



Customer information packet

CEM3559T-5

3HP, 3450RPM, 3PH, 60HZ, 145TC, 3532M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	143TC
Frame Material	Steel
Frequency	60.00 Hz
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
XP Class and Group	None
XP Division	Not Applicable
Agency Approvals	CSA EEV NEMA PREMIUM NEMA_PREMIUM UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary 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	B
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

Part detail

Revision	P
Type	AC
Mech. spec.	35TT856
Base	
Status	PRD/A
Elec. spec.	35WGM839
Layout	35LYTT856
Eff. date	10-19-2023
CD Diagram	CD0006
Poles	02
Leads	3#18
Proprietary	False
Created date	08-03-2010

Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	L
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	3532M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	14.17 IN
Power Factor	92
Product Family	General Purpose
Pulley End Bearing Type	Ball
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	3450 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**NP3441L**

CAT.NO.	CEM3559T-5						
SPEC.	35TT856M839G1						
HP	3						
VOLTS	575						
AMP	2.9						
RPM	3450						
FRAME	143TC		HZ	60		PH	3
SER.F.	1.15	CODE	L	DES	B	CL	F
NEMA-NOM-EFF	86.5	PF	92				
RATING	40C AMB-CONT						
CC	010A	USABLE AT 208V				N/A	
DE	6205	ODE	6203				
ENCL	TEFC	SN					

VPWM INVERTER READY**CT6-60H(10:1)VT3-60H(20:1)**

Parts list

Part number	Description	Quantity
SA201302	SA 35TT856M839G1	1.000 ea
RA188603	RA 35TT856M839G1	1.000 ea
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35CB3009	35 CB W/1.09 DIA. LEAD HOLE @ 6:	1.000 ea
36GS1000SP	GASKET-CONDUIT BOX, .06 THICK #SV-330 LE	1.000 ea
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
35EP3122A00	MASTER ODE,203 BRG,.683SH,#26 DRN,GRSR,F	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3307D00	MASTER DE,205 BRG,.998SH,#26 DRN,GRSR	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 ea
35FH4005A84SP	IEC FH W/GRSR, NO DIMPLES PRIMED	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
35CB4521	35 LIPPED CB LID (GALV & PHOSPH)	1.000 ea
35GS1030	35 GS FOR CB LID - LEXIDE	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20, GOLD	0.017 ga
HA3100A18	THRUBOLT 10-32 X 9.250	4.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0006	CONNECTION LABEL	1.000 ea
NP3441L	ALUM SUPER-E VPWM INVERTER READY UL	1.000 ea
36PA1000	PKG GRP, PRINT PK1016A06	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2100bx)4/22	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea

PE-0000001

ZRTG PE ASSEMBLY

1.000 ea

AC Induction Motor Performance Data

Record # 32143

Typical performance - not guaranteed values

Winding: 35WGM839-R001		Type: 3532M	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	17.8 LB-FT	
R.P.M.	3450	Pull-up Torque	10.9 LB-FT	
Hz	60 Phase	Locked-rotor Torque	15.8 LB-FT	
NEMA Design Code	B KVA Code	Starting Current	26.1 A	
Service Factor (S.F.)	1.15	No-load Current	0.948 A	
NEMA Nom. Eff.	86.5 Power Factor	Line-line Res. @ 25°C	7.47 Ω	
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	61°C	
S.F. Amps		Temp. Rise @ S.F. Load	74°C	
		Locked-rotor Power Factor	47	
		Rotor inertia	0.0885 LB-FT ²	

Load Characteristics 575 V, 60 Hz, 3 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	58	77	86	88	89	90	89
Efficiency	83.8	87.9	88.1	87.2	85.5	83.4	86.2
Speed	3562	3531	3497	3461	3419	3373	3436
Line amperes	1.19	1.67	2.23	2.88	3.6	4.32	3.31

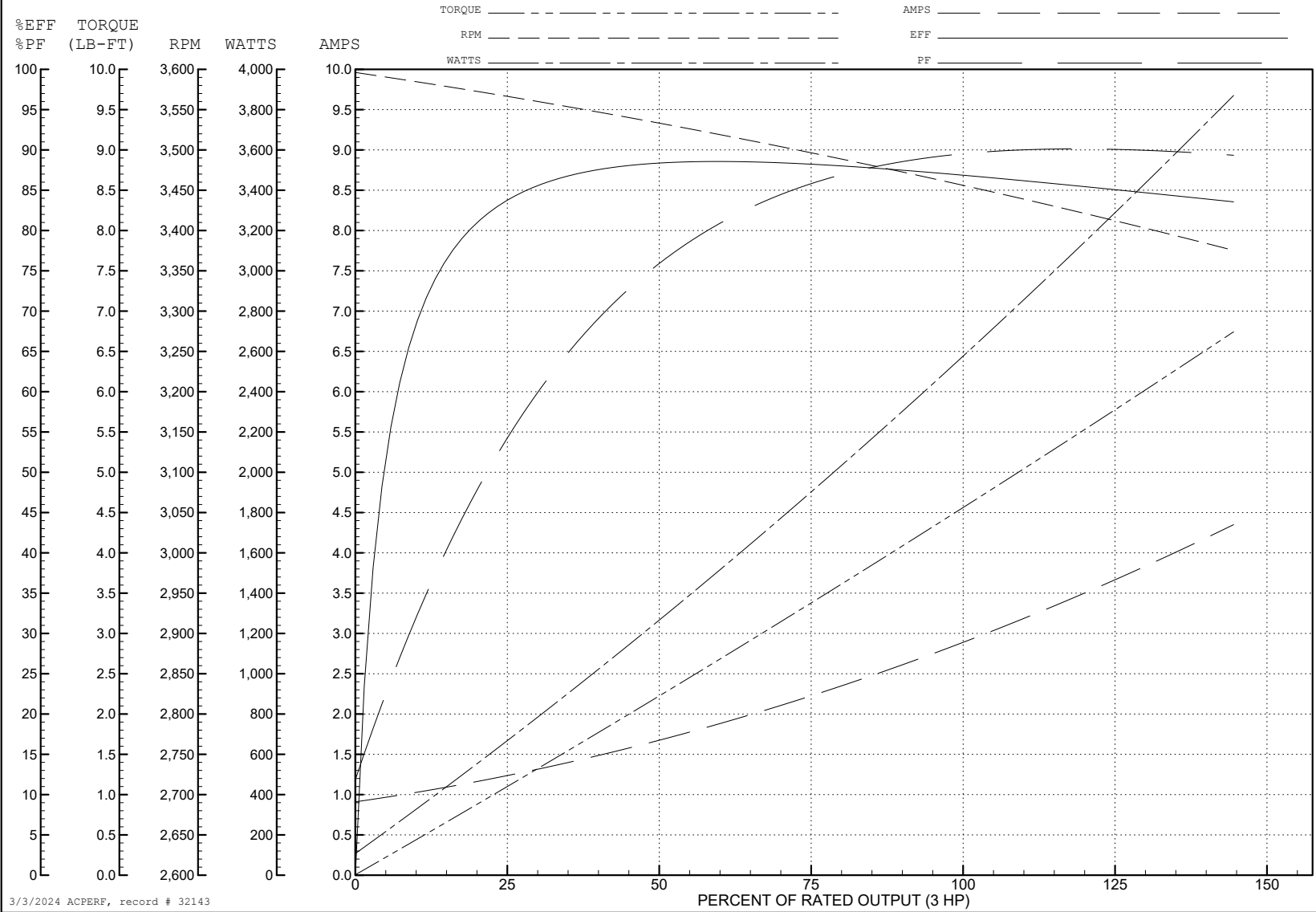
ABB Motors and Mechanical Inc.

WINDING # 35WGM839

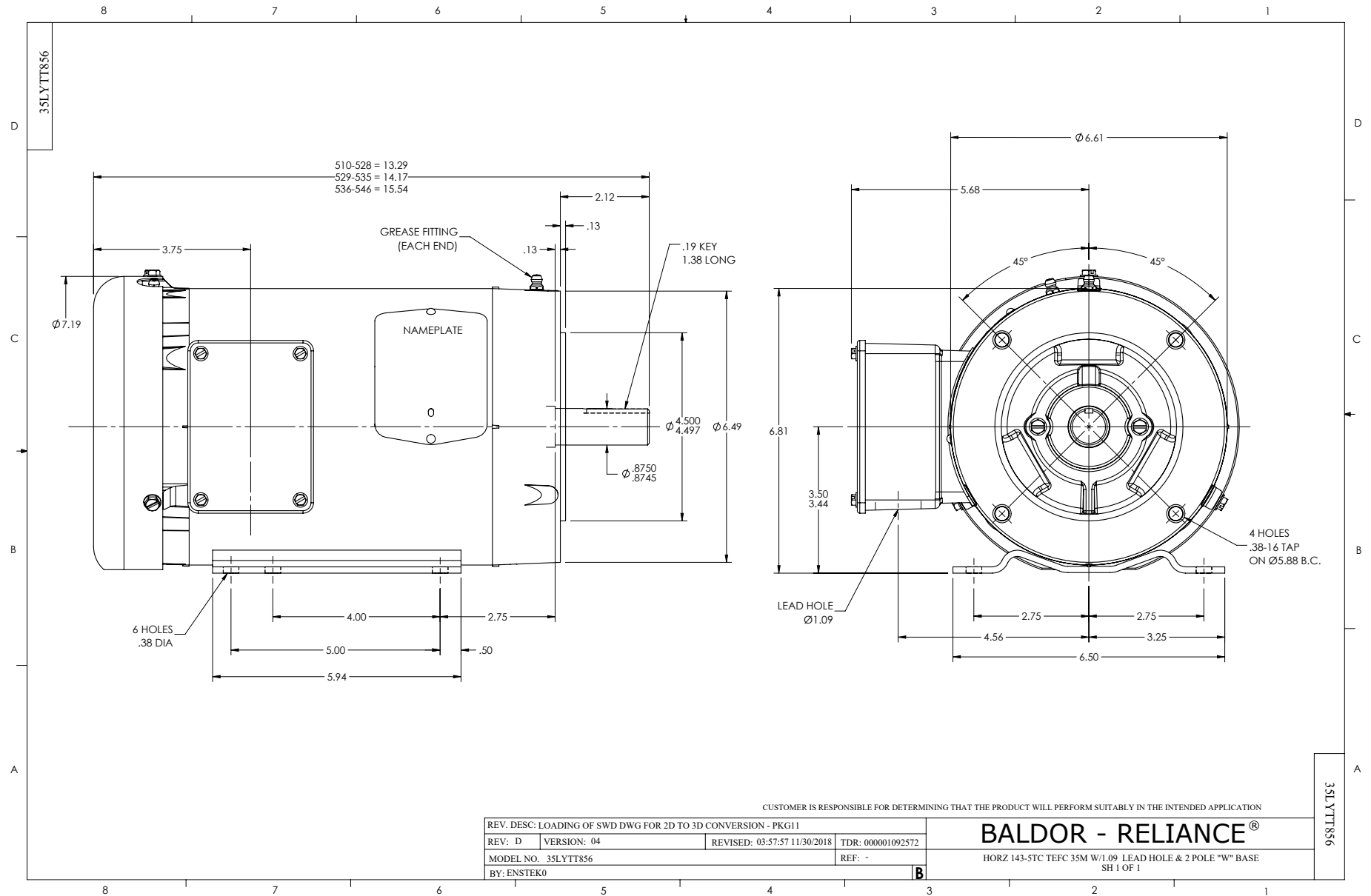
3 HP 3 PH 60 HZ 3450 RPM 575 V 3532M

Typical performance - not guaranteed values.

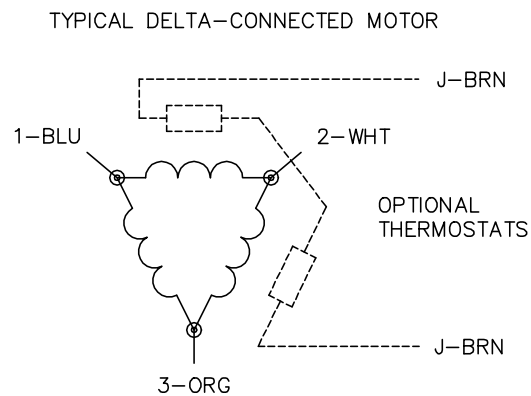
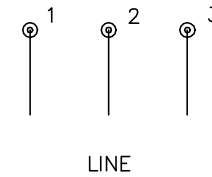
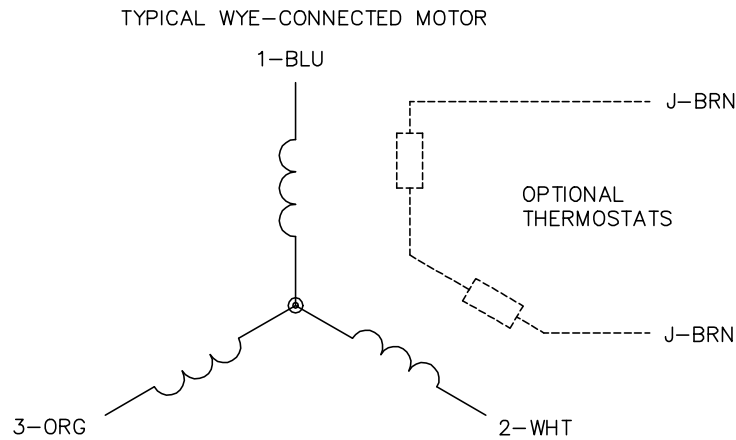
TORQUES (LB-FT): PO=17.8 PU=10.9 LR=15.8 LRA=26.1



3/3/2024 ACPERF, record # 32143



CD0006



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		
REV. LTR: E	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIRO
MTL: -	© □	

BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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