ABB BALDOR RELIANCE

Customer information packet

CFSWDM22976T-E

7.5HP, 1180RPM, 3PH, 60HZ, 254TC, 3954M, TEFC
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	7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	CSA
	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	22.500 A @ 208.0 V
	21.400 A @ 230.0 V
	10.700 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
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	X
Type	AC
Mech. spec.	39E646
Base	
Status	PRD/A
Elec. spec.	39WGX429
Layout	39LYE646
Eff. date	02-10-2025
CD Diagram	CD0005
Poles	06
Leads	9#12
Proprietary	False
Created date	08-08-2017

High Voltage Full Load Amps	10.7 a
Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	J
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	3954M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	24.18 IN
Power Factor	71
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 Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1180 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

NP4427AAA01													
CAT #	CFSWDM22976T-E				**WT**	255	**LBS**						
SPEC	39E646X429G1				**ENCL**	TEFC							
SER #					**CC**	010A	**IP**	69					
HP	7.5			**MAG CUR**	11/5.5								
VOLTS	230/460						**NEMA NOM. EFF**	91					
AMPS	21.4/10.7						**PF**	71					
RATING	40C AMB-CONT												
RPM	1180				**MAX RPM**	1800							
FRAME	254TC	**HZ**	60		**CODE**	J	**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**	4.34	**CT**	30	**TO**	60	2:1						
ID LOGO	**SL HZ**	1	**VT**	6	**TO**	60	10:1						
							QR						
YR													

AC Induction Motor Performance Data
Record # 54940
Typical performance - not guaranteed values

Winding: 39WGX429-R006	**Type:** 3954M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			7.5	**Full Load Torque**	33.3 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			21.4/10.7	**Breakdown Torque**	99.5 LB-FT
R.P.M.			1180	**Pull-up Torque**	39.7 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	58.4 LB-FT
NEMA Design Code	A	**KVA Code**	J	**Starting Current**	70.1 A
Service Factor (S.F.)			1.15	**No-load Current**	5.52 A
NEMA Nom. Eff.	91	**Power Factor**	71	**Line-line Res. @ 25ºC**	0.895 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	51°C
S.F. Amps				**Temp. Rise @ S.F. Load**	61°C
				Locked-rotor Power Factor	25.8
				Rotor inertia	4.34 LB-FT2

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	33	53	65	71	74	75	73
Efficiency	84.9	90.6	91.8	91.5	91.4	90.5	91.6
Speed	1196	1192	1188	1183	1178	1173	1180
Line amperes	6.25	7.28	8.82	10.72	12.91	15.5	12.03

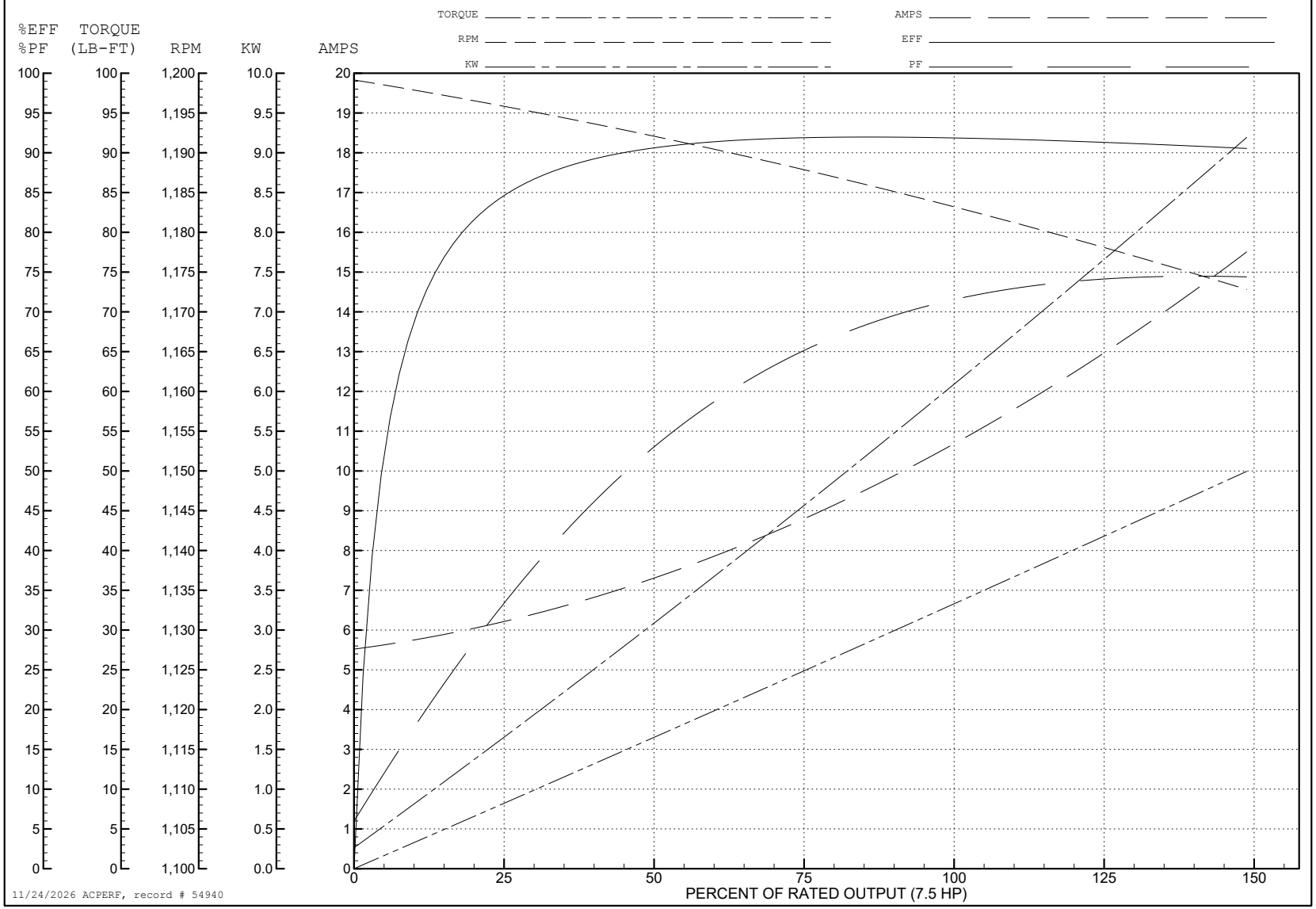
ABB Motors and Mechanical Inc.

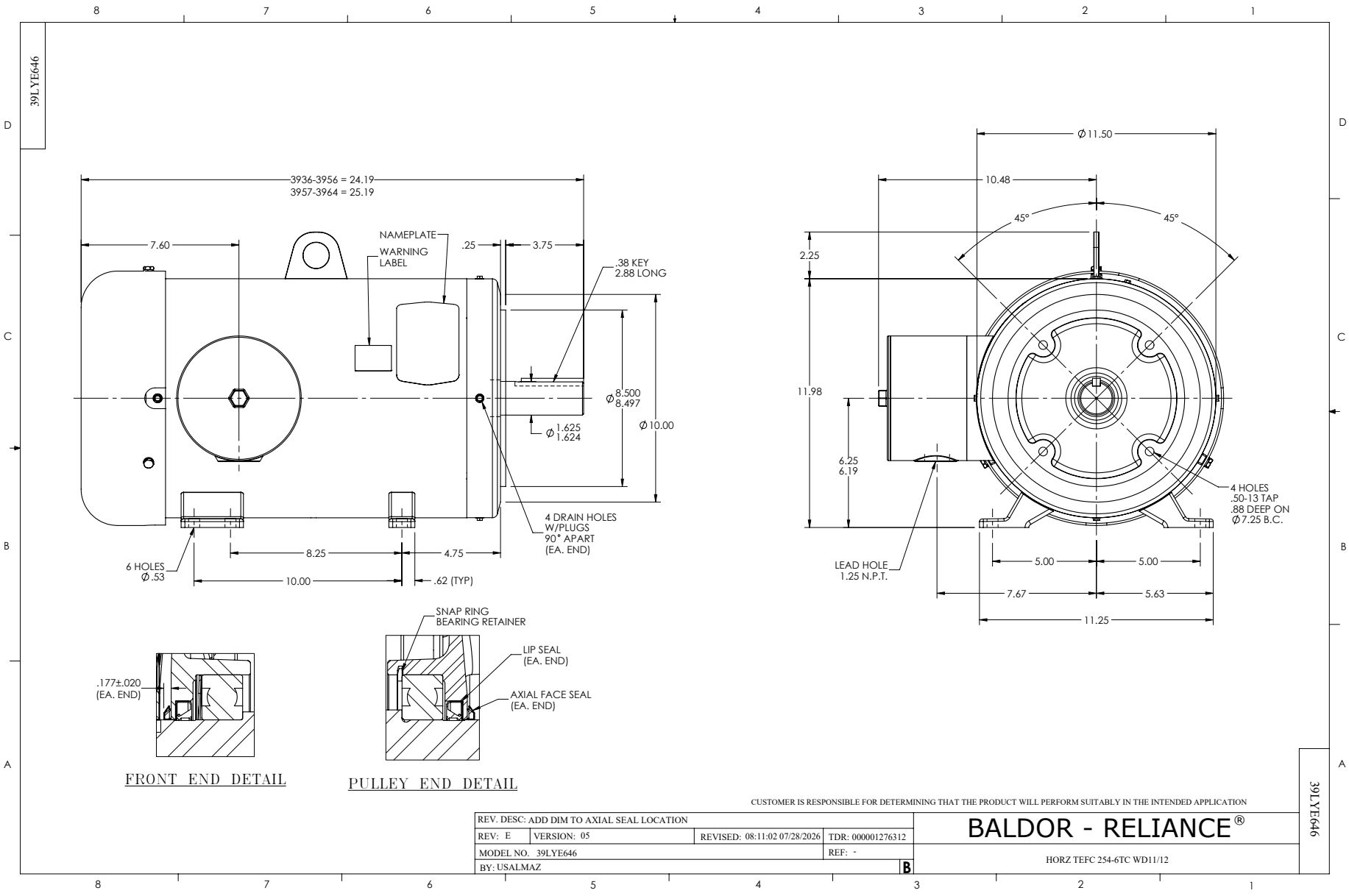
WINDING # 39WGX429

7.5 HP 3 PH 60 HZ 1180 RPM 460 V 3954M

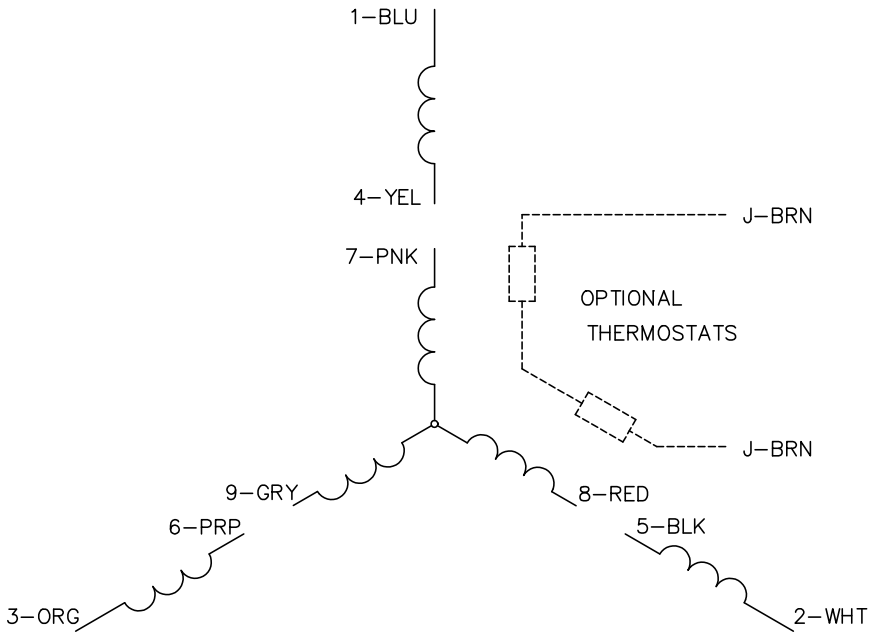
Typical performance - not guaranteed values.

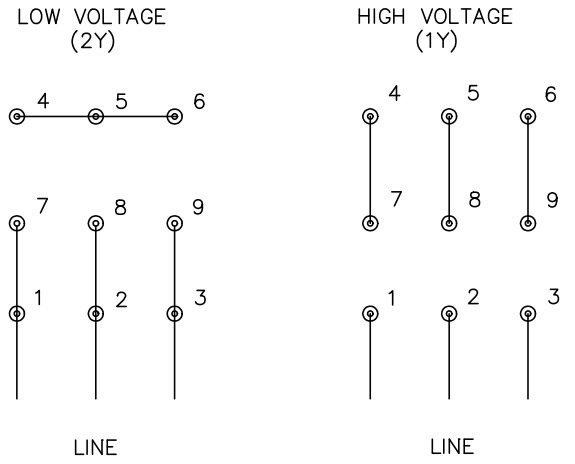
TORQUES(LB-FT): PO=99.5 PU=39.7 LR=58.4 LRA=70.1




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

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