ABB BALDOR RELIANCE

Customer information packet

CEWDM41906T

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

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Specifications

Enclosure	TEFC
Frame	256TC
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	CSA
	CSA EEV
	NEMA PREMIUM
	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	46.000 A @ 230.0 V
	23.000 A @ 460.0 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

Part Detail

Revision	L
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	39WGX191
Layout	39LYR098
Eff. date	02-14-2024
CD Diagram	CD0005
Poles	02
Leads	9#12
Proprietary	False
Created date	08-13-2019

Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	IP55
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
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	C-Face
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.	CEWDM41906T										
SPEC.	39-0000-0190										
HP	20										
VOLTS	230/460										
AMP	46/23										
RPM	3520										
FRAME	256TC	**HZ**	60				**PH**	3			
SER.F.	1.15	**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	10:1CT, 20:1VT @ 1.00SF										

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

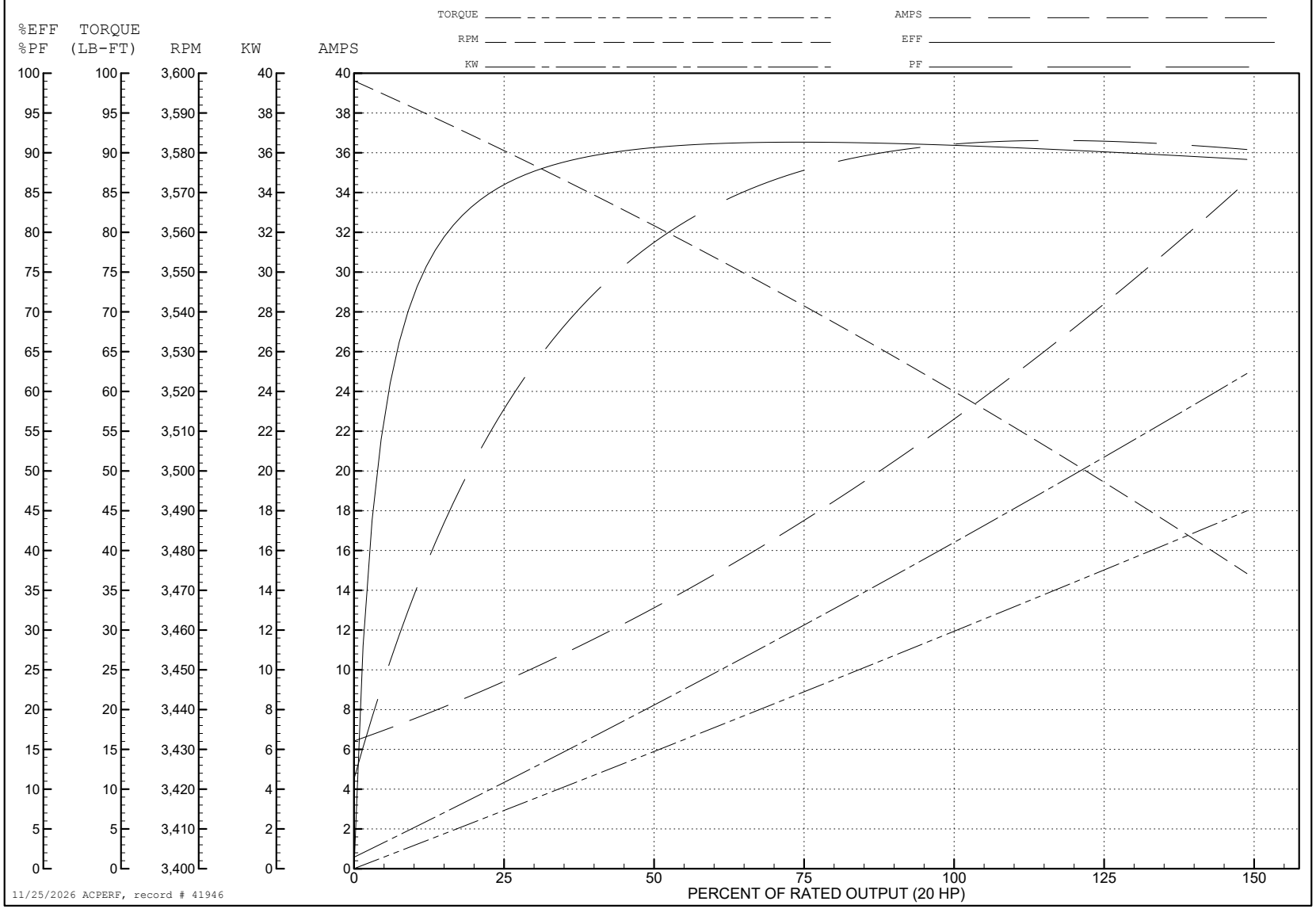
ABB Motors and Mechanical Inc.

WINDING # 39WGX191

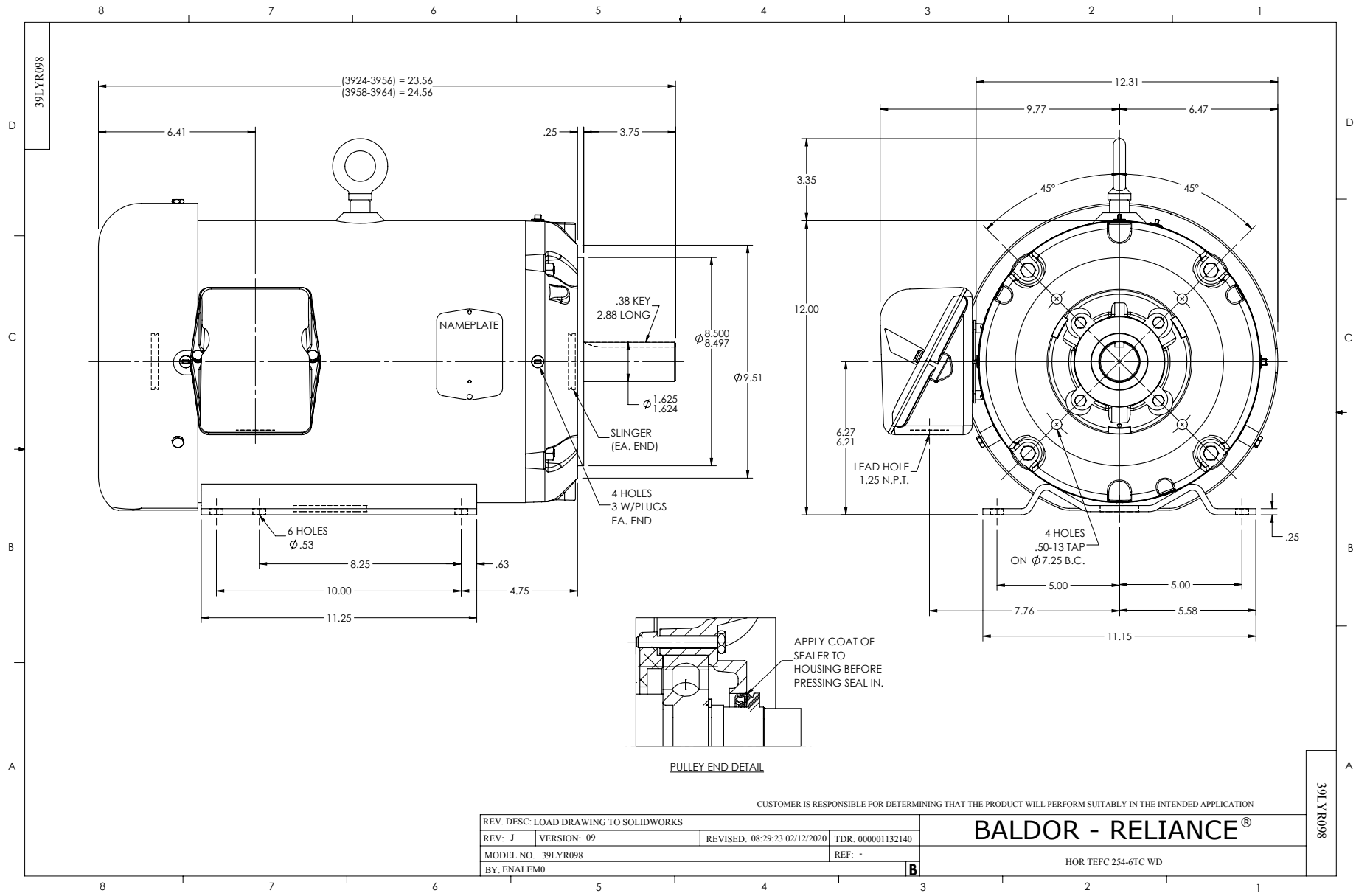
20 HP 3 PH 60 HZ 3520 RPM 460 V 3940M

Typical performance - not guaranteed values.

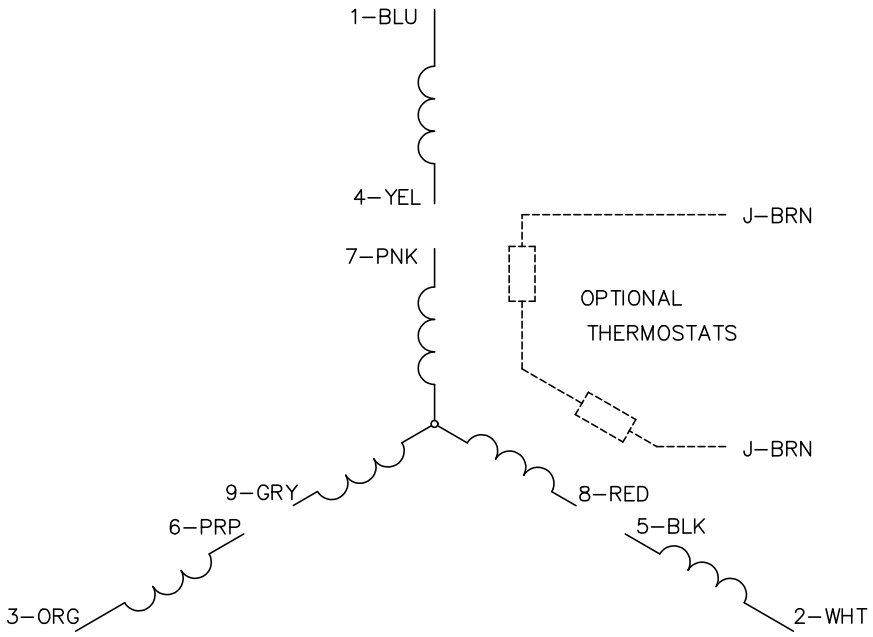
TORQUES(LB-FT): PO=108 PU=40.8 LR=51.6 LRA=168

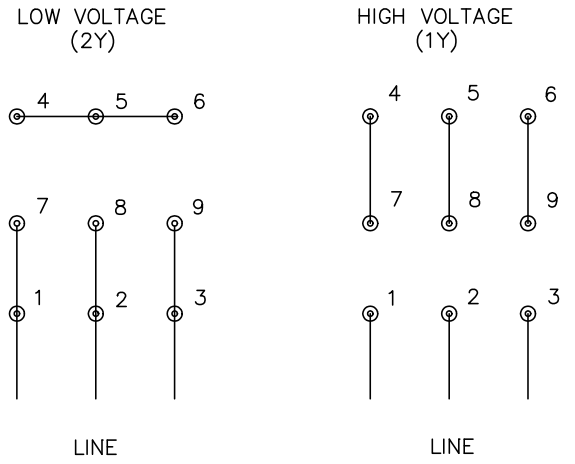


11/25/2026 ACPERF, record # 41946


39LYR098
(3924-3956) = 23.56
(3958-3964) = 24.56
6.41
.25
3.75
NAMEPLATE
.38 KEY
2.88 LONG
Ø 8.500
8.497
Ø9.51
Ø 1.625
1.624
SLINGER
(EA. END)
4 HOLES
3 W/PLUGS
EA. END
6 HOLES
Ø .53
8.25
.63
10.00
4.75
11.25
12.31
9.77
6.47
3.35
45°
45°
12.00
6.27
6.21
LEAD HOLE
1.25 N.P.T.
4 HOLES
.50-13 TAP
ON Ø7.25 B.C.
.25
5.00
5.00
7.76
5.58
11.15
APPLY COAT OF
SEALER TO
HOUSING BEFORE
PRESSING SEAL IN.
PULLEY END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOAD DRAWING TO SOLIDWORKS
REV: J
VERSION: 09
REVISED: 08:29:23 02/12/2020
TDR: 000001132140
MODEL NO. 39LYR098
REF: -
BY: ENALEM0
B
BALDOR - RELIANCE®
HOR TEFC 254-6TC WD
39LYR098

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