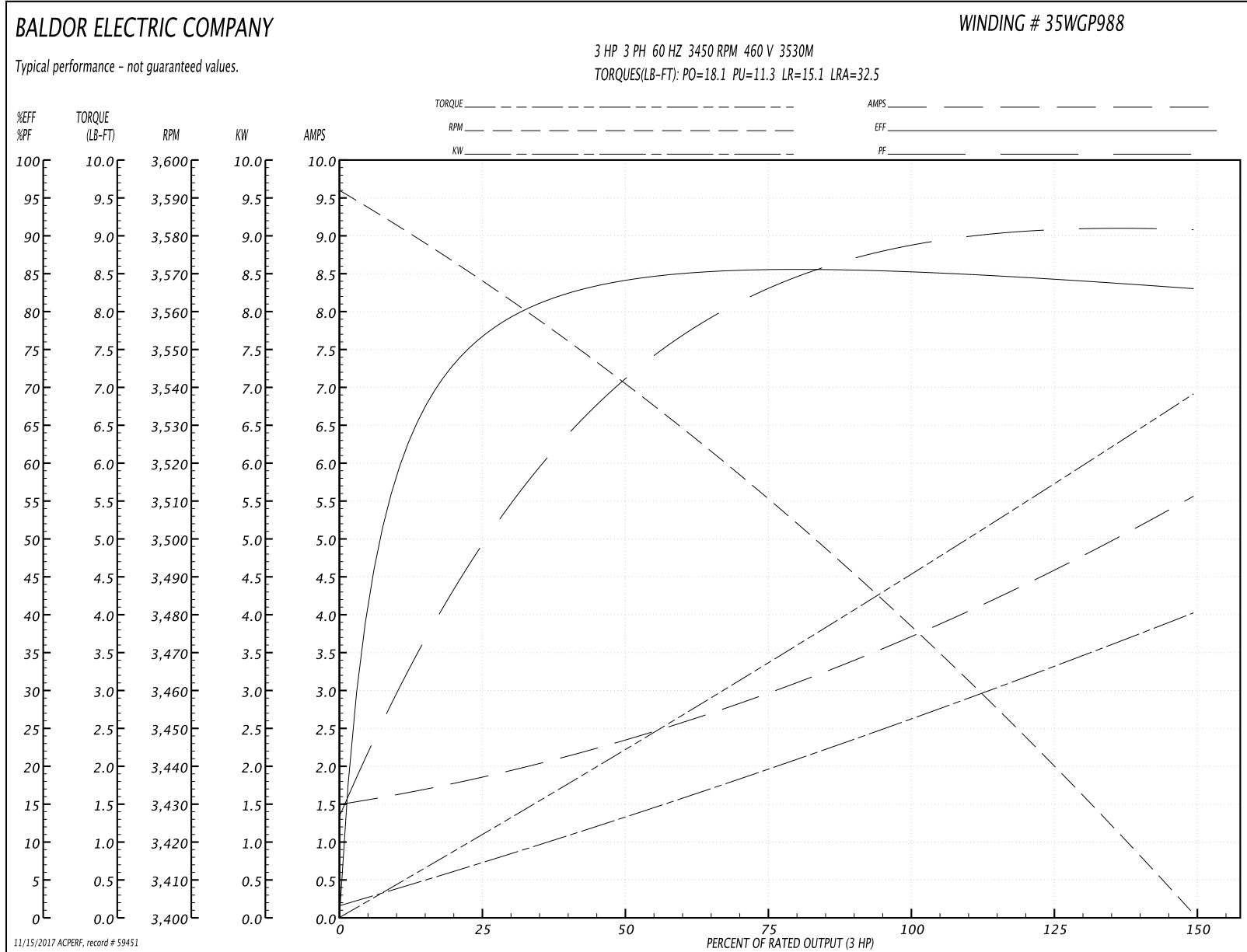
<b>Winding:</b> 35WGP988-R004	<b>Type:</b> 3530M	<b>Enclosure:</b> OPSB
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	3			Full Load Torque	4.5 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	7.6/3.8			Breakdown Torque	18.1 LB-FT
R.P.M.	3450			Pull-up Torque	11.3 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	15.1 LB-FT
NEMA Design Code	B	KVA Code	K	Starting Current	32.5 A
Service Factor (S.F.)	1.15			No-load Current	1.55 A
NEMA Nom. Eff.	85.5	Power Factor	87	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>

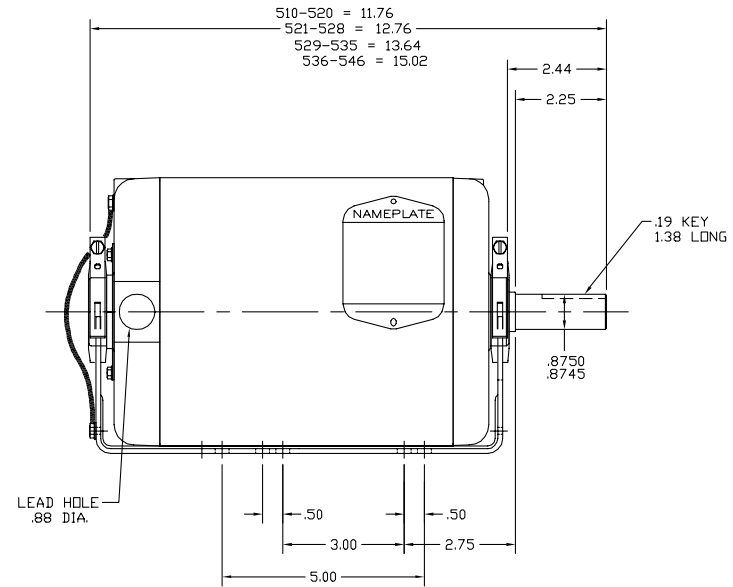
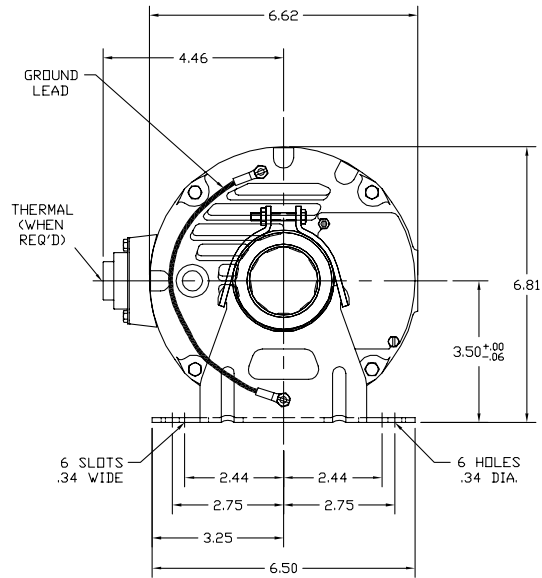
Load Characteristics 460 V, 60 Hz, 3 HP

% 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

Performance Graph at 460V, 60Hz, 3.0HP Typical performance - Not guaranteed values



35LYJ829



35LYJ829

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: CHANGED FRAME DISCRPTION TO 143-5TY W/56HZ	VERSION: 01	TDR: 000000547795
REV. LTR: C	REVISD: 10: 37:14 07/07/2010	BY: ENJERWO
FILE: \AAA\00014\320		
MTL: -		

<b>BALDOR • DODGE • RELIANCE</b>		
SPL HORZ 35M 143-5TY/56HZ OPEN RESIL MTD W/TERM PLATE		
SH 1 of 1		

CD0005

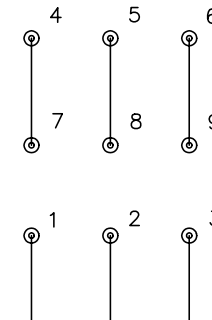


LOW VOLTAGE  
(2Y)



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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS

REV. LTR: E BY: JLP

REVISED: 01/19/99 10:15

TDR: 0171435

CD0005

FILE: AAA00005140

MDL: -

MTL: -

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005