ABB BALDOR RELIANCE

Customer information packet

ECP83768T-5

5HP, 1160RPM, 3PH, 60HZ, 215T, 0748M, TEFC, F1
Class - CLI GP A,B,C,D
Division - Division II

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Specifications

Enclosure	TEFC
Frame	215T
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	5.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 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	2.0
Current @ Voltage	5.700 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	AA
Type	AC
Mech. spec.	07J415
Base	
Status	PRD/A
Elec. spec.	07WGY727
Layout	07LYJ415
Eff. date	10-01-2025
CD Diagram	CD0006
Poles	06
Leads	3#14
Proprietary	False
Created date	03-26-2010

Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	5.7 a
Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	NONE
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	1800 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0748M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	19.50 IN
Power Factor	73
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	1.375 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1160 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.	ECP83768T-5							
SPEC.	07J415Y727G1							
HP	5 TE			**IP**	56			
VOLTS	575							
AMPS	5.7							
R.P.M.	1160							
FRAME	215T	**HZ**	60			**PH**	3	
SER.F.	1.15	**CODE**	J	**DES.**	B	**CLASS**	F	
RATING	40C AMB-CONT							
SN								
DE	6307	**ODE**	6206					
NEMA NOM. EFF.	89.5	**P.F.**	73					
GUAR. MIN. EFF.	87.5	**CC**	010A					
T. CODE	T3C	**TEMP=**	160					

NP3186							
SPEC.	07J415Y727G1						
ABMA DE BRG	35BC03XP30X						
ABMA ODE BRG	30BC02XP30X						
GREASE	POLYREX EM						
MOTOR WEIGHT	226	**ROTOR BARS**	27	**STATOR BARS**	36		
MAX. R.P.M.	1800	**MAX. KVAR**	1.9				
INV.TYPE	PWM						
T=	160						
CHP	60	**TO**	90				
CT	2.0	**TO**	60				
VT	0-	**TO**	60				
HTR-VOLTS	N/A	**HTR-AMPS**	N/A				
HTR-WATTS		**MAX. SPACE HEATER TEMP.**			N/A		

AC Induction Motor Performance Data
Record # 92587
Typical performance - not guaranteed values

Winding: 07WGY727-R006	**Type:** 0748M	**Enclosure:** TEFC

Nameplate Data				**575 V, 60 Hz: Single Voltage Motor**	
Rated Output (HP)			5	**Full Load Torque**	22.4 LB-FT
Volts			575	**Start Configuration**	direct on line
Full Load Amps			5.7	**Breakdown Torque**	63.2 LB-FT
R.P.M.			1160	**Pull-up Torque**	43.4 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	55.3 LB-FT
NEMA Design Code	B	**KVA Code**	J	**Starting Current**	36.8 A
Service Factor (S.F.)			1.15	**No-load Current**	2.74 A
NEMA Nom. Eff.	89.5	**Power Factor**	73	**Line-line Res. @ 25ºC**	2.74 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	50°C
S.F. Amps				**Temp. Rise @ S.F. Load**	63°C
				Locked-rotor Power Factor	21.4
				Rotor inertia	1.19 lb-ft²

Load Characteristics 575 V, 60 Hz, 5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	36	57	67	73	76	77	75
Efficiency	84.7	89.9	90.5	89.5	88.3	86.1	88.8
Speed	1192	1182	1172	1161	1147	1132	1153
Line amperes	2.98	3.69	4.63	5.68	6.97	8.49	6.45

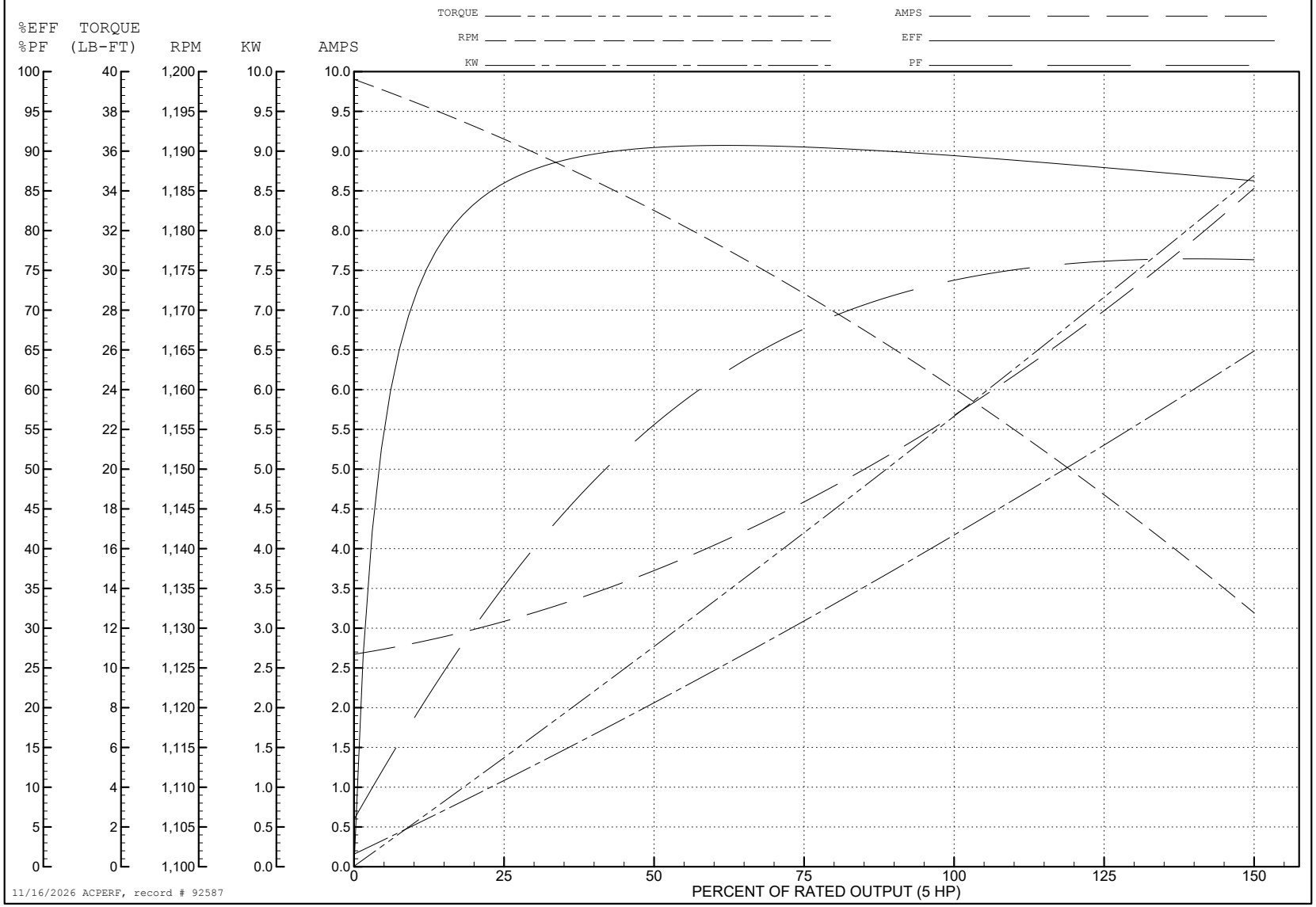
ABB Motors and Mechanical Inc.

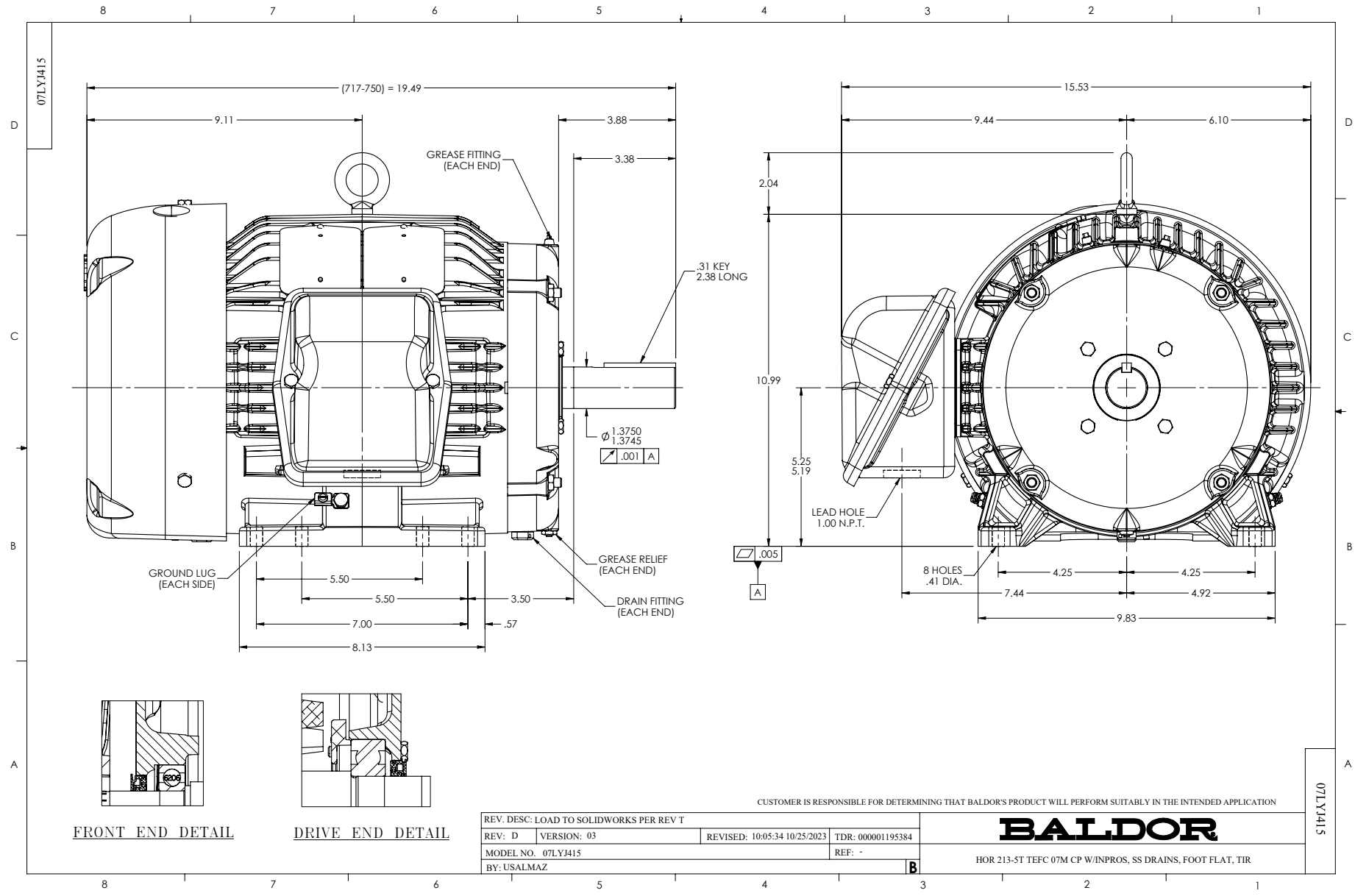
WINDING # 07WGY727

5 HP 3 PH 60 HZ 1160 RPM 575 V 0748M

Typical performance - not guaranteed values.

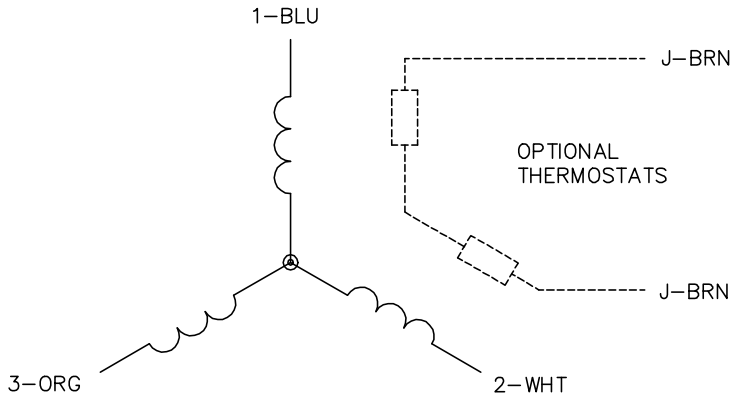
TORQUES(LB-FT): PO=63.2 PU=43.4 LR=55.3 LRA=36.8

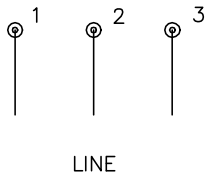



07LYJ415
(717-750) = 19.49
9.11
3.88
3.38
GREASE FITTING (EACH END)
.31 KEY 2.38 LONG
Ø 1.3750 1.3745
.001 A
GROUND LUG (EACH SIDE)
5.50
5.50
3.50
7.00
.57
8.13
GREASE RELIEF (EACH END)
DRAIN FITTING (EACH END)
15.53
9.44
6.10
2.04
10.99
5.25
5.19
LEAD HOLE 1.00 N.P.T.
.005
A
8 HOLES .41 DIA.
4.25
4.25
7.44
4.92
9.83
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 TO SOLIDWORKS PER REV T
REV: D
VERSION: 03
REVISED: 10:05:34 10/25/2023
TDR: 000001195384
MODEL NO. 07LYJ415
REF: -
BY: USALMAZ
B
BALDOR
HOR 213-5T TEFC 07M CP W/INPROS, SS DRAINS, FOOT FLAT, TIR
07LYJ415

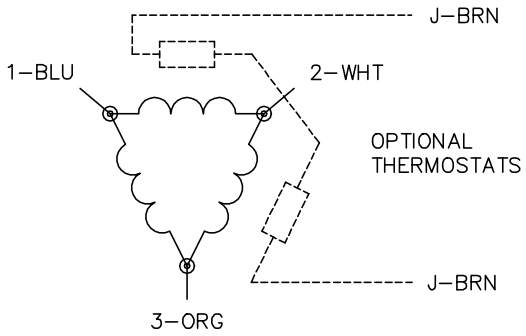
CD0006

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		
REV. LTR: E	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

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

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