ABB BALDOR RELIANCE

Customer information packet

CESSWDM23934T

20HP, 1765RPM, 3PH, 60HZ, 256TC, 3960M, TEFC, F
Class -
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	256TC
Frame Material	Stainless 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
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	24.000 A @ 460.0 V
	48.000 A @ 230.0 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
High Voltage Full Load Amps	24.0 a
Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	J

Part Detail

Revision	R
Type	AC
Mech. spec.	39E119
Base	
Status	PRD/A
Elec. spec.	39WGY400
Layout	39LYE119
Eff. date	11-18-2025
CD Diagram	CD0180
Poles	04
Leads	9#12
Proprietary	False
Created date	01-30-2018

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	3960M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	24.67 IN
Power Factor	84
Product Family	Wash Down All Stainless Steel
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No 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
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP1953D02								
CAT.NO.	CESSWDM23934T							
SPEC.	39E119Y400G1							
HP	20							
VOLTS	230/460							
AMP	48/24							
RPM	1765							
FRAME	256TC	**HZ**	60			**PH**	3	
SER.F.	1.00	**CODE**	J	**DES**	A	**CLASS**	H	
NEMA-NOM-EFF	93	**PF**	84					
RATING	40C AMB-CONT							
CC	010A	**USABLE AT 208V**				N/A		
DE	6309	**ODE**	6208					
ENCL	TEFC	**SN**						
	2:1 CT/10:1 VT							

AC Induction Motor Performance Data
Record # 69070
Typical performance - not guaranteed values

Winding: 39WGY400-R001	**Type:** 3960M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			20	**Full Load Torque**	59.38 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			48/24	**Breakdown Torque**	226 LB-FT
R.P.M.			1765	**Pull-up Torque**	109 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	139 LB-FT
NEMA Design Code	A	**KVA Code**	J	**Starting Current**	188 A
Service Factor (S.F.)			1	**No-load Current**	9.7 A
NEMA Nom. Eff.	93	**Power Factor**	84	**Line-line Res. @ 25ºC**	0.371 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	92°C
				Locked-rotor Power Factor	30.4

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**
Power Factor	47	69	79	84	86	87
Efficiency	89.8	93.1	93.5	93.1	92.4	91.3
Speed	1792	1784.5	1776.1	1767.4	1758.1	1747.4
Line amperes	11.2	14.5	18.9	23.9	29.3	35.2

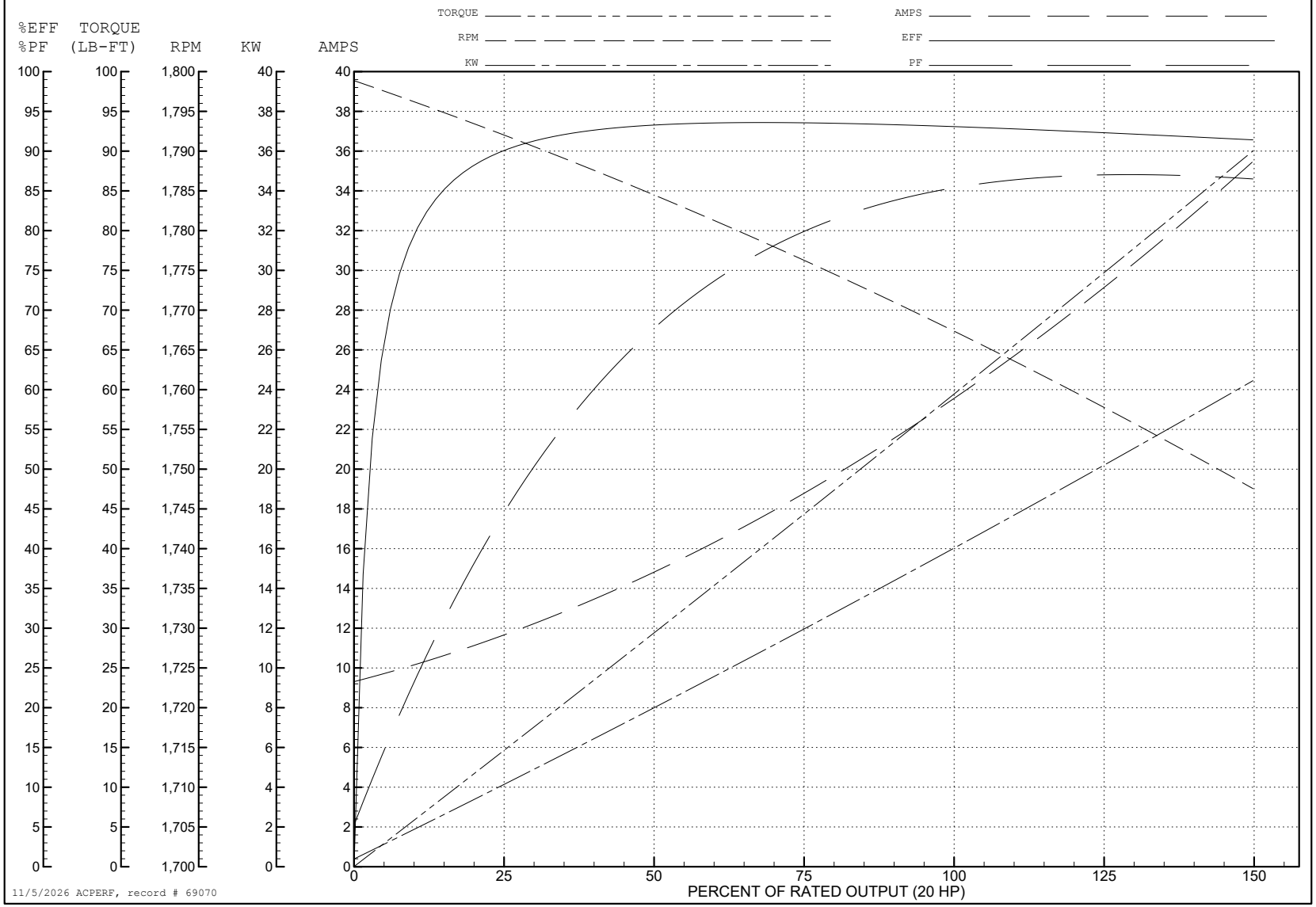
ABB Motors and Mechanical Inc.

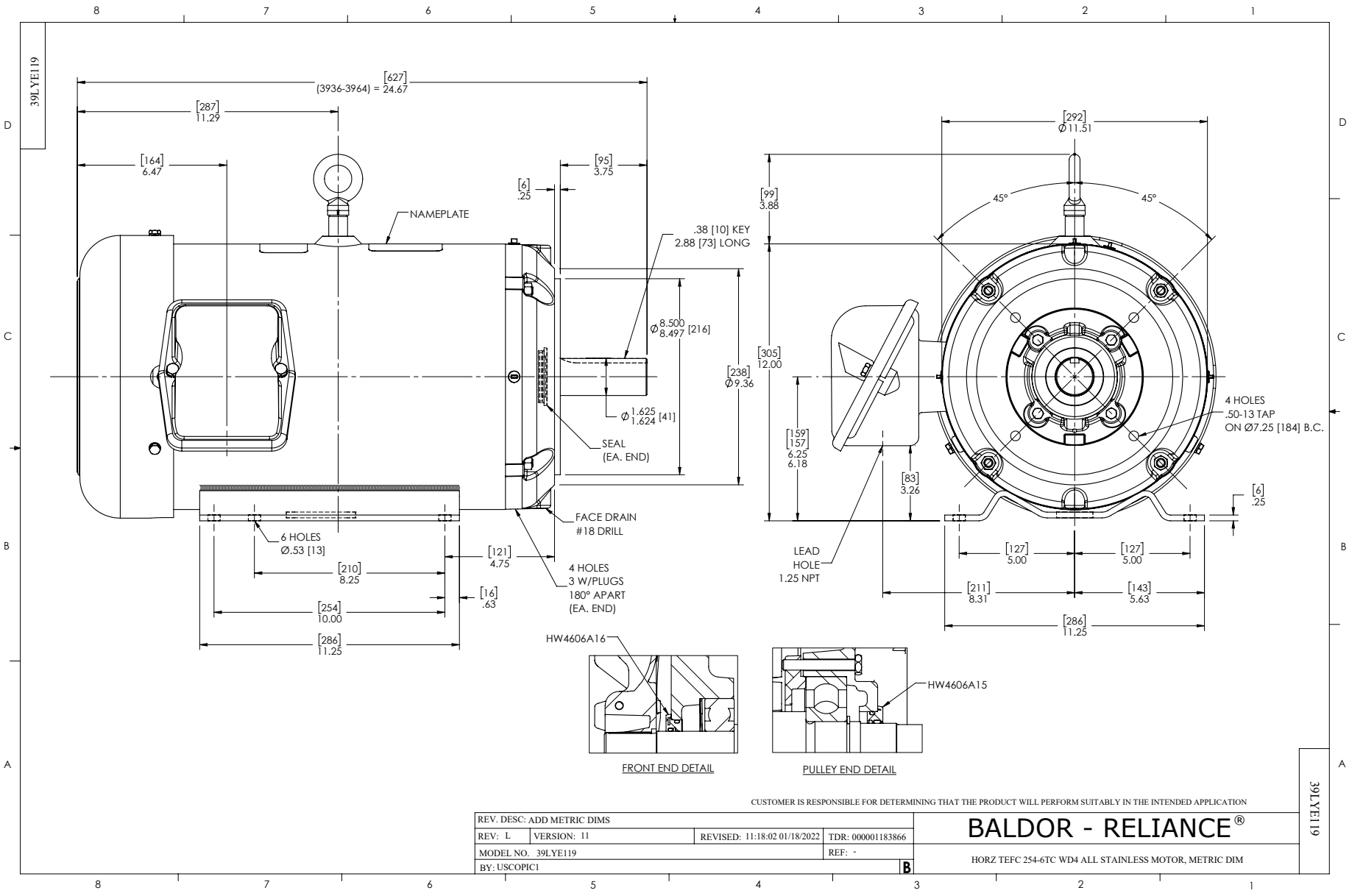
WINDING # 39WGY400

20 HP 3 PH 60 HZ 1765 RPM 460 V 3960M

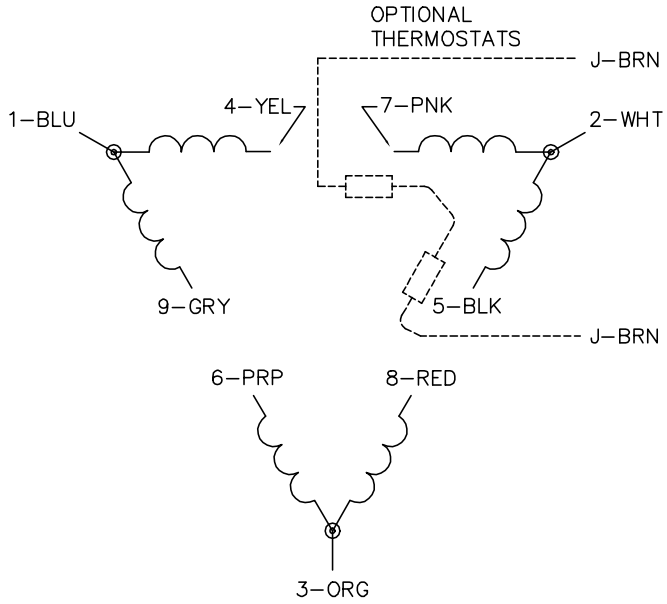
Typical performance - not guaranteed values.

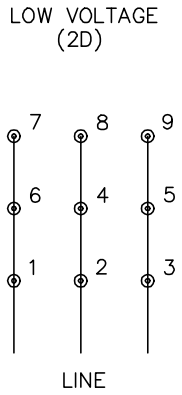
TORQUES(LB-FT): PO=226 PU=109 LR=139 LRA=188

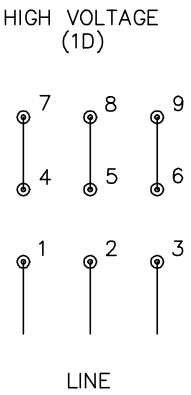



39LYE119
[627]
(3936-3964) = 24.67
[287]
11.29
[164]
6.47
[95]
3.75
[6]
.25
NAMEPLATE
.38 [10] KEY
2.88 [73] LONG
Ø 8.500
8.497 [216]
Ø 1.625
1.624 [41]
SEAL
(EA. END)
[238]
Ø9.36
FACE DRAIN
#18 DRILL
6 HOLES
Ø.53 [13]
[121]
4.75
[210]
8.25
[16]
.63
[254]
10.00
[286]
11.25
4 HOLES
3 W/PLUGS
180° APART
(EA. END)
[292]
Ø11.51
45°
45°
[99]
3.88
[305]
12.00
4 HOLES
.50-13 TAP
ON Ø7.25 [184] B.C.
[159]
[157]
6.25
6.18
[83]
3.26
[6]
.25
LEAD
HOLE
1.25 NPT
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5.00
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8.31
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5.63
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11.25
HW4606A16
HW4606A15
FRONT END DETAIL
PULLEY END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: ADD METRIC DIMS
REV: L
VERSION: 11
REVISED: 11:18:02 01/18/2022
TDR: 000001183866
MODEL NO. 39LYE119
REF: -
BY: USCOPIC1
B
BALDOR - RELIANCE®
HORZ TEFC 254-6TC WD4 ALL STAINLESS MOTOR, METRIC DIM
39LYE119

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

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: D	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\148	REVISED: 10:25:29 02/19/2019	BY: ENBRIR0
MTL: –		

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3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1