ABB BALDOR RELIANCE

Customer information packet

EWDM41906T

20HP, 3520RPM, 3PH, 60HZ, 256T, TEFC, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	256T
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	20.000 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
	UR
	CSA EEV
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	23.000 A @ 460.0 V
	46.000 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	23.0 a
Insulation Class	F

Part Detail

Revision	F
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	39WGX191
Layout	39LYS015
Eff. date	02-14-2024
CD Diagram	CD0005
Poles	02
Leads	9#12
Proprietary	False
Created date	08-13-2019

Inverter Code	Inverter Ready
IP Rating	IP55
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3940M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	23.57 IN
Power Factor	90
Product Family	Wash Down
Pulley Face Code	Standard
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	1.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	3520 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

NP1669L									
CAT.NO.	EWDM41906T								
SPEC.	39-0000-0185								
HP	20								
VOLTS	230/460								
AMP	46/23								
RPM	3520								
FRAME	256T		**HZ**	60			**PH**	3	
SER.F.	1.00	**CODE**	H	**DES**	A	**CLASS**		F	
NEMA-NOM-EFF	91	**PF**	90						
RATING	40C AMB-CONT								
CC	010A								
DE	6309		**ODE**	6208					
ENCL	TEFC	**SN**							
BLANK	20:1 CT/VT								

AC Induction Motor Performance Data
Record # 41946
Typical performance - not guaranteed values

Winding: 39WGX191-R001	**Type:** 3940M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			20	**Full Load Torque**	29.6 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			46/23	**Breakdown Torque**	108 LB-FT
R.P.M.			3520	**Pull-up Torque**	40.8 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	51.6 LB-FT
NEMA Design Code	A	**KVA Code**	H	**Starting Current**	168 A
Service Factor (S.F.)			1.15	**No-load Current**	6.78 A
NEMA Nom. Eff.	91	**Power Factor**	90	**Line-line Res. @ 25ºC**	0.446 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	77°C
S.F. Amps				**Temp. Rise @ S.F. Load**	94°C
				Locked-rotor Power Factor	28.4
				Rotor inertia	1.02 lb-ft²

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	59	80	87	90	91	91	91
Efficiency	85.1	90.4	91.3	91.1	90.3	89.2	90.6
Speed	3580.6	3561.9	3542.4	3521.2	3498.6	3473.5	3508
Line amperes	8.79	12.7	17.5	22.6	28.5	34.3	26.1

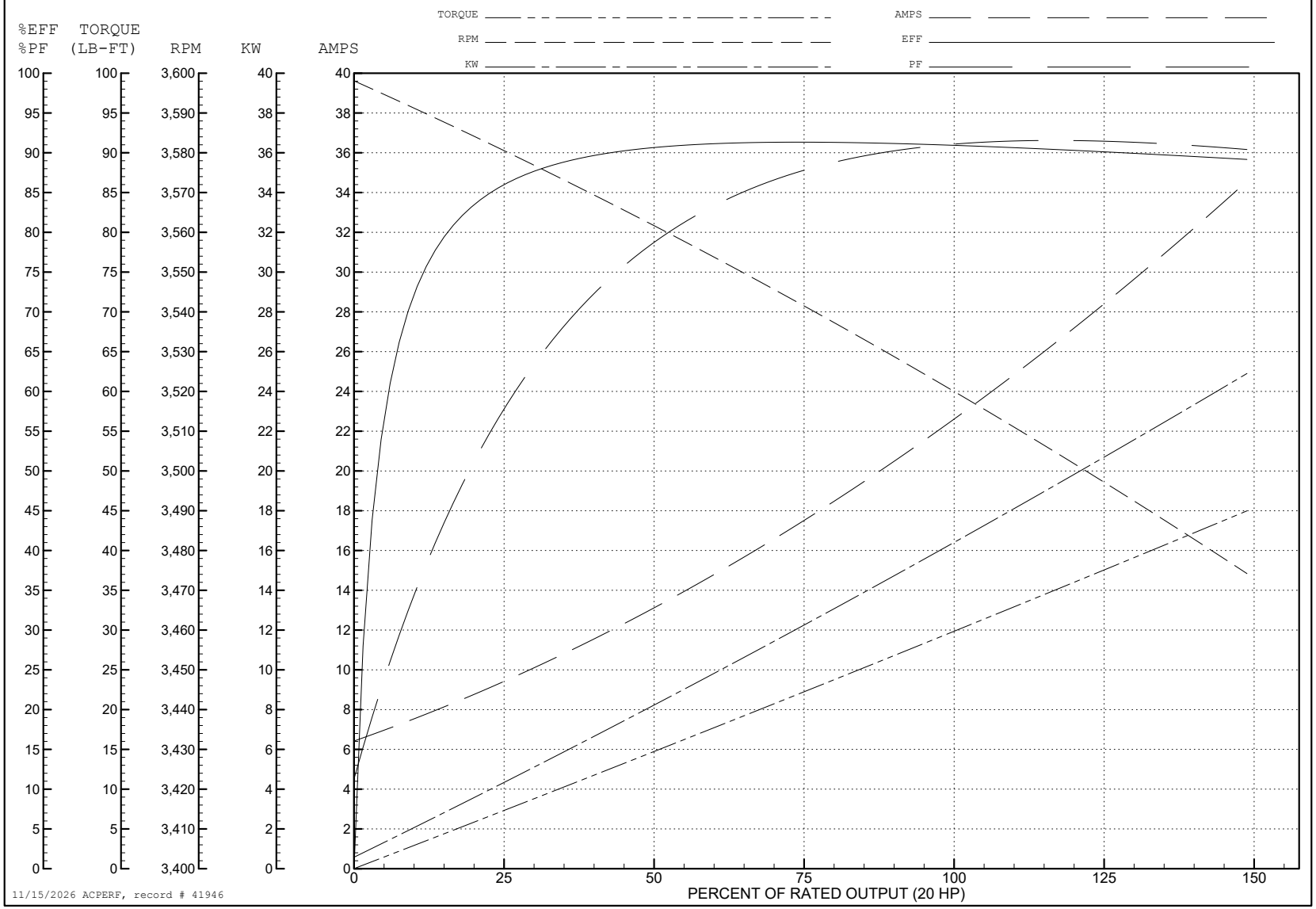
ABB Motors and Mechanical Inc.

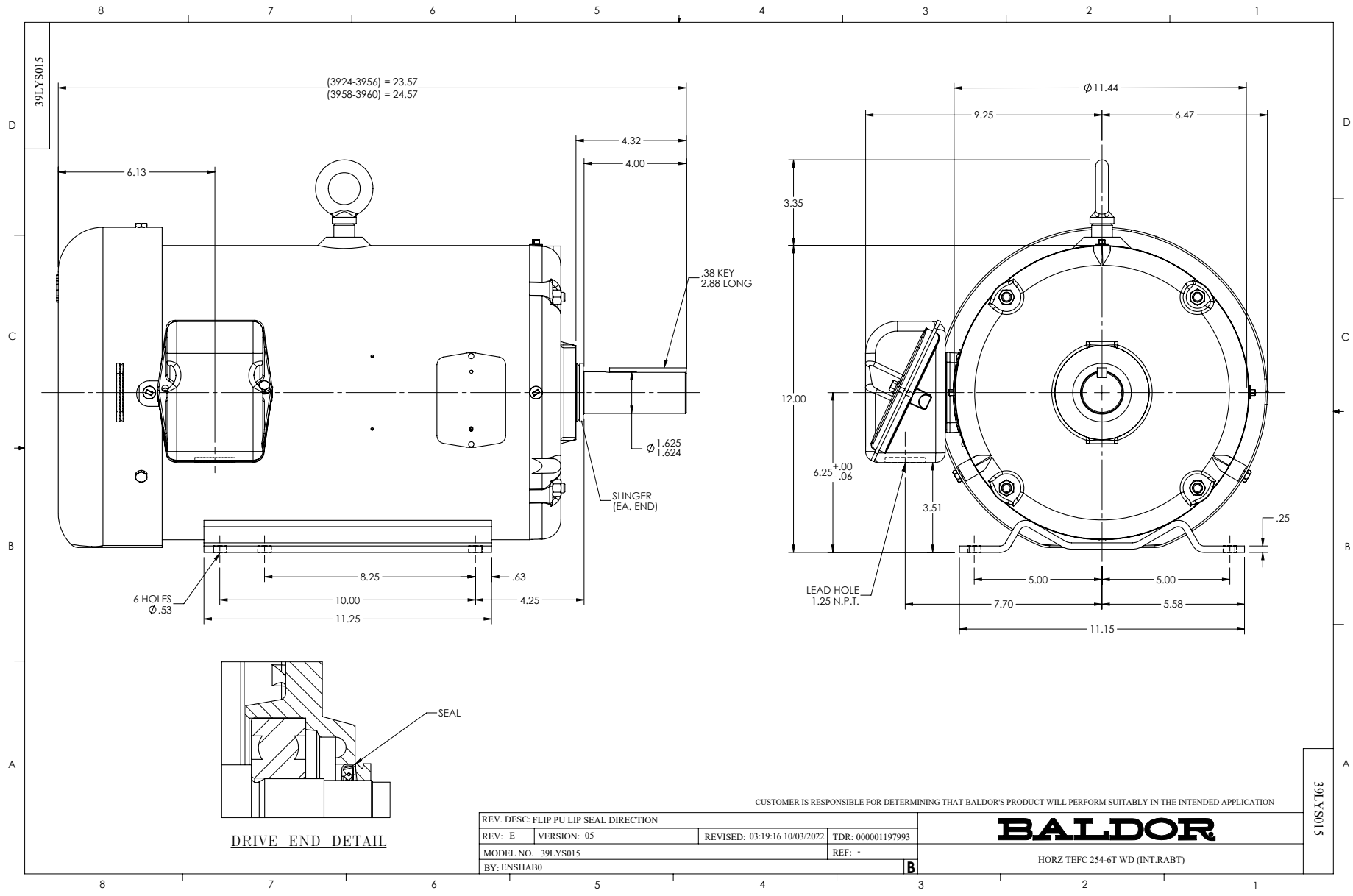
WINDING # 39WGX191

20 HP 3 PH 60 HZ 3520 RPM 460 V 3940M

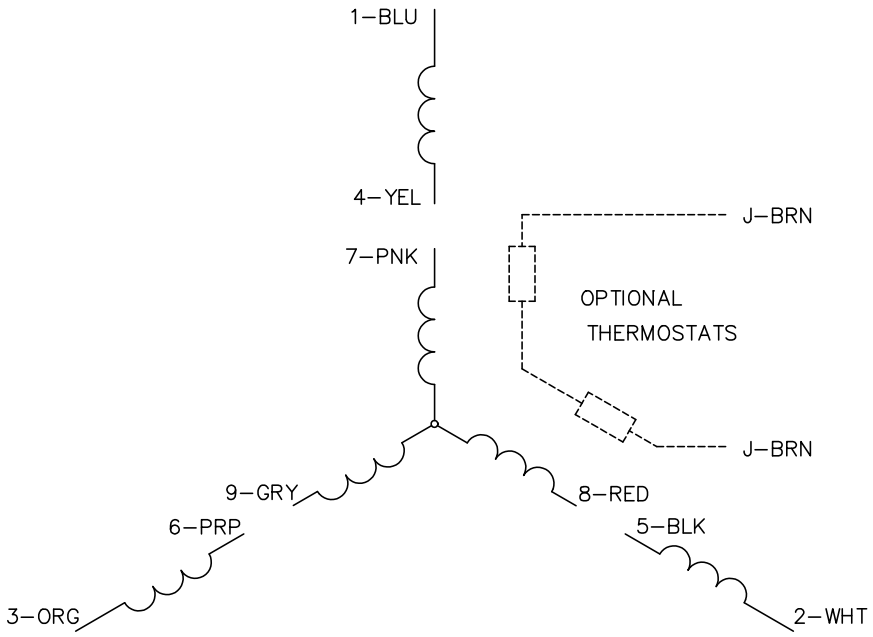
Typical performance - not guaranteed values.

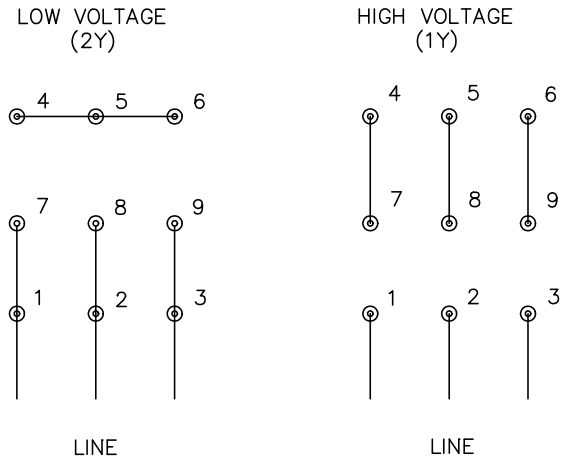
TORQUES(LB-FT): PO=108 PU=40.8 LR=51.6 LRA=168




39LYS015
(3924-3956) = 23.57
(3958-3960) = 24.57
6.13
4.32
4.00
.38 KEY
2.88 LONG
Ø1.625
1.624
SLINGER
(EA. END)
6 HOLES
Ø.53
8.25
.63
10.00
4.25
11.25
Ø11.44
9.25
6.47
3.35
12.00
6.25 +.00 -.06
3.51
.25
LEAD HOLE
1.25 N.P.T.
5.00
5.00
7.70
5.58
11.15
SEAL
DRIVE END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: FLIP PU LIP SEAL DIRECTION
REV: E
VERSION: 05
REVISED: 03:19:16 10/03/2022
TDR: 000001197993
MODEL NO. 39LYS015
REF: -
BY: ENSHAB0
B
BALDOR
HORZ TEFC 254-6T WD (INT.RABT)
39LYS015

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