ABB BALDOR RELIANCE

Customer information packet

CFSWDM23933T-5E

56M 4P TEFC HOR 254TC S/P9-12 SE ENCAP
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	254TC
Frame Material	Stainless Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	15.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	CSA 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	14.200 A @ 575.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	92.4 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	14.2 a
Insulation Class	H
Inverter Code	Inverter Ready

Part Detail

Revision	T
Type	AC
Mech. spec.	39E646
Base	
Status	PRD/A
Elec. spec.	39WGX761
Layout	39LYE646
Eff. date	02-10-2025
CD Diagram	CD0006
Poles	04
Leads	3#12
Proprietary	False
Created date	10-11-2018

KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	3 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3956M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	24.18 IN
Power Factor	85
Product Family	WD All SS Encapsulated
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 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

NP4427AAA02

CAT #	CFSWDM23933T-5E			**WGT**	281	**LBS**						
SPEC	39E646X761G1			**ENCL**	TEFC							
SER #				**CC**	010A	**IP**	69					
HP	15		**MAG CUR**	5.8								
VOLTS	575					**NEMA NOM. EFF**	92.4					
AMPS	14.2				**PF**	85						
RATING	40C AMB-CONT											
RPM	1765			**MAX RPM**	2700							
FRAME	254TC	**HZ**	60	**CODE**	H	**CLASS**	H					
SER.F.	1.15	**SF AMP**			**PH**	3	**DES**	A				
DE	6309		**ODE**	6309								
LUBRICATION	POLYREX EM											
ID LOGO	**INVERTER TYPE**		**VPWM**		**CHP**	60	**TO**	90	1.5:1			
ID LOGO	**WK2**	2.44	**CT**	30	**TO**	60	2:1					
ID LOGO	**SL HZ**	1.2	**VT**	6	**TO**	60	10:1					
										QR		
YR												

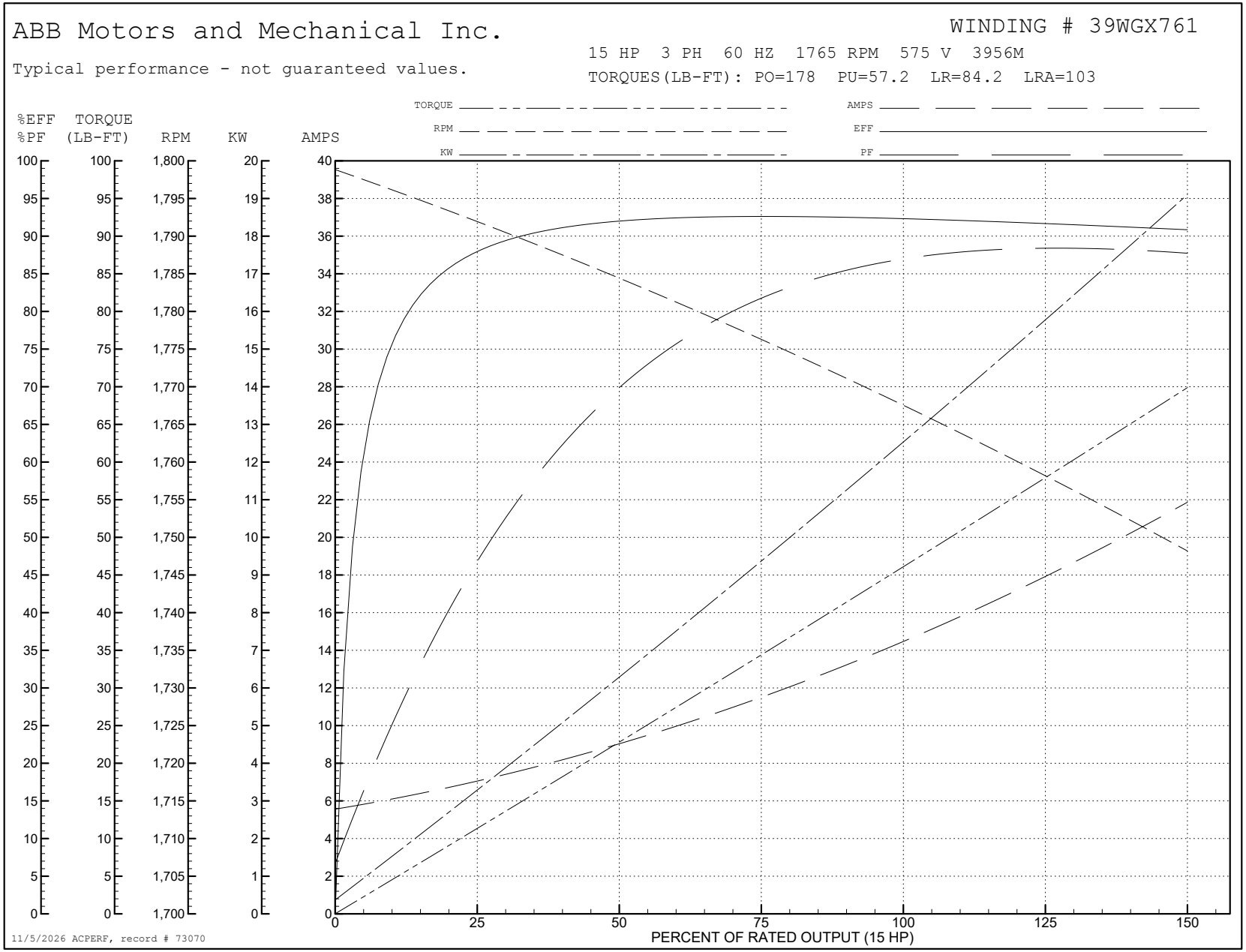
AC Induction Motor Performance Data
Record # 73070
Typical performance - not guaranteed values

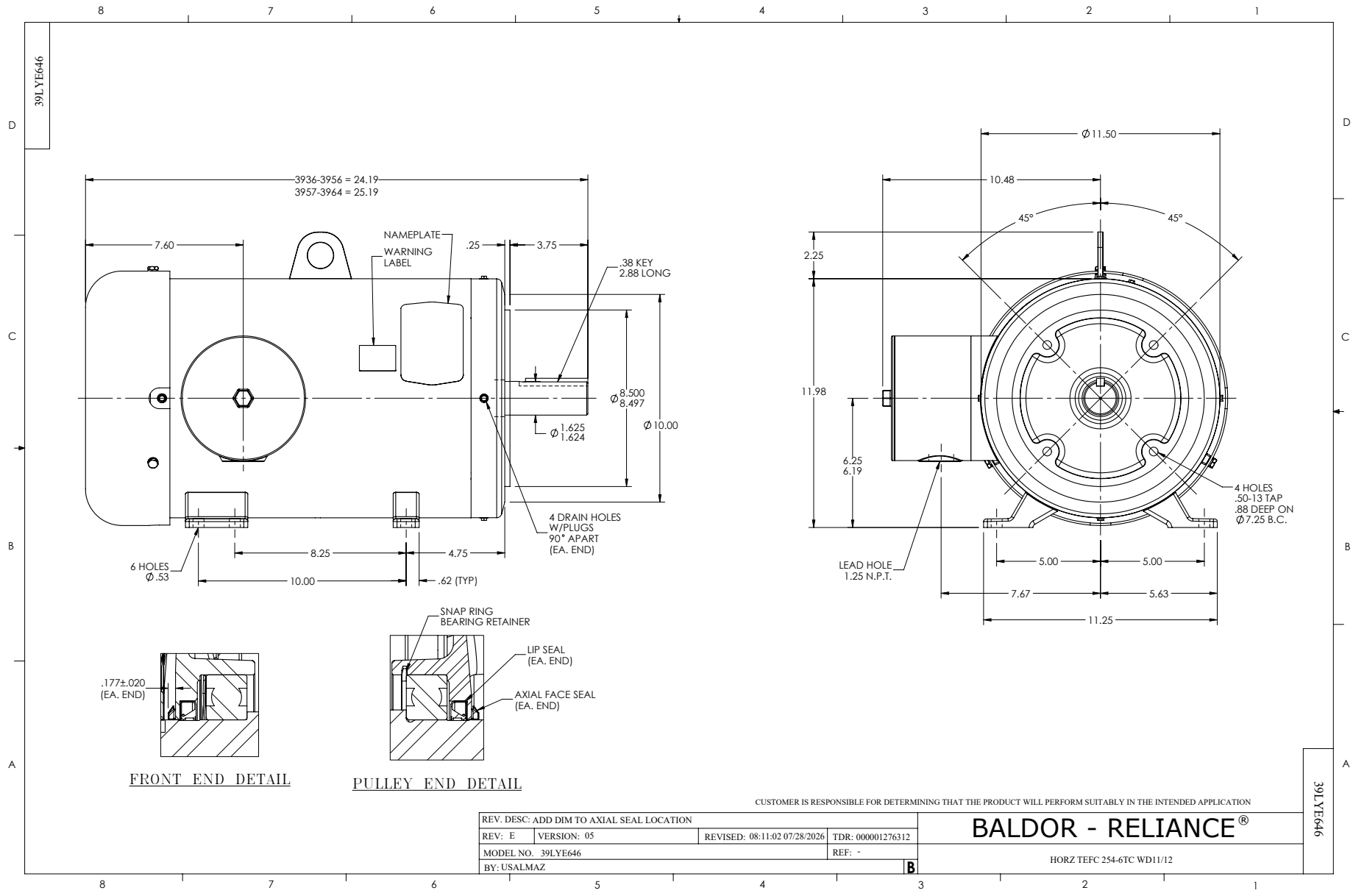
Winding: 39WGX761-R003	**Type:** 3956M	**Enclosure:** TEFC

Nameplate Data				**575 V, 60 Hz: Single Voltage Motor**	
Rated Output (HP)			15	**Full Load Torque**	44.6 LB-FT
Volts			575	**Start Configuration**	direct on line
Full Load Amps			14.2	**Breakdown Torque**	178 LB-FT
R.P.M.			1765	**Pull-up Torque**	57.2 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	84.2 LB-FT
NEMA Design Code	A	**KVA Code**	H	**Starting Current**	103 A
Service Factor (S.F.)			1.15	**No-load Current**	5.78 A
NEMA Nom. Eff.	92.4	**Power Factor**	85	**Line-line Res. @ 25ºC**	0.788 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	65°C
S.F. Amps				**Temp. Rise @ S.F. Load**	79°C
				Locked-rotor Power Factor	31.9
				Rotor inertia	2.45 LB-FT2

Load Characteristics 575 V, 60 Hz, 15 HP

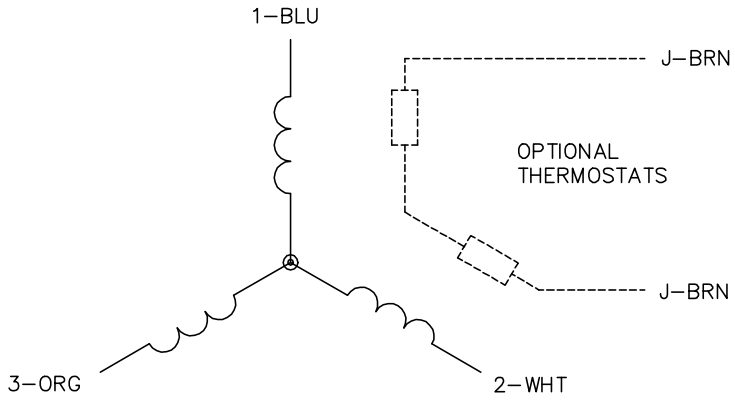
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	48	70	81	85	87	88	86
Efficiency	87.2	91.2	92.6	92.8	91.8	90.7	92.2
Speed	1792	1785	1777	1769	1760	1748	1764
Line amperes	6.74	8.72	11.2	14.2	17.5	21.7	16.2

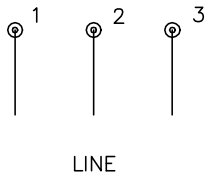

ABB Motors and Mechanical Inc.
WINDING # 39WGX761
15 HP 3 PH 60 HZ 1765 RPM 575 V 3956M
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=178 PU=57.2 LR=84.2 LRA=103
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
KW
AMPS
PERCENT OF RATED OUTPUT (15 HP)
11/5/2026 ACPERF, record # 73070


39LYE646
3936-3956 = 24.19
3957-3964 = 25.19
7.60
NAMEPLATE
WARNING LABEL
.25
3.75
.38 KEY
2.88 LONG
Ø 8.500
8.497
Ø 1.625
1.624
Ø 10.00
4 DRAIN HOLES
W/PLUGS
90° APART
(EA. END)
6 HOLES
Ø .53
8.25
4.75
10.00
.62 (TYP)
Ø 11.50
10.48
45°
45°
2.25
11.98
6.25
6.19
4 HOLES
.50-13 TAP
.88 DEEP ON
Ø 7.25 B.C.
LEAD HOLE
1.25 N.P.T.
5.00
5.00
7.67
5.63
11.25
SNAP RING
BEARING RETAINER
LIP SEAL
(EA. END)
AXIAL FACE SEAL
(EA. END)
.177±.020
(EA. END)
FRONT END DETAIL
PULLEY END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: ADD DIM TO AXIAL SEAL LOCATION
REV: E
VERSION: 05
REVISED: 08:11:02 07/28/2026
TDR: 000001276312
MODEL NO. 39LYE646
REF: -
BY: USALMAZ
B
BALDOR - RELIANCE®
HORZ TEFC 254-6TC WD11/12
39LYE646

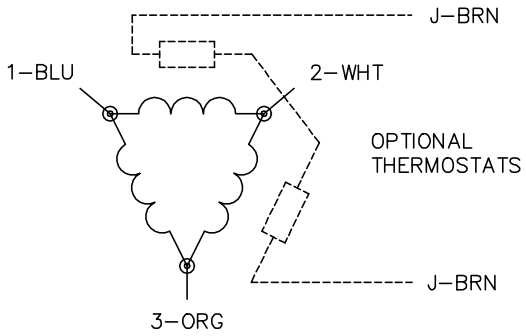
CD0006

TYPICAL WYE–CONNECTED MOTOR





TYPICAL DELTA–CONNECTED MOTOR



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007			BALDOR - RELIANCE®
REV. LTR: E	VERSION: 01	TDR: 000001099922	
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIR0	3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED
MTL: –			SH 1 of 1