ABB BALDOR RELIANCE

Customer information packet

CESSWDM3709T-5

7.5HP, 3500RPM, 3PH, 60HZ, 213TC, 3734M, TEFC
Class -
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	213TC
Frame Material	Stainless Steel
Frequency	60.00 Hz
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	575.0 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	6.700 A @ 575.0 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
High Voltage Full Load Amps	6.7 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	L
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing

Part Detail

Revision	P
Type	AC
Mech. spec.	37J639
Base	
Status	PRD/A
Elec. spec.	37WGR393
Layout	37LYJ639
Eff. date	12-18-2024
CD Diagram	CD0006
Poles	02
Leads	3#14
Proprietary	False
Created date	01-20-2015

Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3734M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	19.03 IN
Power Factor	94
Product Family	Wash Down All Stainless Steel
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.375 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3500 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

NP1953C05							
CAT.NO.	CESSWDM3709T-5						
SPEC.	37J639R393G1						
HP	7.5						
VOLTS	575						
AMP	6.7						
RPM	3500						
FRAME	213TC	**HZ**	60		**PH**	3	
SER.F.	1.15	**CODE**	L	**DES**	A	**CLASS**	F
NEMA-NOM-EFF	91	**PF**	94				
RATING	40C AMB-CONT						
CC	010A	**USABLE AT 208V**			N/A		
DE	6307	**ODE**	6206				
ENCL	TEFC	**SN**					
	4:1CT 20:1VT						

AC Induction Motor Performance Data
Record # 58663
Typical performance - not guaranteed values

Winding: 37WGR393-R001	**Type:** 3734M	**Enclosure:** TEFC

Nameplate Data				**575 V, 60 Hz: Single Voltage Motor**	
Rated Output (HP)			7.5	**Full Load Torque**	11.5 LB-FT
Volts			575	**Start Configuration**	direct on line
Full Load Amps			6.7	**Breakdown Torque**	67.5 LB-FT
R.P.M.			3500	**Pull-up Torque**	26.4 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	37.5 LB-FT
NEMA Design Code	A	**KVA Code**	L	**Starting Current**	70.3 A
Service Factor (S.F.)			1.15	**No-load Current**	2.68 A
NEMA Nom. Eff.	91	**Power Factor**	94	**Line-line Res. @ 25ºC**	1.43 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	47°C
S.F. Amps				**Temp. Rise @ S.F. Load**	57°C
				Locked-rotor Power Factor	32.7
				Rotor inertia	0.311 LB-FT2

Load Characteristics 575 V, 60 Hz, 7.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	60	84	89	94	95	100	95
Efficiency	84.3	90.8	92	91.9	91.3	90.8	91.7
Speed	3584	3564	3542	3521	3499	3483	3510
Line amperes	2.89	3.82	5.34	6.69	8.29	9.49	7.65

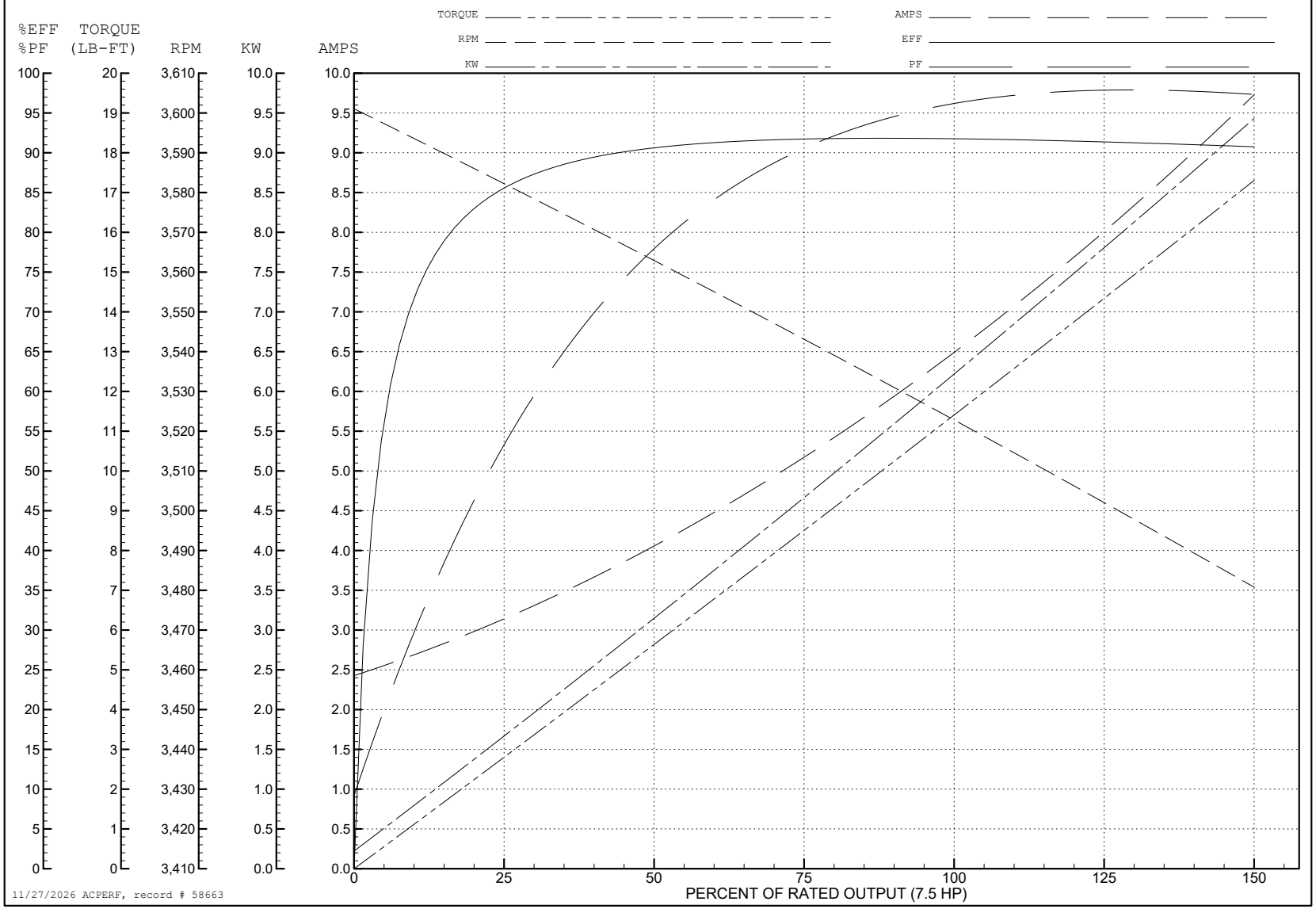
ABB Motors and Mechanical Inc.

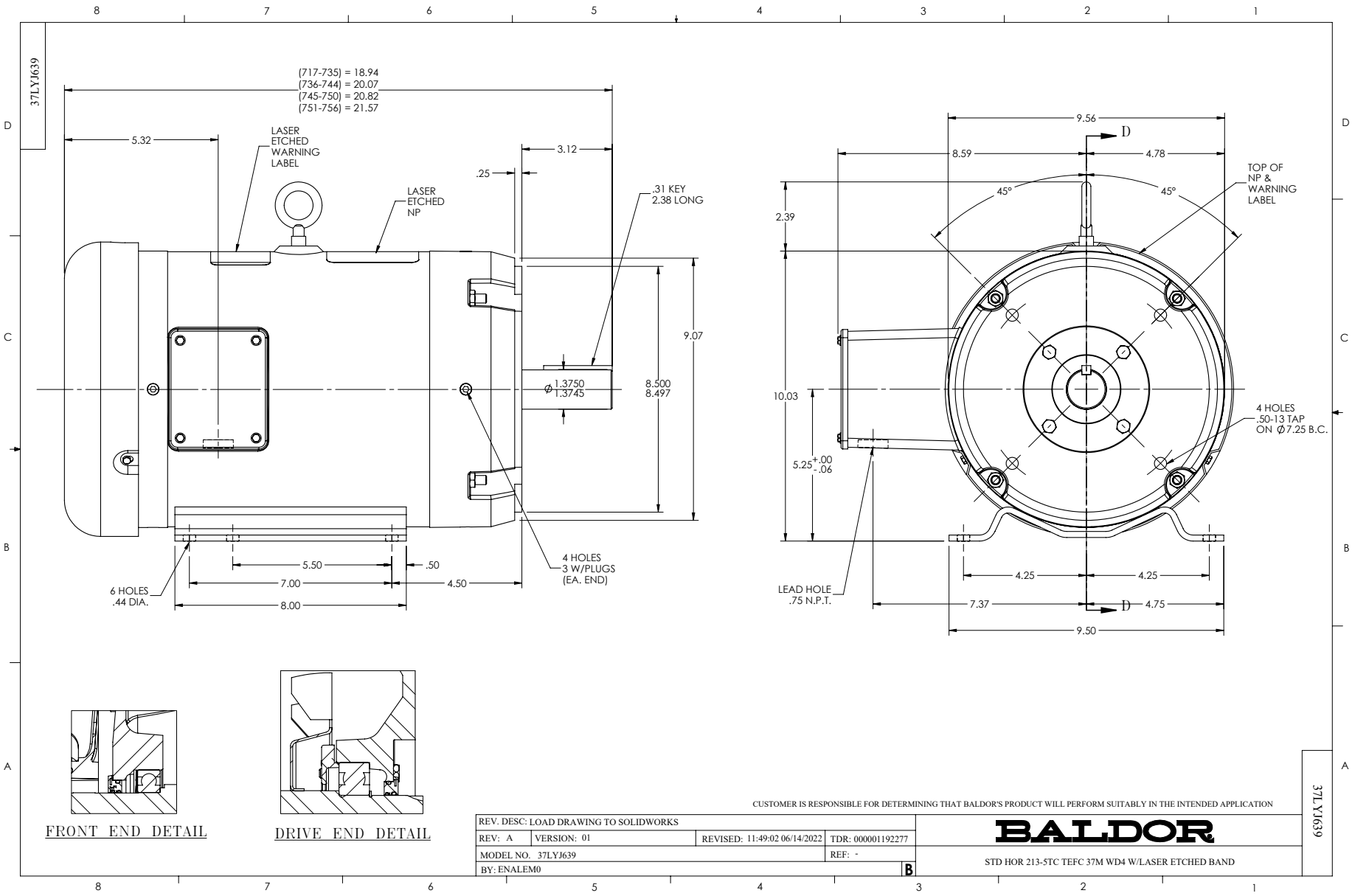
WINDING # 37WGR393

7.5 HP 3 PH 60 HZ 3500 RPM 575 V 3734M

Typical performance - not guaranteed values.

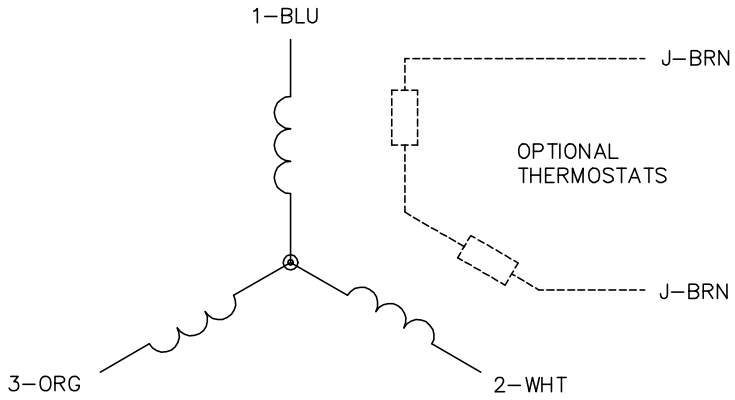
TORQUES(LB-FT): PO=67.5 PU=26.4 LR=37.5 LRA=70.3

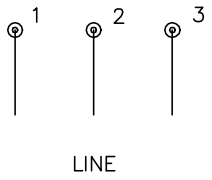



37LYJ639
(717-735) = 18.94
(736-744) = 20.07
(745-750) = 20.82
(751-756) = 21.57
5.32
LASER ETCHED WARNING LABEL
LASER ETCHED NP
3.12
.25
.31 KEY 2.38 LONG
9.07
8.500
8.497
1.3750
1.3745
4 HOLES 3 W/PLUGS (EA. END)
6 HOLES .44 DIA.
5.50
.50
7.00
4.50
8.00
9.56
8.59
4.78
45°
45°
TOP OF NP & WARNING LABEL
2.39
10.03
4 HOLES .50-13 TAP ON Ø7.25 B.C.
5.25 +.00 -.06
LEAD HOLE .75 N.P.T.
4.25
4.25
7.37
4.75
9.50
FRONT END DETAIL
DRIVE END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOAD DRAWING TO SOLIDWORKS
REV: A VERSION: 01 REVISED: 11:49:02 06/14/2022 TDR: 000001192277
MODEL NO. 37LYJ639 REF: -
BY: ENALEM0 B
BALDOR
STD HOR 213-5TC TEFC 37M WD4 W/LASER ETCHED BAND
37LYJ639

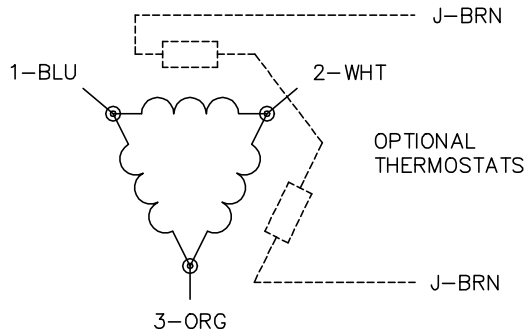
CD0006

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