ABB BALDOR RELIANCE

Customer information packet

CESSWDM3559T-5

3HP, 3470RPM, 3PH, 60HZ, 145TC, 3546M, TEFC, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	145TC
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	3.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	UR
	CSA
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	2.900 A @ 575.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	86.5 %
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	2.9 a
Insulation Class	F
Inverter Code	Inverter Ready

Part Detail

Revision	T
Type	AC
Mech. spec.	35VV818
Base	
Status	PRD/A
Elec. spec.	35WGN653
Layout	35LYVV818
Eff. date	02-19-2024
CD Diagram	CD0006
Poles	02
Leads	3#18
Proprietary	False
Created date	02-07-2013

KVA Code	P
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3546M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	15.67 IN
Power Factor	91
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	0.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3470 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

NP1951A05								
CAT.NO.	CESSWDM3559T-5							
SPEC.	35VV818N653G1							
HP	3							
VOLTS	575							
AMP	2.9							
RPM	3470							
FRAME	145TC	**HZ**	60			**PH**	3	
SER.F.	1.15	**CODE**	P	**DES**	A	**CLASS**	F	
NEMA-NOM-EFF	86.5	**PF**	91					
RATING	40C AMB-CONT							
CC	010A							
DE	6205	**ODE**	6203					
ENCL	TEFC	**SN**						
	4:1CT 20:1VT							

AC Induction Motor Performance Data
Record # 50291
Typical performance - not guaranteed values

Winding: 35WGN653-R002	**Type:** 3546M	**Enclosure:** TEFC

Nameplate Data				**575 V, 60 Hz: Single Voltage Motor**	
Rated Output (HP)			3	**Full Load Torque**	4.5 LB-FT
Volts			575	**Start Configuration**	direct on line
Full Load Amps			2.9	**Breakdown Torque**	17.5 LB-FT
R.P.M.			3470	**Pull-up Torque**	10.7 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	17.3 LB-FT
NEMA Design Code	A	**KVA Code**	P	**Starting Current**	39.4 A
Service Factor (S.F.)			1.15	**No-load Current**	1.02 A
NEMA Nom. Eff.	86.5	**Power Factor**	91	**Line-line Res. @ 25ºC**	5.41 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	63°C
S.F. Amps				**Temp. Rise @ S.F. Load**	74°C
				Locked-rotor Power Factor	42.7
				Rotor inertia	0.127 LB-FT2

Load Characteristics 575 V, 60 Hz, 3 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	58	79	87	90	91	90	91
Efficiency	79.3	86.2	87	86.9	85.6	83.9	86.1
Speed	3568	3542	3511	3481	3446	3406	3460
Line amperes	1.24	1.67	2.24	2.85	3.54	4.32	3.26

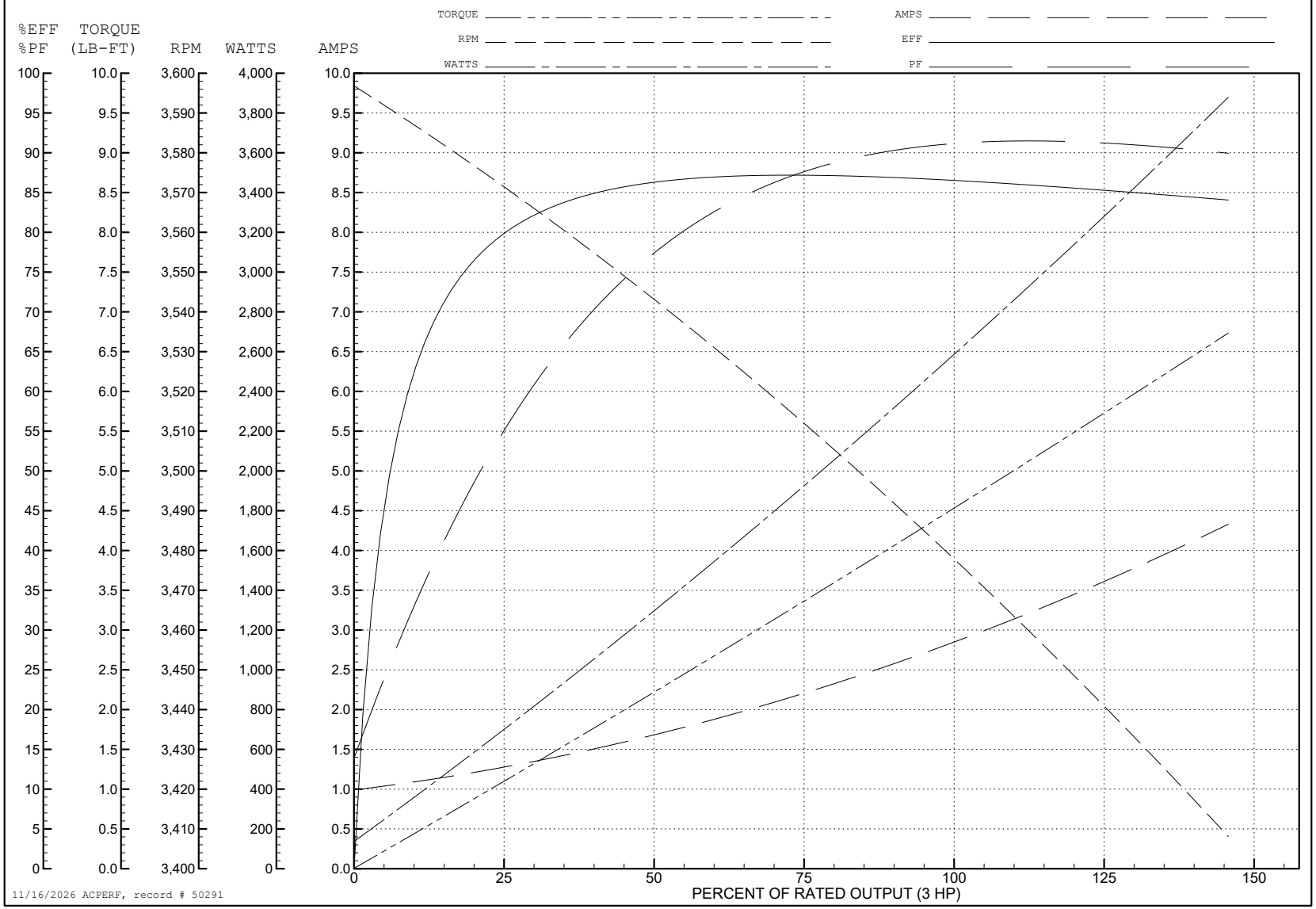
ABB Motors and Mechanical Inc.

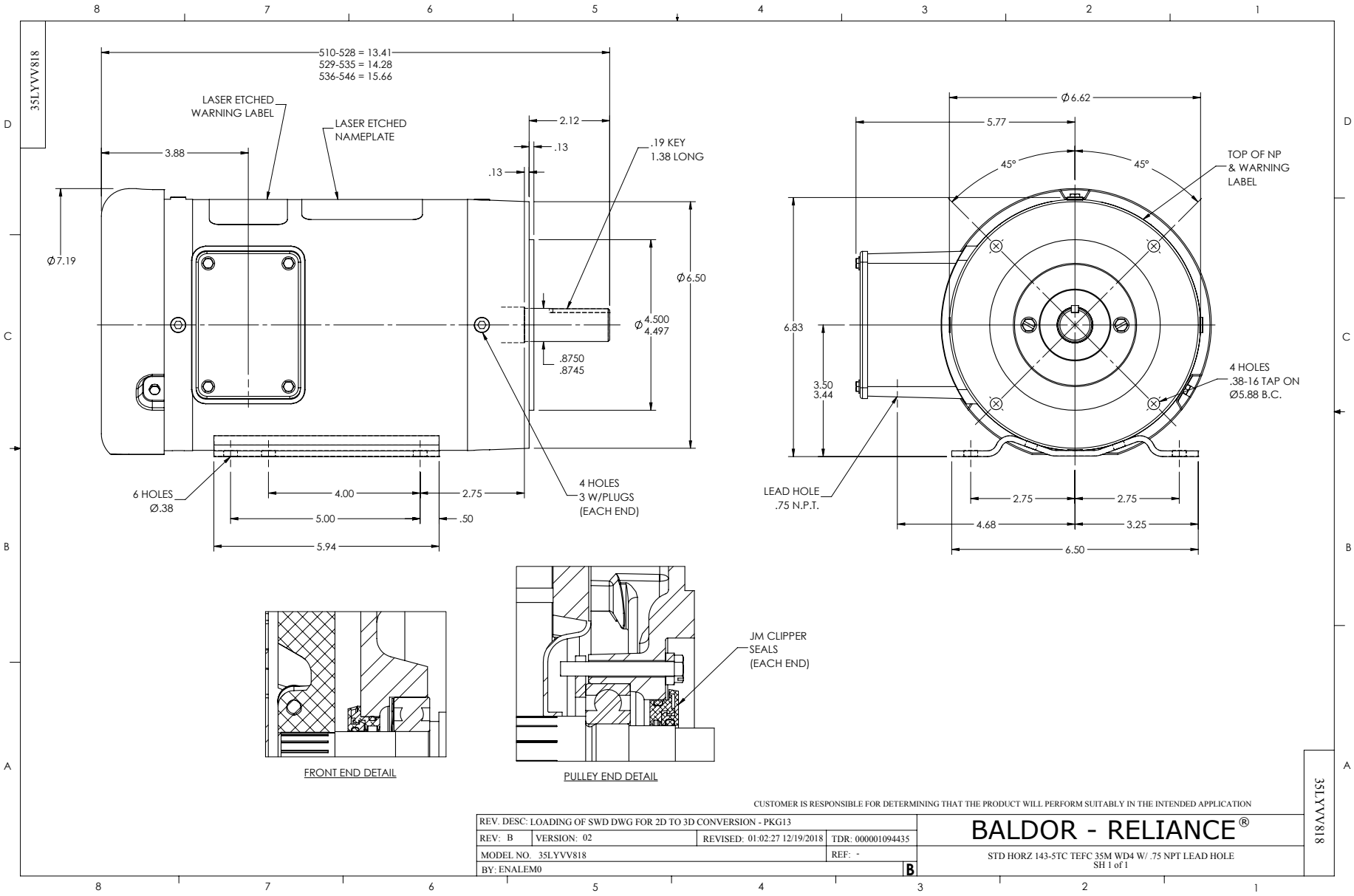
WINDING # 35WGN653

3 HP 3 PH 60 HZ 3470 RPM 575 V 3546M

Typical performance - not guaranteed values.

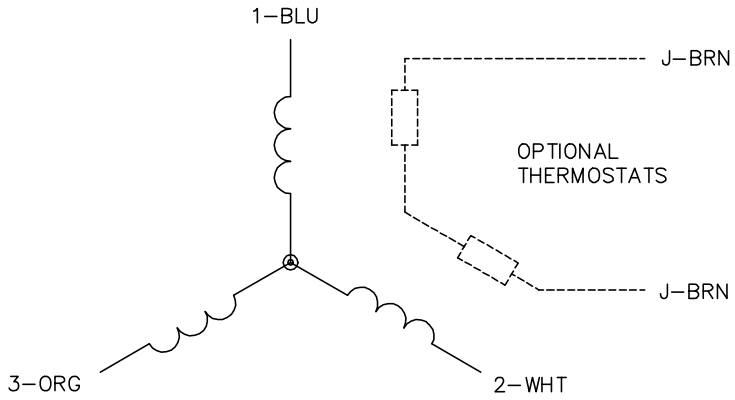
TORQUES(LB-FT): PO=17.5 PU=10.7 LR=17.3 LRA=39.4

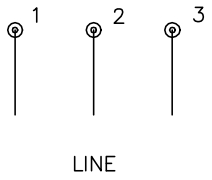



35LYVV818
510-528 = 13.41
529-535 = 14.28
536-546 = 15.66
LASER ETCHED WARNING LABEL
LASER ETCHED NAMEPLATE
3.88
2.12
.13
.13
.19 KEY 1.38 LONG
Ø7.19
Ø6.50
Ø 4.500 4.497
.8750 .8745
6 HOLES Ø.38
4.00
2.75
5.00
.50
5.94
4 HOLES 3 W/PLUGS (EACH END)
Ø6.62
5.77
45°
45°
TOP OF NP & WARNING LABEL
6.83
3.50 3.44
4 HOLES .38-16 TAP ON Ø5.88 B.C.
LEAD HOLE .75 N.P.T.
2.75
2.75
4.68
3.25
6.50
JM CLIPPER SEALS (EACH END)
FRONT END DETAIL
PULLEY END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOADING OF SWD DWG FOR 2D TO 3D CONVERSION - PKG13
REV: B
VERSION: 02
REVISED: 01:02:27 12/19/2018
TDR: 000001094435
MODEL NO. 35LYVV818
REF: -
BY: ENALEM0
B
BALDOR - RELIANCE®
STD HORZ 143-5TC TEFC 35M WD4 W/ .75 NPT LEAD HOLE
SH 1 of 1
35LYVV818

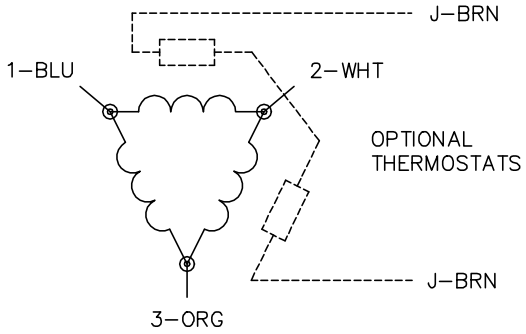
CD0006

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