ABB BALDOR RELIANCE

Customer information packet

CEWDM23934T

20HP, 1765RPM, 3PH, 60HZ, 256TC, 3952M, TEFC
Class -
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	256TC
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	20.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	CSA
	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	52.000 A @ 208.0 V
	48.000 A @ 230.0 V
	24.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
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	BE
Type	AC
Mech. spec.	39R098
Base	
Status	PRD/A
Elec. spec.	39WGW766
Layout	39LYR098
Eff. date	01-22-2025
CD Diagram	CD0180
Poles	04
Leads	9#12
Proprietary	False
Created date	01-01-0001

High Voltage Full Load Amps	24.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3952M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	23.57 IN
Power Factor	84
Product Family	Wash Down
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1765 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor

Nameplate

NP1669L									
CAT.NO.	CEWDM23934T								
SPEC.	39R098W766G1								
HP	20								
VOLTS	230/460								
AMP	48/24								
RPM	1765								
FRAME	256TC	**HZ**	60			**PH**	3		
SER.F.	1.15	**CODE**	H	**DES**	A	**CLASS**	F		
NEMA-NOM-EFF	93	**PF**	84						
RATING	40C AMB-CONT								
CC	010A								
DE	6309	**ODE**	6208						
ENCL	TEFC	**SN**							
BLANK	20:1 CT 20:1 VT								

AC Induction Motor Performance Data
Record # 32188
Typical performance - not guaranteed values

Winding: 39WGW766-R006	**Type:** 3952M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			20	**Full Load Torque**	60 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			48/24	**Breakdown Torque**	183 LB-FT
R.P.M.			1765	**Pull-up Torque**	79 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	120 LB-FT
NEMA Design Code	A	**KVA Code**	H	**Starting Current**	171 A
Service Factor (S.F.)			1.15	**No-load Current**	8.5 A
NEMA Nom. Eff.	93	**Power Factor**	84	**Line-line Res. @ 25ºC**	0.4083 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	70°C
S.F. Amps				**Temp. Rise @ S.F. Load**	84°C
				Locked-rotor Power Factor	32.6
				Rotor inertia	2.27 LB-FT2

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	45	67	79	84	86	87	85
Efficiency	89.6	92.9	93.5	93.2	92.5	91.6	92.8
Speed	1791	1784	1776	1767	1758	1748	1762
Line amperes	10.17	13.79	18.39	23.89	28.78	34.6	26.82

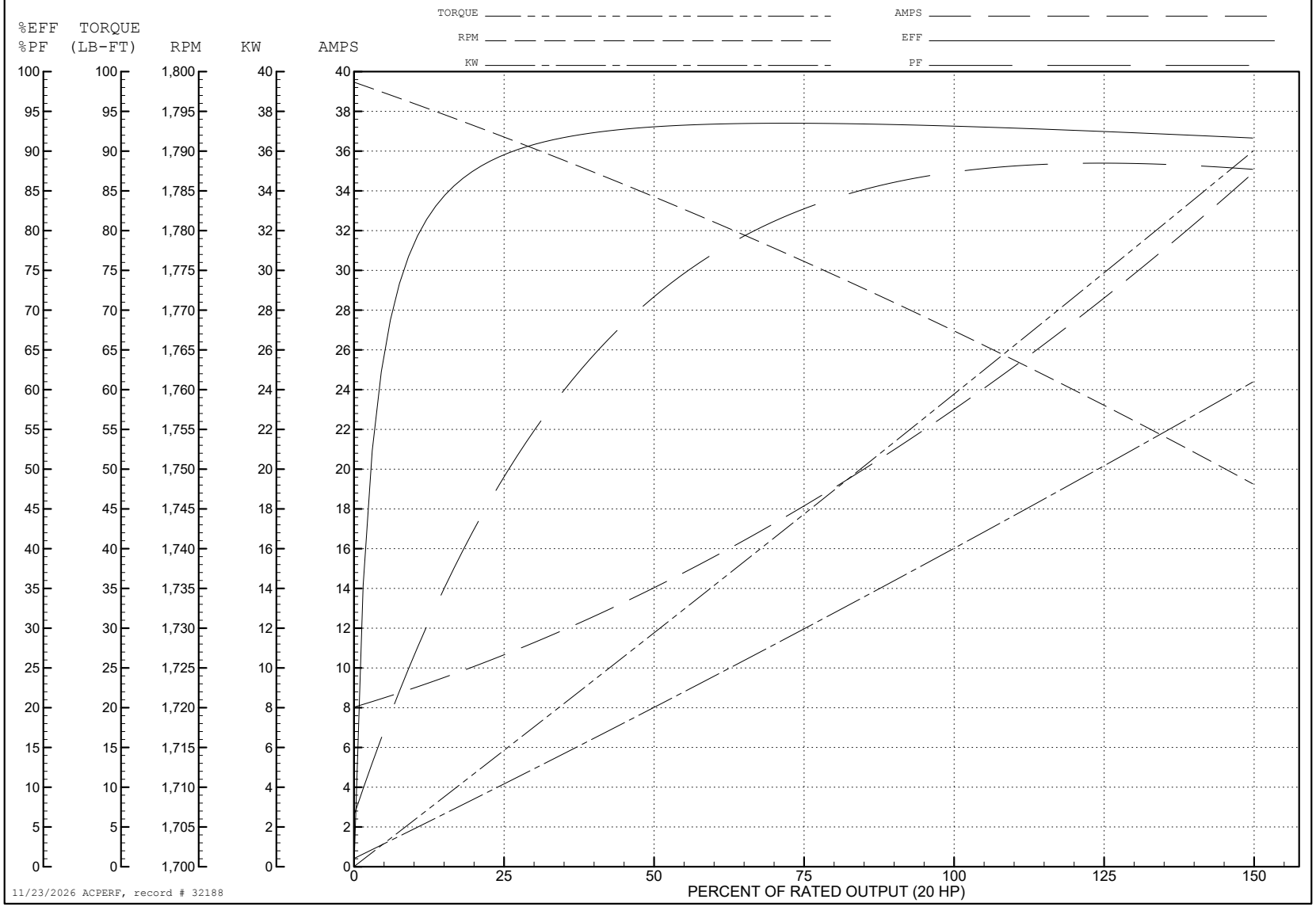
ABB Motors and Mechanical Inc.

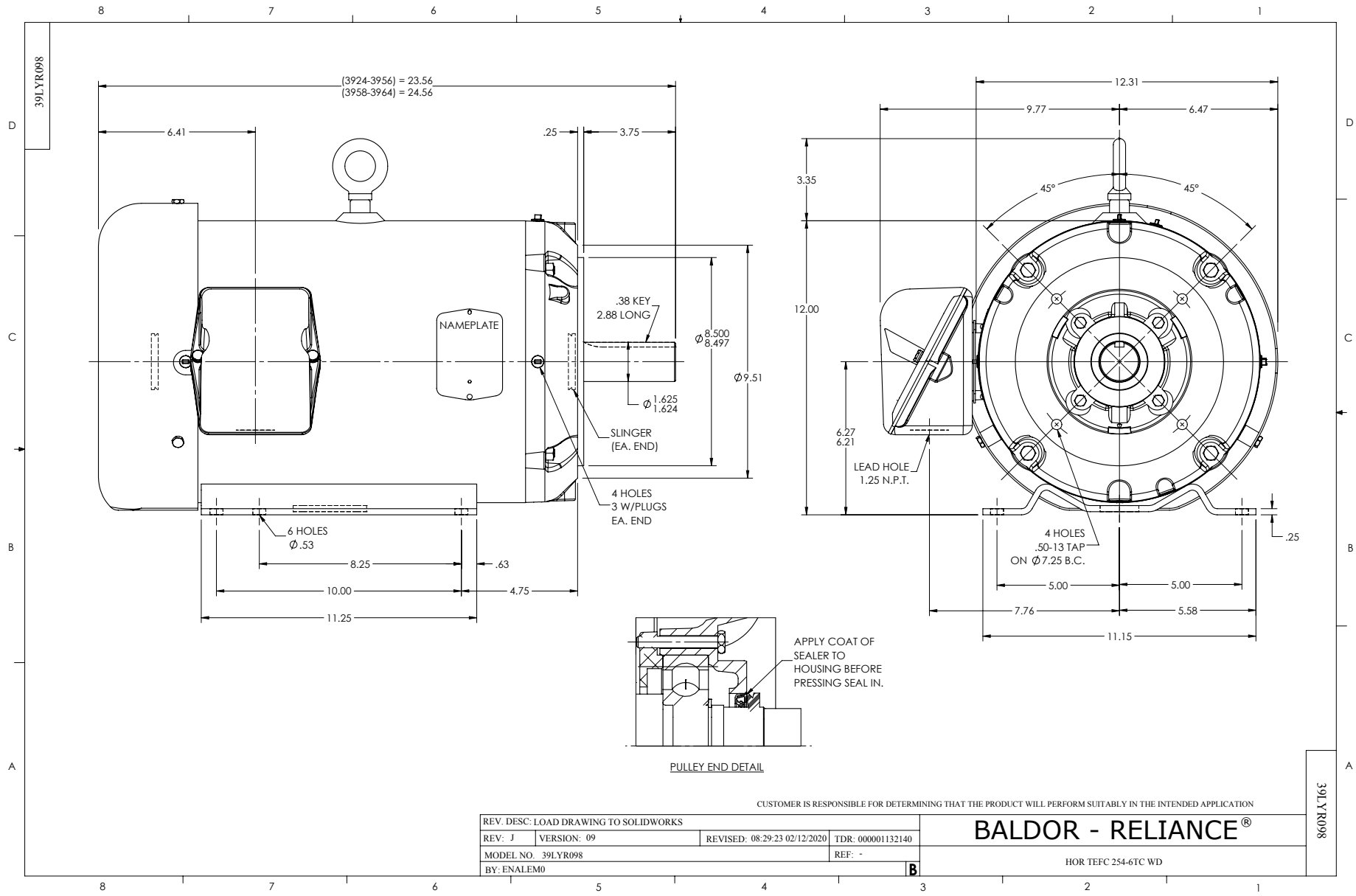
WINDING # 39WGW766

20 HP 3 PH 60 HZ 1765 RPM 460 V 3952M

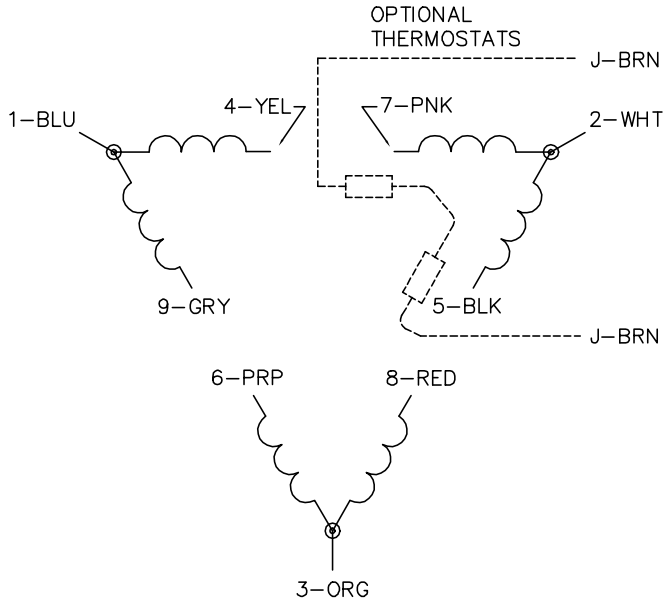
Typical performance - not guaranteed values.

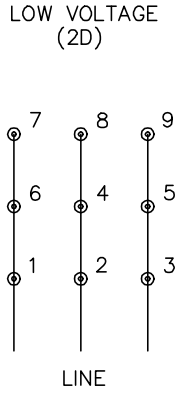
TORQUES(LB-FT): PO=183 PU=79 LR=120 LRA=171

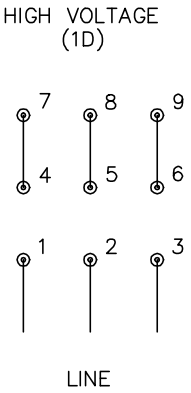



39LYR098
(3924-3956) = 23.56
(3958-3964) = 24.56
6.41
.25
3.75
NAMEPLATE
.38 KEY
2.88 LONG
Ø 8.500
8.497
Ø9.51
Ø 1.625
1.624
SLINGER
(EA. END)
4 HOLES
3 W/PLUGS
EA. END
6 HOLES
Ø .53
8.25
.63
10.00
4.75
11.25
12.31
9.77
6.47
3.35
45°
45°
12.00
6.27
6.21
LEAD HOLE
1.25 N.P.T.
4 HOLES
.50-13 TAP
ON Ø7.25 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

CD0180







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.

CD0180

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FILE: \AAA\00005\148	REVISED: 10:25:29 02/19/2019	BY: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

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