ABB BALDOR RELIANCE

Customer information packet

M3550T

1.5HP, 3450RPM, 3PH, 60HZ, 143T, 3520M, TEFC
Class -
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	143T
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Division	Not Applicable
Output @ Frequency	1.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	208.0 V @ 60 HZ
	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	CSA
	UR
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	4.300 A @ 208.0 V
	4.200 A @ 230.0 V
	2.100 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	82.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	2.1 a

Part Detail

Revision	K
Type	AC
Mech. spec.	35T638
Base	
Status	NLA/A
Elec. spec.	35WGS253
Layout	35LYT638
Eff. date	10-04-2010
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	06-22-2007

Insulation Class	B
Inverter Code	Not Inverter
KVA Code	L
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	3520M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	12.31 IN
Power Factor	85
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
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	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP1256L									
CAT.NO.	M3550T								
SPEC.	35T638S253H1								
HP	1.5								
VOLTS	208-230/460								
AMP	4.3-4.2/2.1								
RPM	3450								
FRAME	143T	**HZ**	60			**PH**	3		
SER.F.	1.15	**CODE**	L	**DES**	B	**CLASS**	B		
NEMA-NOM-EFF	82.5	**PF**	85						
RATING	40C AMB-CONT								
CC	010A								
DE	6205	**ODE**	6203						
ENCL	TEFC	**SN**							

Accessories

Part number	Description	Multiplier
35-8762	C FACE KIT	A8
35EP1506A01SP	D-FLANGE KIT	A8

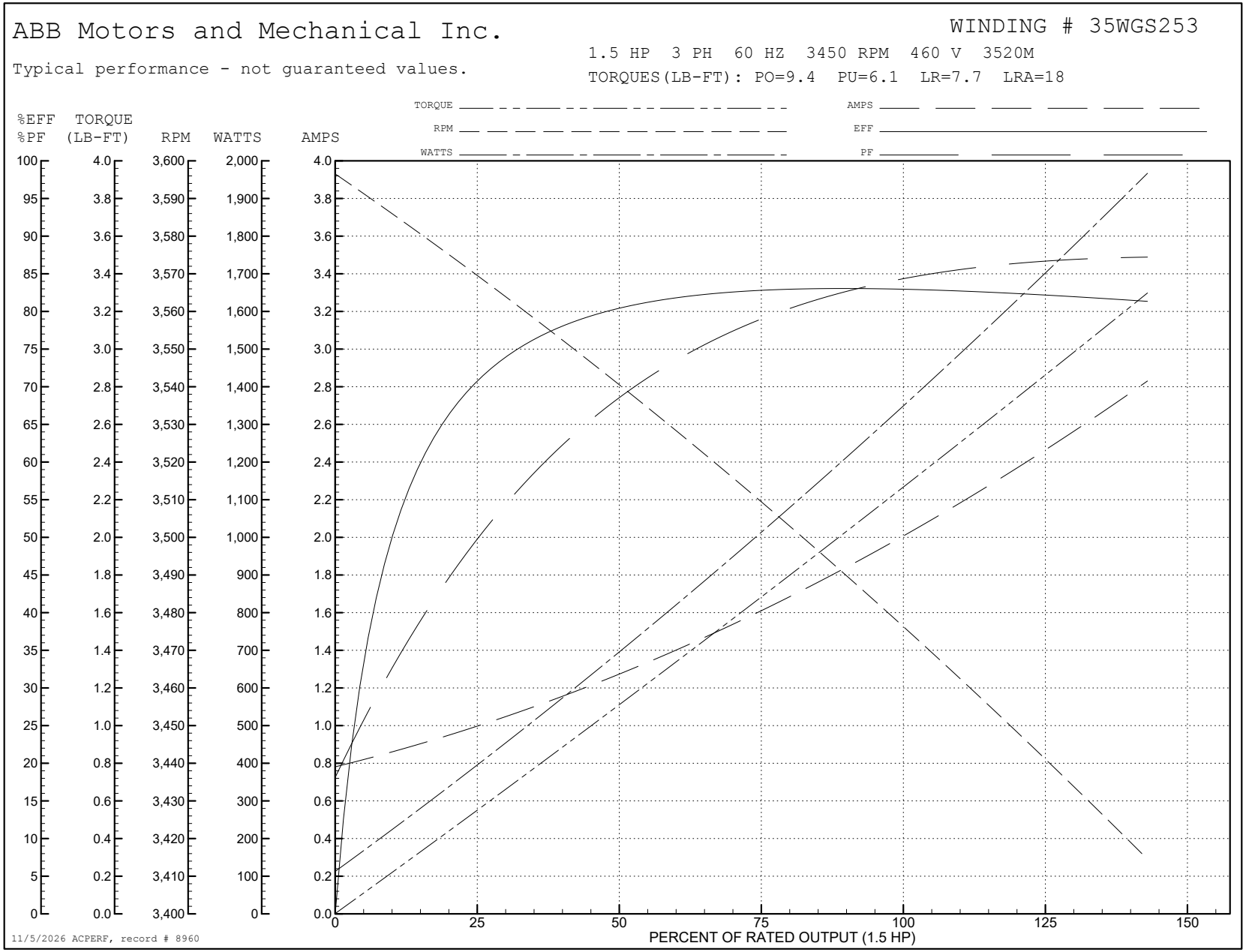
AC Induction Motor Performance Data
Record # 8960
Typical performance - not guaranteed values

Winding: 35WGS253-R003	**Type:** 3520M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			1.5	**Full Load Torque**	2.2 LB-FT
Volts			208-230/460	**Start Configuration**	direct on line
Full Load Amps			4.3-4.2/2.1	**Breakdown Torque**	9.4 LB-FT
R.P.M.			3450	**Pull-up Torque**	6.1 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	7.7 LB-FT
NEMA Design Code	B	**KVA Code**	L	**Starting Current**	18 A
Service Factor (S.F.)			1.15	**No-load Current**	0.8 A
NEMA Nom. Eff.	82.5	**Power Factor**	85	**Line-line Res. @ 25ºC**	11.6 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	42°C
S.F. Amps				**Temp. Rise @ S.F. Load**	49°C
				Locked-rotor Power Factor	57
				Rotor inertia	0.0548 LB-FT2

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	58	76	85	89	92	94	91
Efficiency	71.6	80.1	82.6	83	82.5	81.3	82.7
Speed	3566	3540	3513	3481	3449	3413	3462
Line amperes	1	1.2	1.6	2	2.4	2.8	2.2


ABB Motors and Mechanical Inc.
WINDING # 35WGS253
1.5 HP 3 PH 60 HZ 3450 RPM 460 V 3520M
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=9.4 PU=6.1 LR=7.7 LRA=18
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
PERCENT OF RATED OUTPUT (1.5 HP)
11/5/2026 ACPERF, record # 8960

AC Induction Motor Performance Data
Record # 20978
Typical performance - not guaranteed values

Winding: 35WGS253-R007	**Type:** 3520M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			1.5	**Full Load Torque**	2.2 LB-FT
Volts			208-230/460	**Start Configuration**	direct on line
Full Load Amps			4.3-4.2/2.1	**Breakdown Torque**	9.4 LB-FT
R.P.M.			3450	**Pull-up Torque**	6.1 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	7.7 LB-FT
NEMA Design Code	B	**KVA Code**	L	**Starting Current**	18 A
Service Factor (S.F.)			1.15	**No-load Current**	0.8 A
NEMA Nom. Eff.	82.5	**Power Factor**	85	**Line-line Res. @ 25ºC**	11.6 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	42°C
S.F. Amps				**Temp. Rise @ S.F. Load**	49°C
				Locked-rotor Power Factor	57
				Rotor inertia	0.0548 LB-FT2

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	58	76	85	89	92	94	0
Efficiency	71.6	80.1	82.6	83	82.5	81.3	0
Speed	3566	3540	3513	3481	3449	3413	0
Line amperes	1	1.2	1.6	2	2.4	2.8	2.2

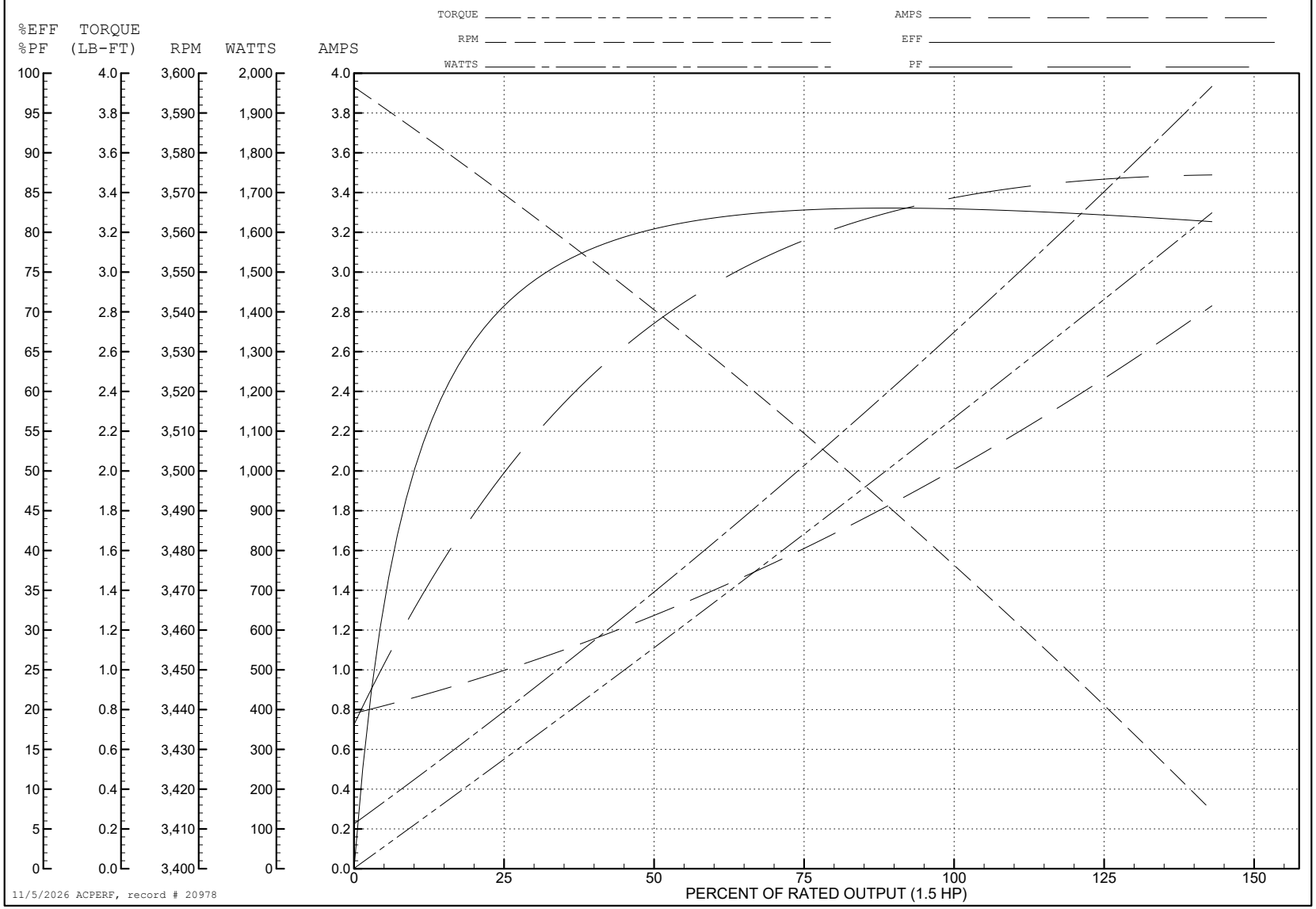
ABB Motors and Mechanical Inc.

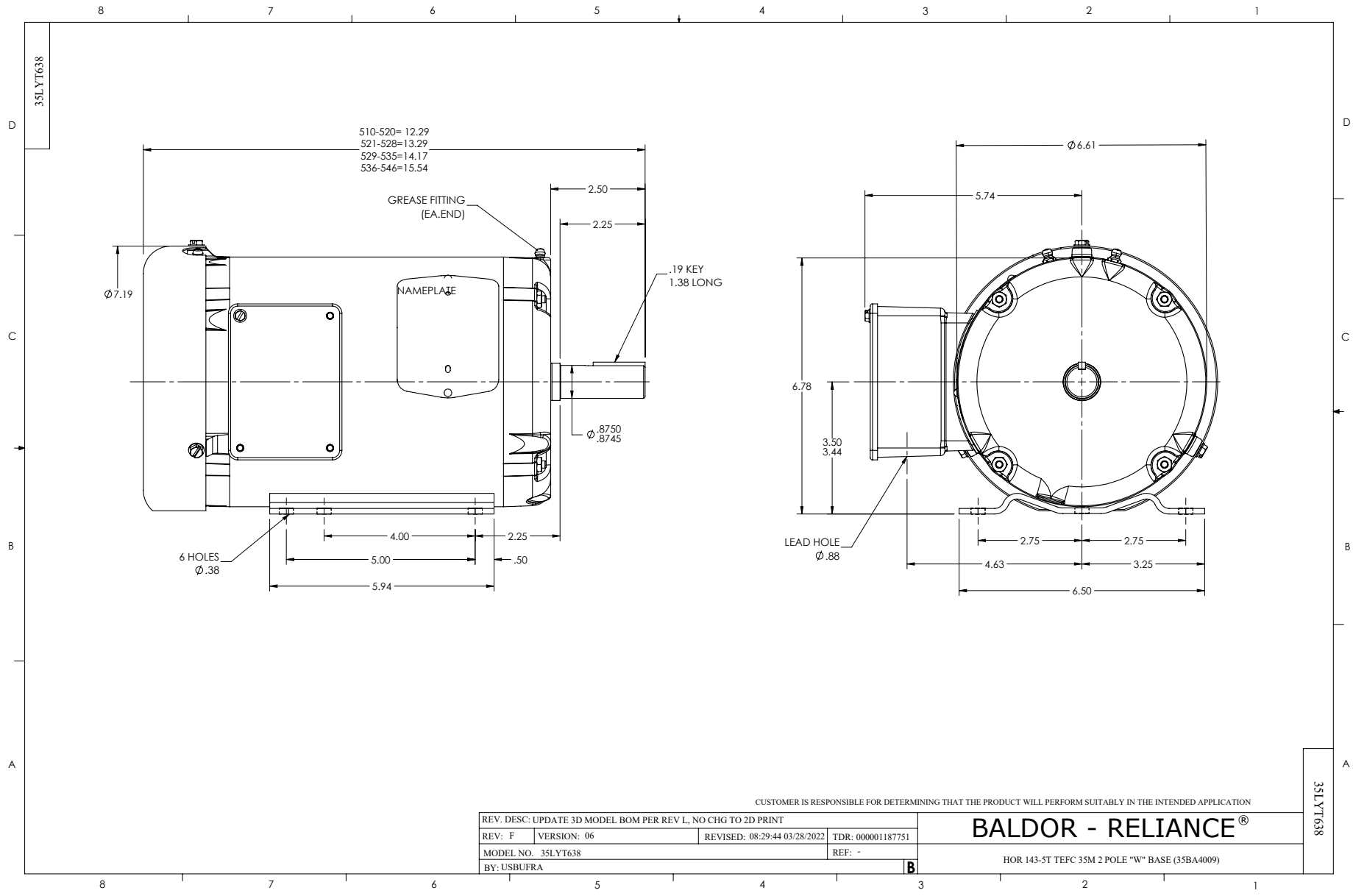
WINDING # 35WGS253

1.5 HP 3 PH 60 HZ 3450 RPM 460 V 3520M

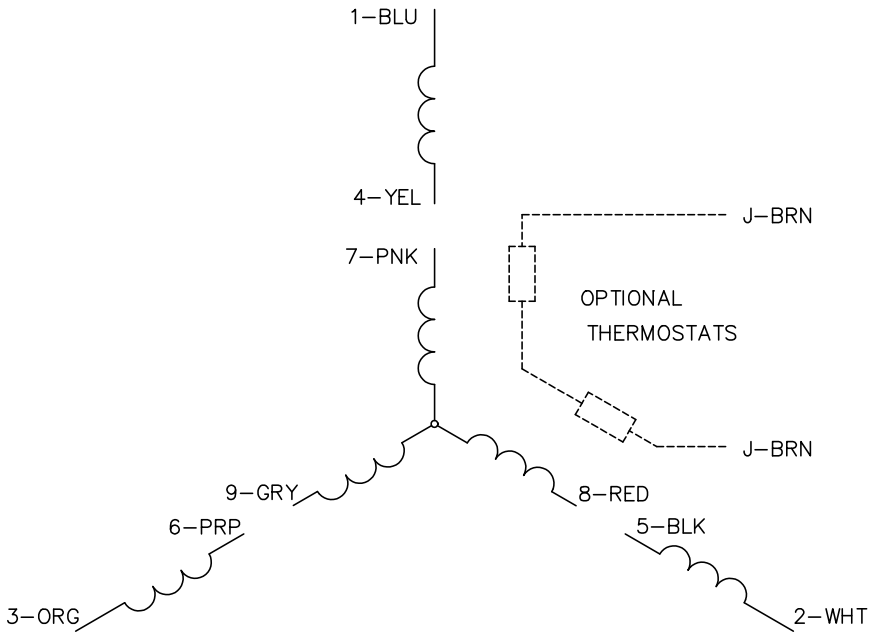
Typical performance - not guaranteed values.

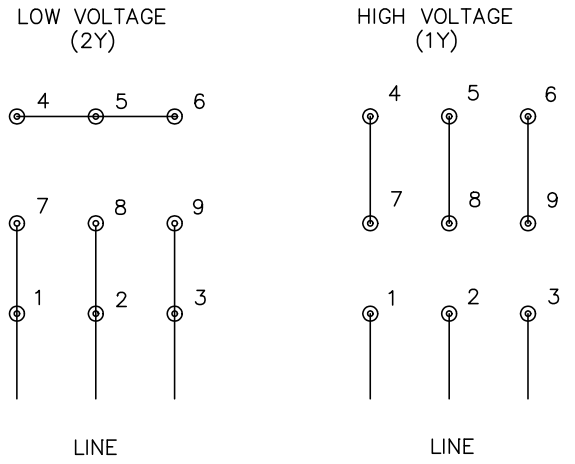
TORQUES(LB-FT): PO=9.4 PU=6.1 LR=7.7 LRA=18




35LYT638
510-520= 12.29
521-528=13.29
529-535=14.17
536-546=15.54
GREASE FITTING
(EA.END)
2.50
2.25
.19 KEY
1.38 LONG
Ø7.19
NAMEPLATE
Ø .8750
Ø .8745
6 HOLES
Ø .38
4.00
2.25
5.00
.50
5.94
Ø6.61
5.74
6.78
3.50
3.44
LEAD HOLE
Ø .88
2.75
2.75
4.63
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 L, NO CHG TO 2D PRINT
REV: F
VERSION: 06
REVISED: 08:29:44 03/28/2022
TDR: 000001187751
MODEL NO. 35LYT638
REF: -
BY: USBUFRA
B
BALDOR - RELIANCE®
HOR 143-5T TEFC 35M 2 POLE "W" BASE (35BA4009)
35LYT638

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