

ABB BALDOR RELIANCE III

Customer information packet

ECP83583T-5

1.5HP, 3450RPM, 3PH, 60HZ, 143T, 0524M, TEFC, F

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	143T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP A,B,C,D
Haz Area Division	Division II
Motor Letter Type	Three Phase
Output @ Frequency	1.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	CSA EEV NEMA PREMIUM NEMA_PREMIUM UR CCSA US
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
Constant Torque Speed Range	2
Current @ Voltage	1.600 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	85.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Enclosure Modification	841
Feedback Device	NO FEEDBACK
Front Face Code	Standard

Part Detail

Revision	Z
Type	AC
Mech. spec.	05E811
Base	
Status	PRD/A
Elec. spec.	05WGX365
Layout	05LYE811
Eff. date	10-01-2025
CD Diagram	CD0006
Poles	02
Leads	3#18
Proprietary	False
Created date	11-07-2014

Front Shaft Indicator	None
Haz Area Temp Code	T4
Heater Indicator	No Heater
High Voltage Full Load Amps	1.6 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	M
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0524M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	12.87 IN
Power Factor	87
Product Family	Chem Process S/P 32-8 IEEE 841
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
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	Shaft Slinger
Speed	3480 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

NP4328									
CAT.NO.	ECP83583T-5								
SPEC.	05E811X365G1								
HP	1.5 TE			IP	56				
VOLTS	575								
AMPS	1.6								
R.P.M.	3480								
FRAME	143T	HZ		60		PH	3		
SER.F.	1.15	CODE	M	DES.	B	CLASS	F		
RATING	40C AMB-CONT								
SN									
DE	6205	ODE		6205					
NEMA NOM. EFF.	85.5	P.F.		87					
GUAR. MIN. EFF.	82.5	CC	010A						
T. CODE	T4	TEMP=		135					

NP3186									
SPEC.	05E811X365G1								
ABMA DE BRG	25BC02X30X								
ABMA ODE BRG	25BC02X30X								
GREASE	POLYREX EM								
MOTOR WEIGHT	71	ROTOR BARS		20	STATOR BARS		24		
MAX. R.P.M.	5400	MAX. KVAR		0.11					
INV.TYPE	PWM								
T=	135								
CHP	60	TO	90						
CT	2	TO	60						
VT	0-	TO	60						
HTR-VOLTS	N/A	HTR-AMPS		N/A					
HTR-WATTS	N/A	MAX. SPACE HEATER TEMP.							N/A

AC Induction Motor Performance Data

Record # 92585

Typical performance - not guaranteed values

Winding: 05WGX365-R002			Type: 0524M	Enclosure: TEFC	
Nameplate Data			575 V, 60 Hz: Single Voltage Motor		
Rated Output (HP)		1.5	Full Load Torque		2.43 LB-FT
Volts		575	Start Configuration		direct on line
Full Load Amps		1.6	Breakdown Torque		11.8 LB-FT
R.P.M.		3450	Pull-up Torque		9.34 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	10.2 LB-FT
NEMA Design Code	B	KVA Code	M	Starting Current	16 A
Service Factor (S.F.)		1.15	No-load Current		0.719 A
NEMA Nom. Eff.	84	Power Factor	83	Line-line Res. @ 25°C	13.1 Ω
Rating - Duty		40C	AMB-CONT	Temp. Rise @ Rated Load	34°C
S.F. Amps				Temp. Rise @ S.F. Load	40°C
				Locked-rotor Power Factor	50.6
				Rotor inertia	0.0664 lb-ft²

Load Characteristics 575 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	54	72	82	87	90	91	89
Efficiency	74.9	82.5	84.8	85.6	84	84.3	85.3
Speed	3564	3539	3513	3484	3455	3425	3467
Line amperes	0.853	1.07	1.33	1.63	1.94	2.28	1.82

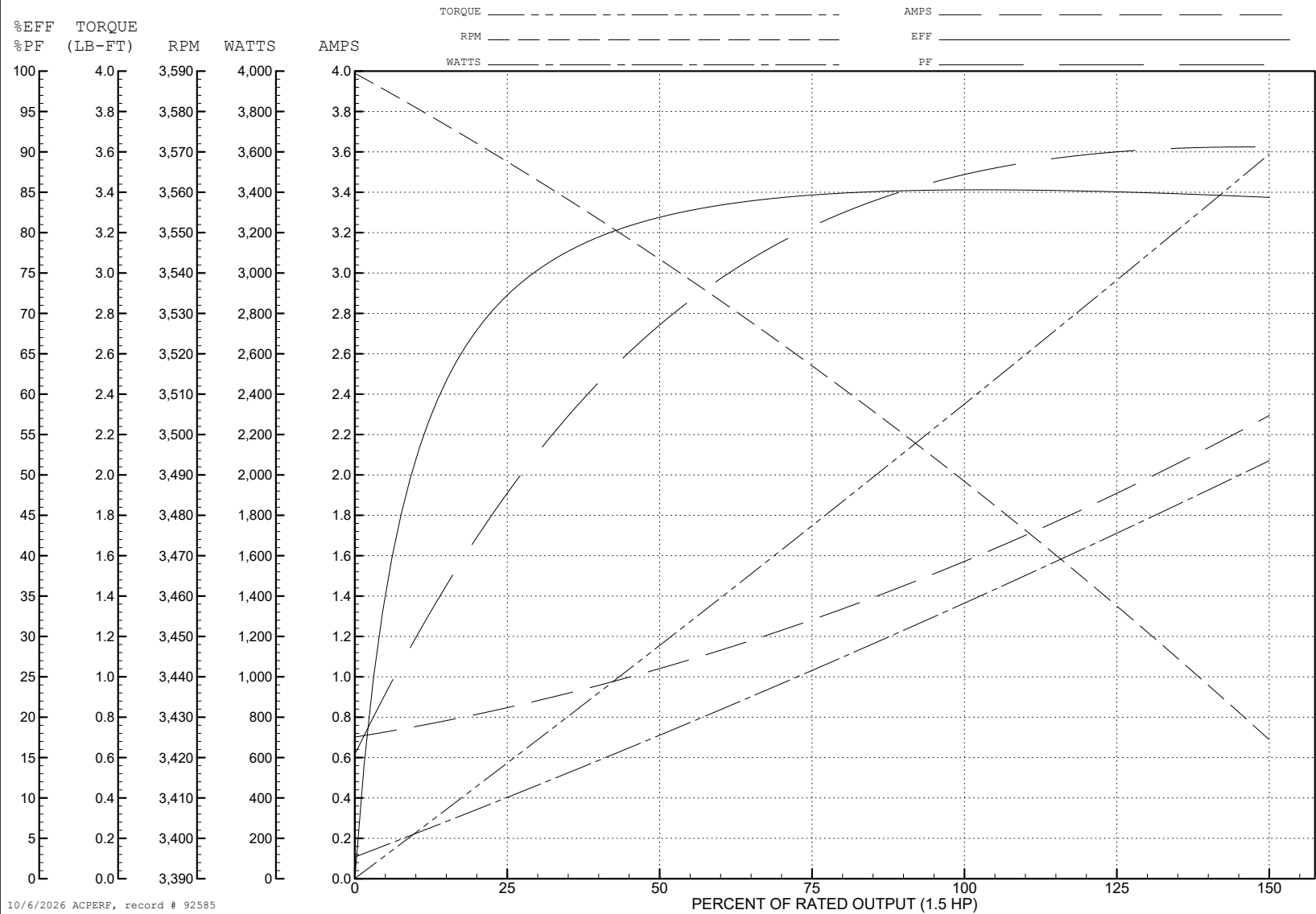
ABB Motors and Mechanical Inc.

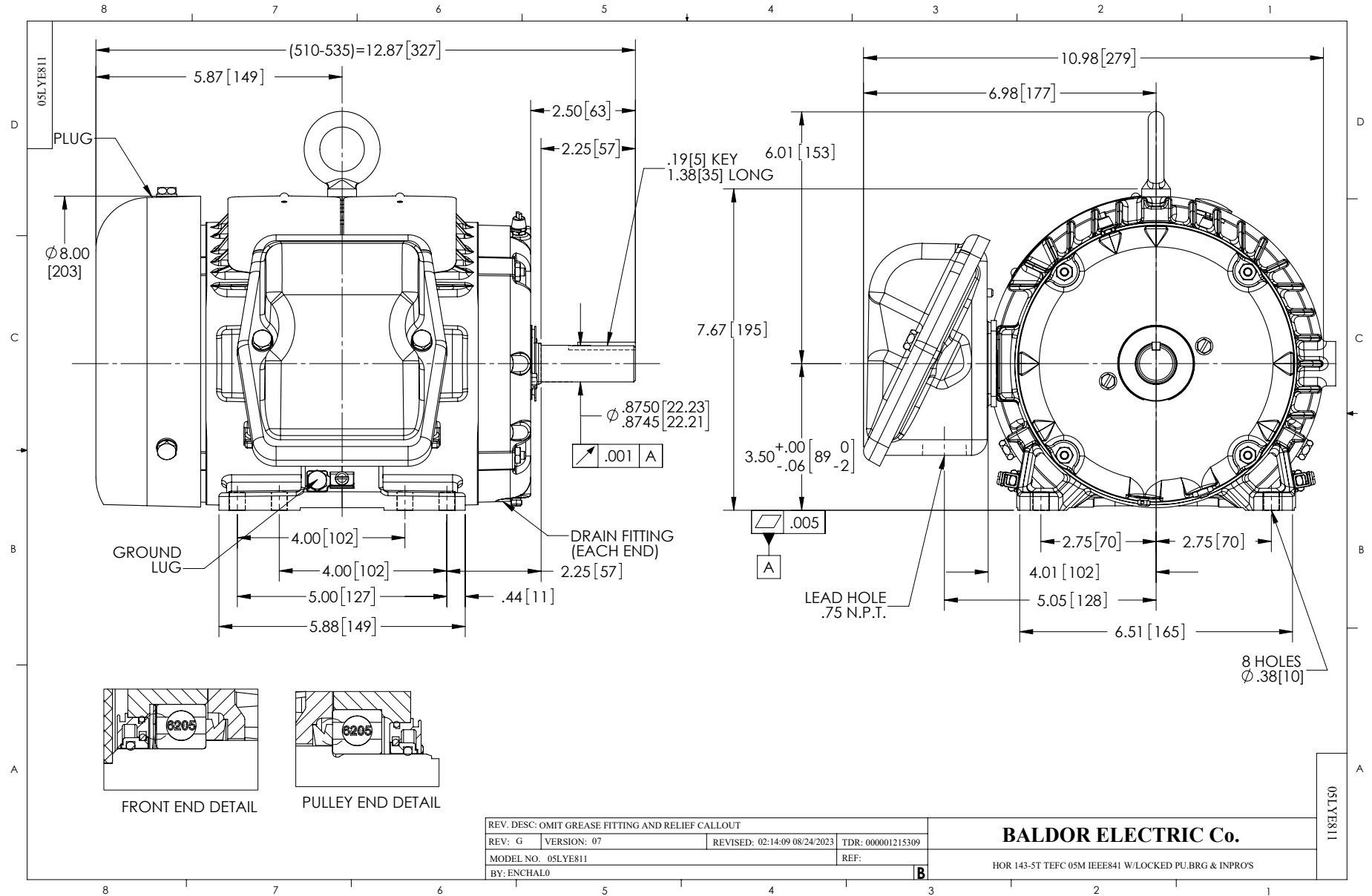
WINDING # 05WGX365

Typical performance - not guaranteed values.

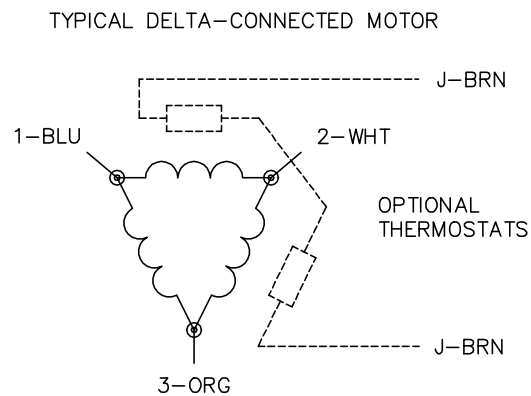
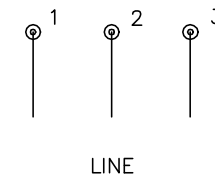
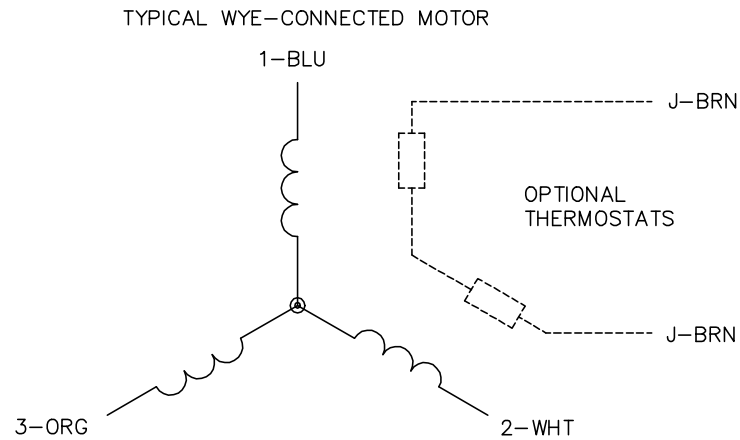
1.5 HP 3 PH 60 HZ 3450 RPM 575 V 0524M

TORQUES (LB-FT): PO=11.8 PU=9.34 LR=10.2 LRA=16





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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