ABB BALDOR RELIANCE

Customer information packet

ERHM3162TA

5HP, 3450RPM, 3PH, 60HZ, 145TY, 3540M, OPEN, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	OPEN
Frame	145TY
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	5.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	UR
	CSA
	CSA EEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Resilient
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	6.100 A @ 460.0 V
	13.000 A @ 208.0 V
	12.200 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	86.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Terminal Panel
Front Shaft Indicator	None

Part Detail

Revision	Q
Type	AC
Mech. spec.	35J829
Base	
Status	PRD/A
Elec. spec.	35WGM541
Layout	35LYJ829
Eff. date	07-25-2024
CD Diagram	CD0007
Poles	02
Leads	12#18
Proprietary	False
Created date	08-05-2010

Heater Indicator	No Heater
High Voltage Full Load Amps	6.1 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Terminal Panel
Motor Lead Quantity/Wire Size	12 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3540M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	15.02 IN
Power Factor	89
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Resilient Mount
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
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 Valiid
Vibration Sensor Indicator	No Vibration Sensor

Winding Thermal 1	Automatic Thermal Overload
Winding Thermal 1 Location	SB
Winding Thermal 2	None

Nameplate

NP2601L									
CAT.NO.	ERHM3162TA								
SPEC.	35J829M541G1								
HP	5								
VOLTS	230/460								
AMP	12.2/6.1								
RPM	3450								
FRAME	143TY	**HZ**	60			**PH**	3		
SER.F.	1.15	**CODE**	L	**DES**	A	**CL**	F		
NEMA-NOM-EFF	86.5	**PF**	89						
RATING	40C AMB-CONT								
CC	010A								
DE	6205	**ODE**	6203						
ENCL	OPEN	**SN**							

AC Induction Motor Performance Data
Record # 53123
Typical performance - not guaranteed values

Winding: 35WGM541-R003	**Type:** 3540M	**Enclosure:** OPEN

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			5	**Full Load Torque**	7.65 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			12.2/6.1	**Breakdown Torque**	34.5 LB-FT
R.P.M.			3450	**Pull-up Torque**	20.8 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	32.1 LB-FT
NEMA Design Code	A	**KVA Code**	L	**Starting Current**	60.4 A
Service Factor (S.F.)			1.15	**No-load Current**	2.21 A
NEMA Nom. Eff.	86.5	**Power Factor**	89	**Line-line Res. @ 25ºC**	2.93 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	56°C
S.F. Amps				**Temp. Rise @ S.F. Load**	68°C
				Locked-rotor Power Factor	48.2
				Rotor inertia	0.111 LB-FT2

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	54	76	85	89	91	92	90
Efficiency	83.8	88.1	87.9	86.9	84.9	82.6	85.7
Speed	3564	3530	3493	3452	3406	3353	3424
Line amperes	2.62	3.53	4.75	6.1	7.57	9.29	6.98

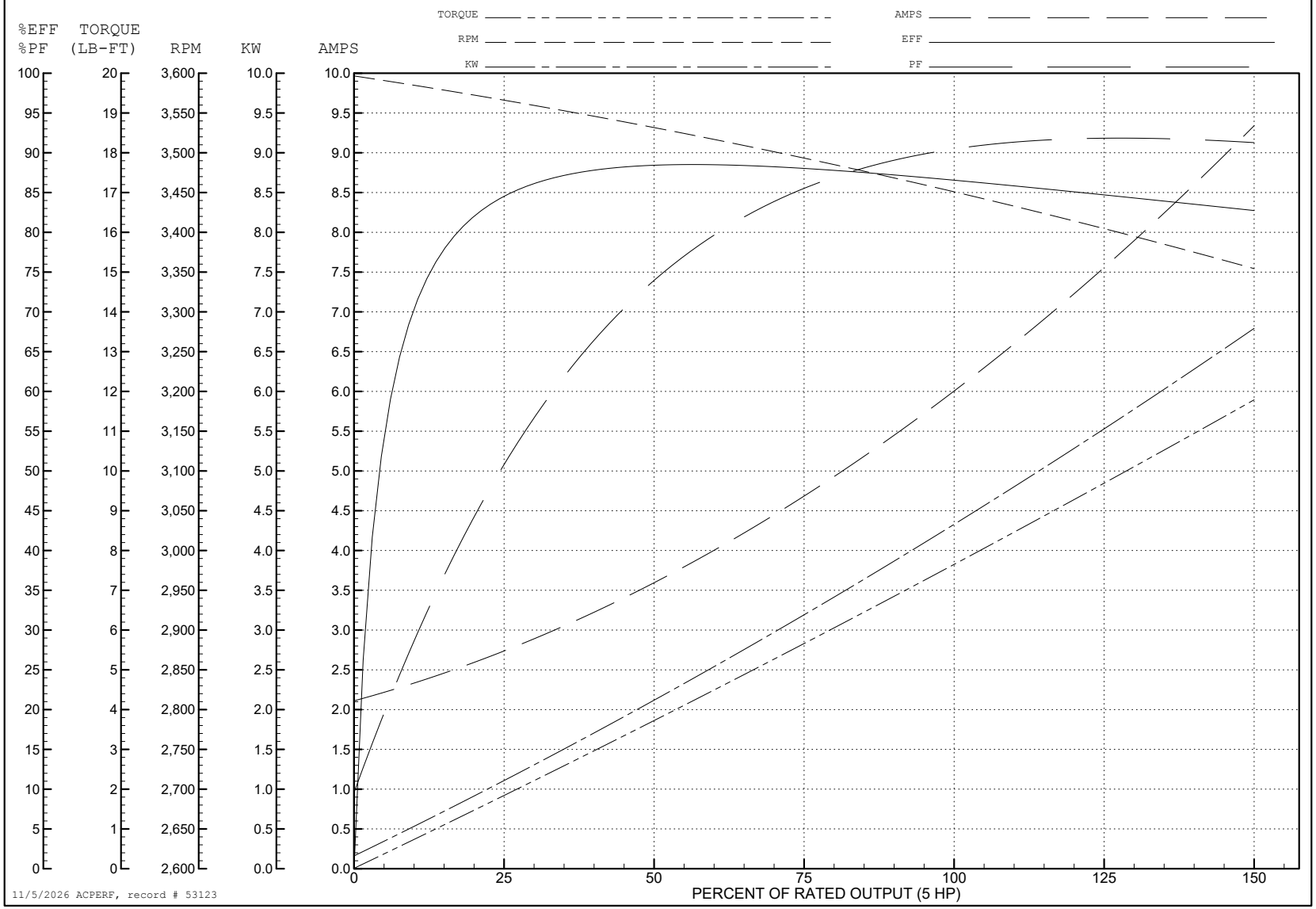
ABB Motors and Mechanical Inc.

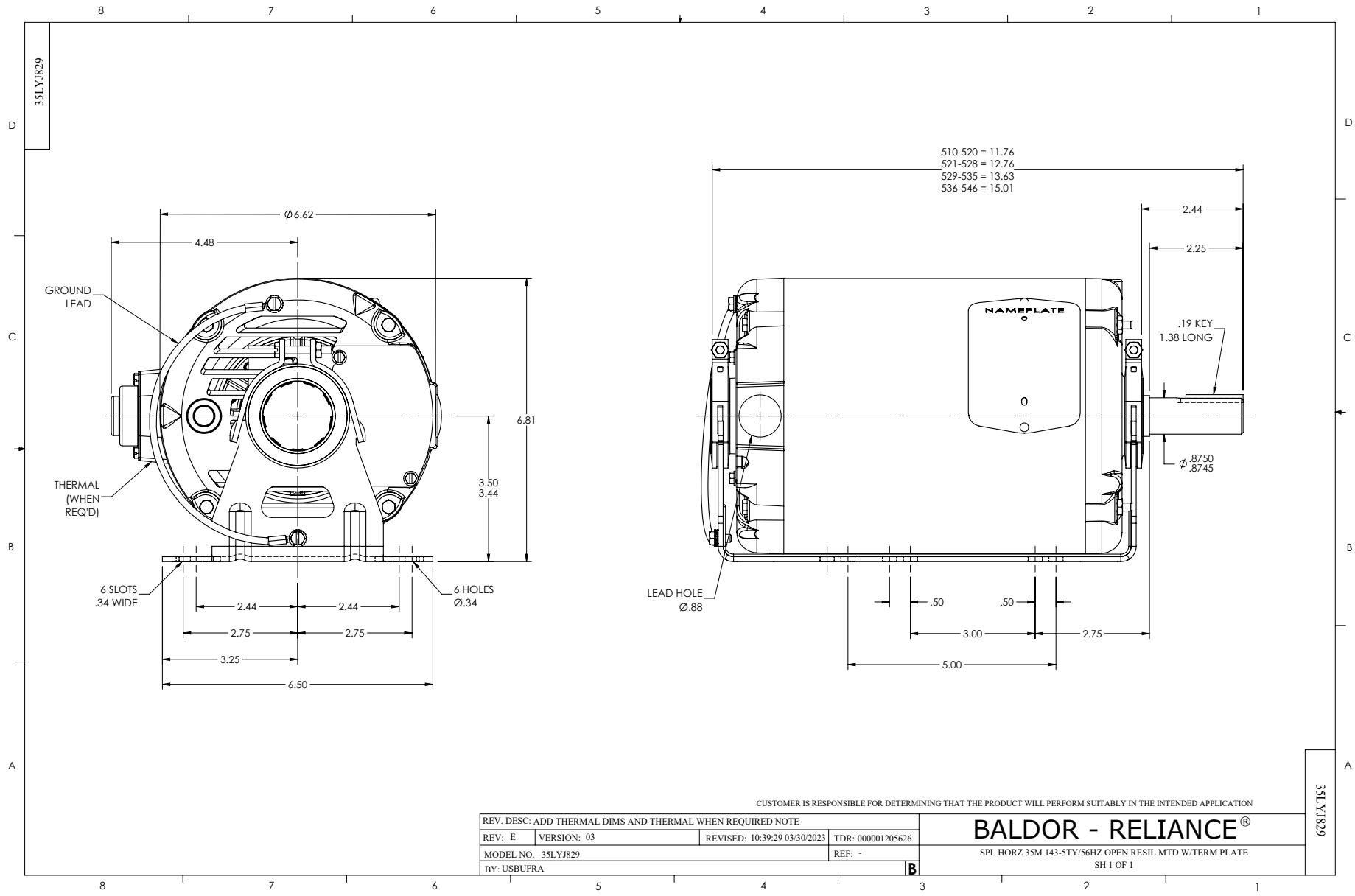
WINDING # 35WGM541

5 HP 3 PH 60 HZ 3450 RPM 460 V 3540M

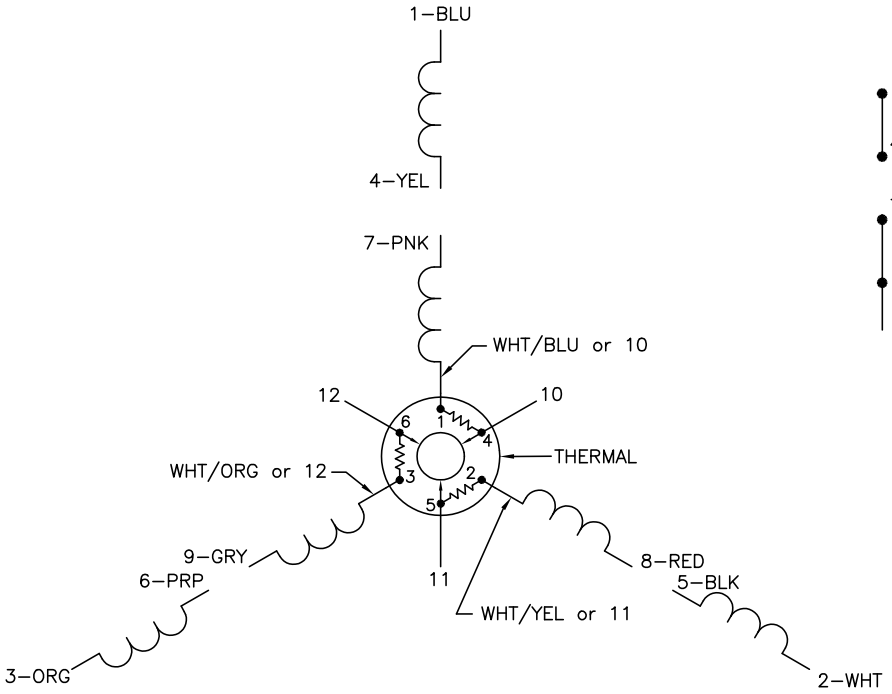
Typical performance - not guaranteed values.

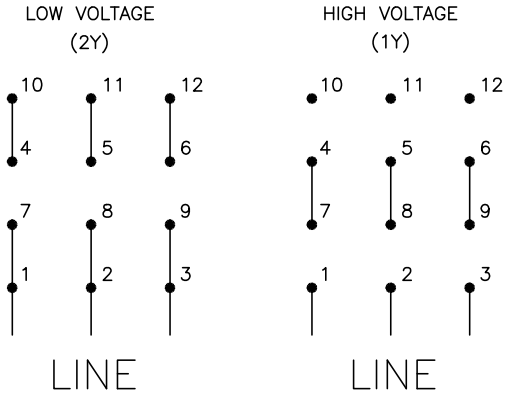
TORQUES(LB-FT): PO=34.5 PU=20.8 LR=32.1 LRA=60.4




35LYJ829
Ø6.62
4.48
GROUND LEAD
6.81
3.50
3.44
THERMAL (WHEN REQ'D)
6 SLOTS .34 WIDE
6 HOLES Ø.34
2.44
2.44
2.75
2.75
3.25
6.50
510-520 = 11.76
521-528 = 12.76
529-535 = 13.63
536-546 = 15.01
2.44
2.25
NAMEPLATE
.19 KEY
1.38 LONG
Ø .8750
.8745
LEAD HOLE Ø.88
.50
.50
3.00
2.75
5.00
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: ADD THERMAL DIMS AND THERMAL WHEN REQUIRED NOTE
REV: E
VERSION: 03
REVISED: 10:39:29 03/30/2023
TDR: 000001205626
MODEL NO. 35LYJ829
REF: -
BY: USBUFRA
B
BALDOR - RELIANCE®
SPL HORZ 35M 143-5TY/56HZ OPEN RESIL MTD W/TERM PLATE
SH 1 OF 1
35LYJ829

CD0007





NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
3. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: ADDED "CK" PLANT CODE			BALDOR ELECTRIC Co.
REV. LTR: E	BY: EAH	REVISED: 05/06/99 17:1	TDR: 0181040
CD0007		FILE: AAA00008370	MDL: –
		MTL: –	3PH, DV, THERMAL, 12 LEADS

CD0007