ABB BALDOR RELIANCE

Customer information packet

EM3158T

3HP, 3450RPM, 3PH, 60HZ, 3530M, N
Class - None
Division - Not Applicable

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Specifications

Enclosure	OPSB
Frame	145T
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	3.000 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	NEMA PREMIUM
	CURUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	3.800 A @ 460.0 V
	7.600 A @ 230.0 V
	8.000 A @ 208.0 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	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	T
Type	AC
Mech. spec.	35T680
Base	
Status	PRD/A
Elec. spec.	35WGP988
Layout	35LYT680
Eff. date	01-05-2026
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	05-10-2010

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	Ko Box
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	13.00 IN
Power Factor	87
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
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	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None

Winding Thermal 2	None

Nameplate

NP3553LUA									
CAT.NO.	EM3158T								
SPEC.	35T680P988G2								
HP	3								
VOLTS	230/460								
AMPS	7.6/3.8								
RPM	3450								
FRAME	145T	**HZ**	60			**PH**	3		
SF	1.15	**CODE**	K	**DES**	B	**CLASS**	F		
NEMA NOM. EFF	85.5	**PF**	87						
RATING	40C AMB-CONT								
CC	010A								
ENCL	OPSB	**SN**							
DE	6205	**ODE**	6203						
VPWM INVERTER READY									
CT30-60(2:1) VT3-60(20:1)									
USABLE AT	50HZ 3HP 190/380V 9/4.5A								SF1.0

Accessories

Part number	Description	Multiplier
35-8764	C FACE KIT	A8
35EP1604A01SP	D-FLANGE KIT	

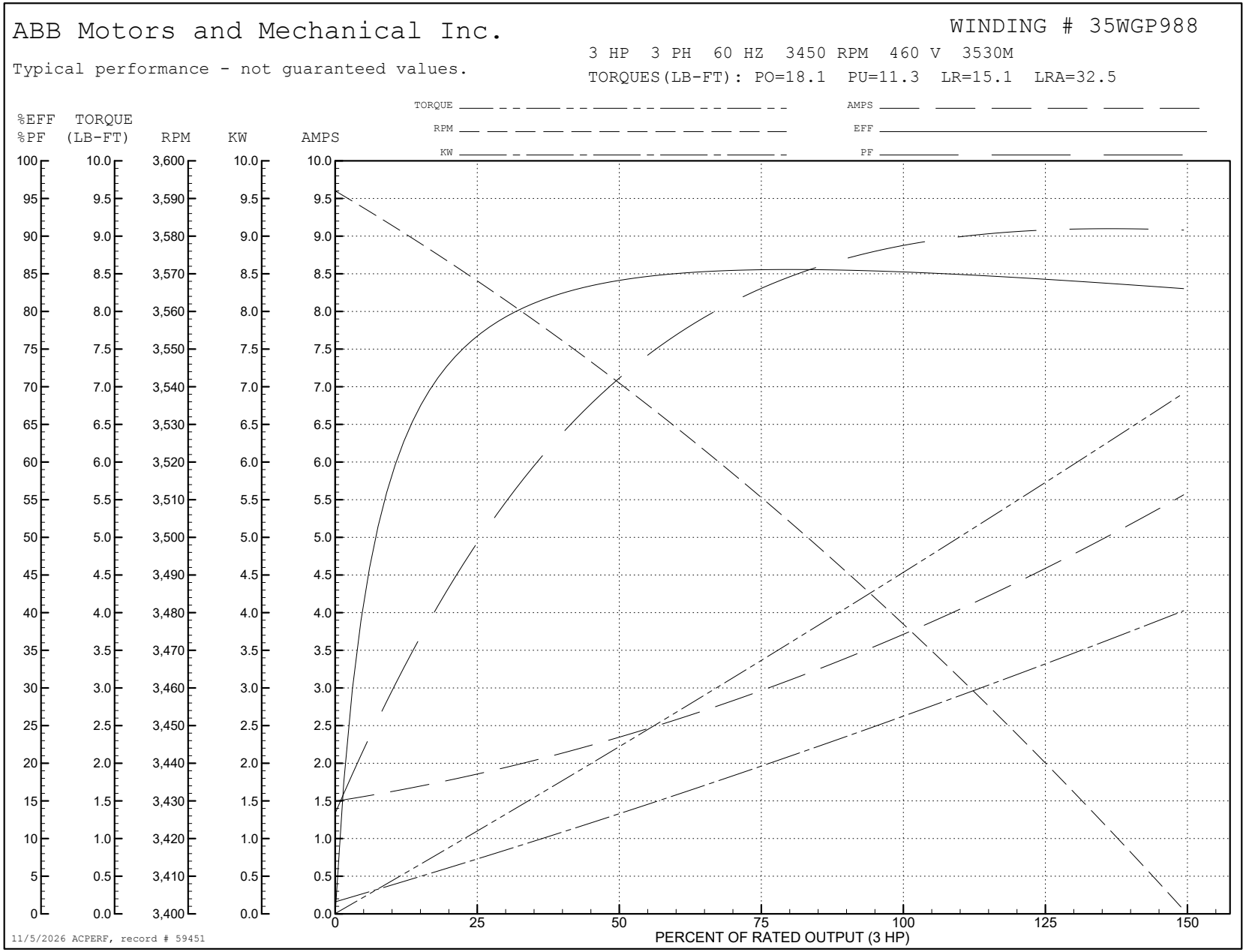
AC Induction Motor Performance Data
Record # 59451
Typical performance - not guaranteed values

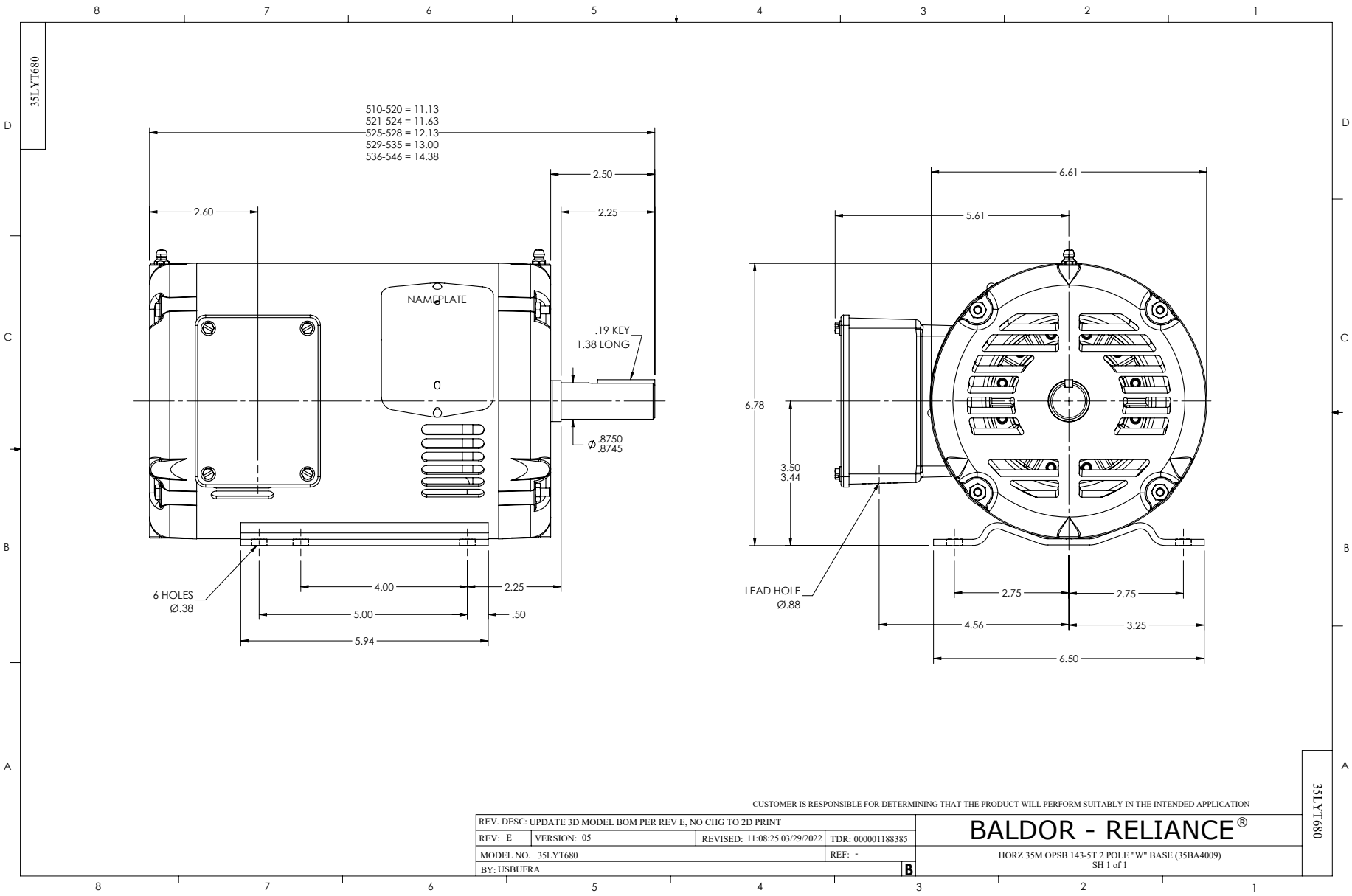
Winding: 35WGP988-R004	**Type:** 3530M	**Enclosure:** OPSB

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. @ 25ºC**	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-FT2

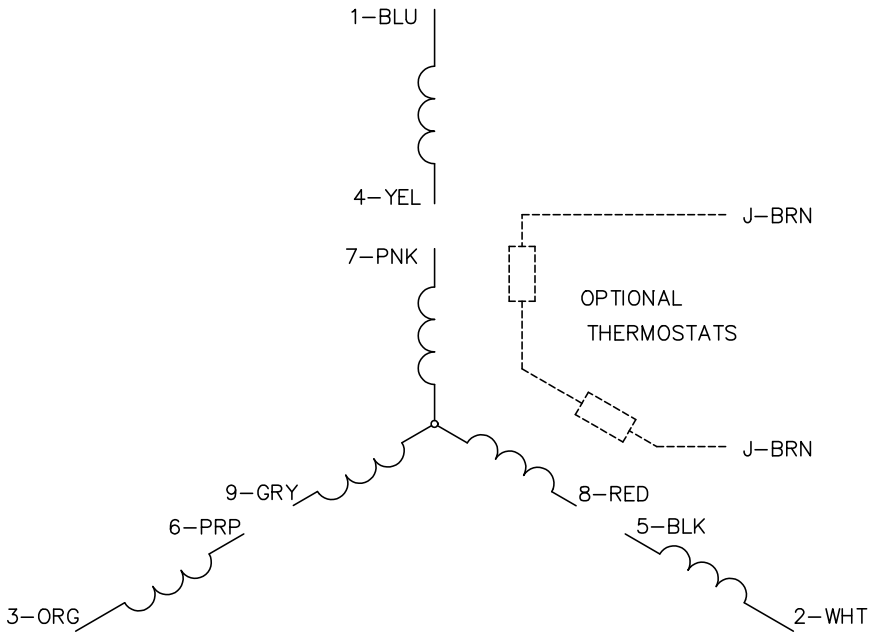
Load Characteristics 460 V, 60 Hz, 3 HP

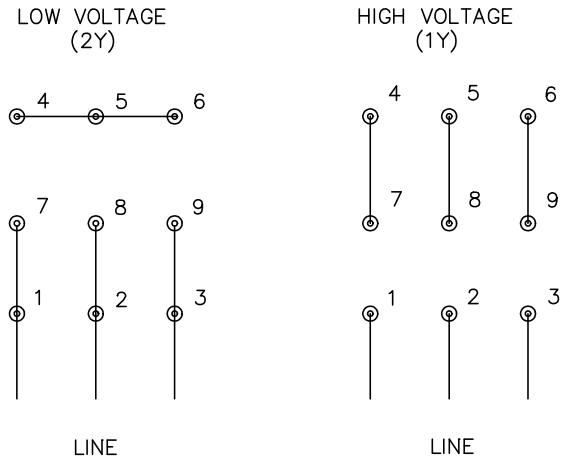
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	50	72	82	87	90	91	89
Efficiency	76.1	84.3	86	85.8	84.7	83	85.1
Speed	3569.1	3541.6	3510.6	3478.3	3442.7	3400.2	3457
Line amperes	1.77	2.29	2.97	3.73	4.58	5.53	4.24


ABB Motors and Mechanical Inc.
WINDING # 35WGP988
Typical performance - not guaranteed values.
3 HP 3 PH 60 HZ 3450 RPM 460 V 3530M
TORQUES(LB-FT): PO=18.1 PU=11.3 LR=15.1 LRA=32.5
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
KW
AMPS
PERCENT OF RATED OUTPUT (3 HP)
11/5/2026 ACPERF, record # 59451


35LYT680
510-520 = 11.13
521-524 = 11.63
525-528 = 12.13
529-535 = 13.00
536-546 = 14.38
2.50
2.60
2.25
NAMEPLATE
.19 KEY
1.38 LONG
Ø .8750
.8745
6 HOLES
Ø.38
4.00
2.25
5.00
.50
5.94
6.61
5.61
6.78
3.50
3.44
LEAD HOLE
Ø.88
2.75
2.75
4.56
3.25
6.50
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: UPDATE 3D MODEL BOM PER REV E, NO CHG TO 2D PRINT
REV: E
VERSION: 05
REVISED: 11:08:25 03/29/2022
TDR: 000001188385
MODEL NO. 35LYT680
REF: -
BY: USBUFRA
B
BALDOR - RELIANCE®
HORZ 35M OPSB 143-5T 2 POLE "W" BASE (35BA4009)
SH 1 of 1
35LYT680

CD0005





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			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS