ABB BALDOR RELIANCE

Customer information packet

ECP83663T-5

5HP, 3440RPM, 3PH, 60HZ, 184T, 0643M, TEFC, F1
Class - CLI GP A,B,C,D
Division - Division II

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Specifications

Enclosure	TEFC
Frame	184T
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	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	6
Current @ Voltage	4.600 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	88.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	P
Type	AC
Mech. spec.	06H759
Base	
Status	PRD/A
Elec. spec.	06WGX823
Layout	06LYH759
Eff. date	09-16-2024
CD Diagram	CD0006
Poles	02
Leads	3#16
Proprietary	False
Created date	10-03-2016

Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	4.6 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	J
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 @ 16 AWG
Motor Lead Termination	Ring Terminals
Motor Standards	NEMA
Motor Type	0642M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	15.93 IN
Power Factor	94
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
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	3440 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.	ECP83663T-5							
SPEC.	06H759X823G1							
HP	5 TE			**IP**	56			
VOLTS	575							
AMPS	4.6							
R.P.M.	3440							
FRAME	184T	**HZ**	60			**PH**	3	
SER.F.	1.15	**CODE**	J	**DES.**	B	**CLASS**	F	
RATING	40C AMB-CONT							
SN								
DE	6206	**ODE**	6206					
NEMA NOM. EFF.	88.5	**P.F.**	94					
GUAR. MIN. EFF.	86.5	**CC**	010A					
T. CODE	T3C	**TEMP=**	160					

NP3186							
SPEC.	06H759X823G1						
ABMA DE BRG	30BC02X30X						
ABMA ODE BRG	30BC02X30X						
GREASE	POLYREX EM						
MOTOR WEIGHT	130	**ROTOR BARS**	28	**STATOR BARS**	36		
MAX. R.P.M.	5400	**MAX. KVAR**	0.15				
INV.TYPE	PWM						
T=	160						
CHP	60	**TO**	90				
CT	6	**TO**	60				
VT	2.7	**TO**	60				
HTR-VOLTS	N/A	**HTR-AMPS**	N/A				
HTR-WATTS	N/A	**MAX. SPACE HEATER TEMP.**			N/A		

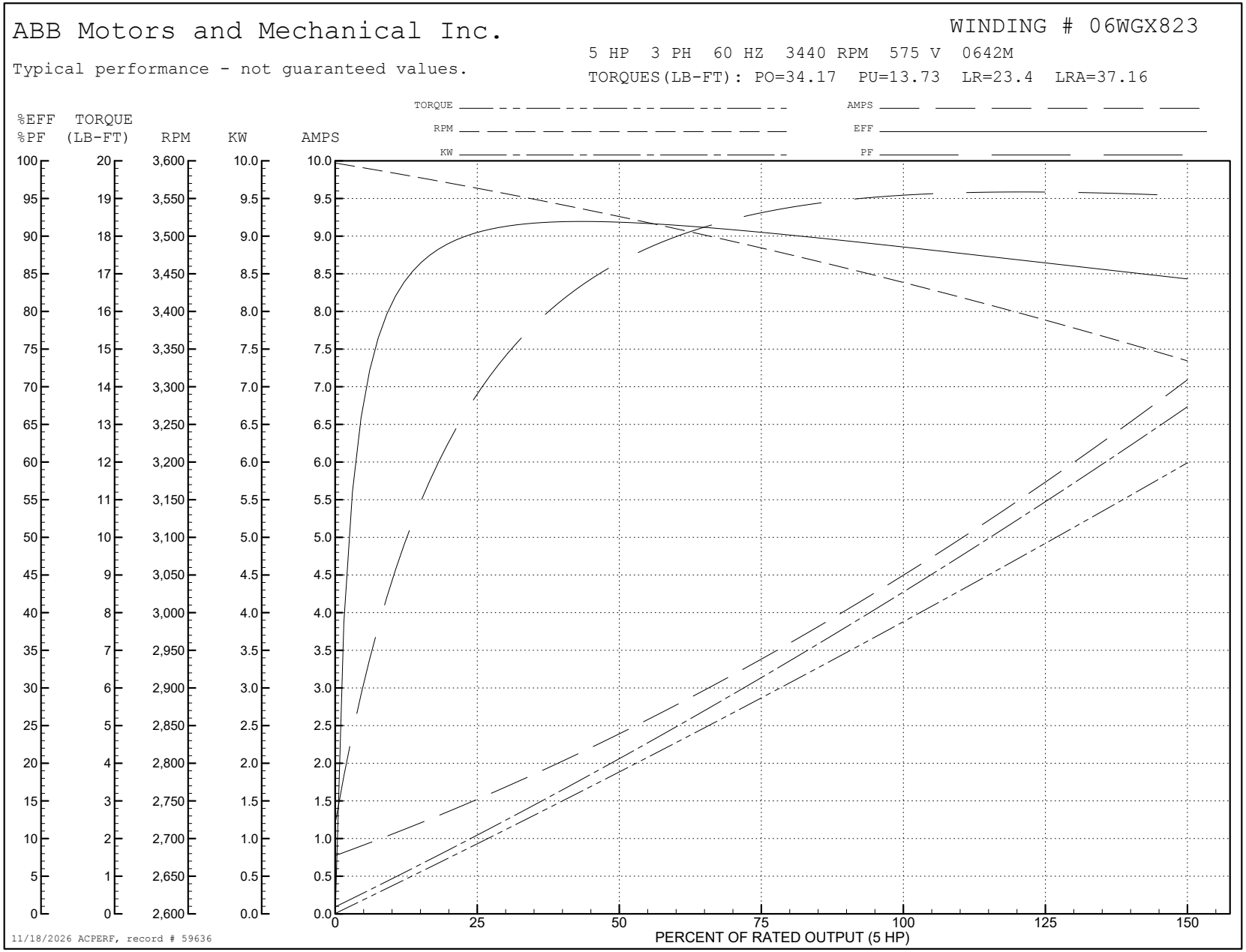
AC Induction Motor Performance Data
Record # 59636
Typical performance - not guaranteed values

Winding: 06WGX823-R001	**Type:** 0642M	**Enclosure:** TEFC

Nameplate Data				**575 V, 60 Hz: Single Voltage Motor**	
Rated Output (HP)			5	**Full Load Torque**	7.76 LB-FT
Volts			575	**Start Configuration**	direct on line
Full Load Amps			4.6	**Breakdown Torque**	34.17 LB-FT
R.P.M.			3440	**Pull-up Torque**	13.73 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	23.4 LB-FT
NEMA Design Code	B	**KVA Code**	J	**Starting Current**	37.16 A
Service Factor (S.F.)			1.15	**No-load Current**	0.876 A
NEMA Nom. Eff.	88.5	**Power Factor**	94	**Line-line Res. @ 25ºC**	4.06 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	51°C
S.F. Amps				**Temp. Rise @ S.F. Load**	65°C
				Locked-rotor Power Factor	41.9
				Rotor inertia	0.188 LB-FT2

Load Characteristics 575 V, 60 Hz, 5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	78	89	93	94	93	97	93
Efficiency	90.1	91.4	90.5	88.8	86.4	84.2	87.4
Speed	3560	3524	3484	3440	3389	3334	3406
Line amperes	1.45	2.35	3.41	4.54	5.86	6.98	5.34


ABB Motors and Mechanical Inc.
WINDING # 06WGX823
Typical performance - not guaranteed values.
5 HP 3 PH 60 HZ 3440 RPM 575 V 0642M
TORQUES(LB-FT): PO=34.17 PU=13.73 LR=23.4 LRA=37.16
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
KW
AMPS
PERCENT OF RATED OUTPUT (5 HP)
11/18/2026 ACPERF, record # 59636

AC Induction Motor Performance Data
Record # 106001
Typical performance - not guaranteed values

Winding: 06WGX823-R001	**Type:** 0642M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: Single Voltage Motor**	
Rated Output (HP)			5	**Full Load Torque**	7.98 LB-FT
Volts			575	**Start Configuration**	direct on line
Full Load Amps			4.6	**Breakdown Torque**	21.8 LB-FT
R.P.M.			3440	**Pull-up Torque**	8.8 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	14.9 LB-FT
NEMA Design Code	B	**KVA Code**	J	**Starting Current**	29.7 A
Service Factor (S.F.)			1.15	**No-load Current**	0.71 A
NEMA Nom. Eff.	88.5	**Power Factor**	94	**Line-line Res. @ 25ºC**	4.09 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	74°C
S.F. Amps				**Temp. Rise @ S.F. Load**	103°C
				Locked-rotor Power Factor	41.7
				Rotor inertia	0.188 LB-FT2

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	88	93	94	94	91	91	92
Efficiency	91.6	90.9	88.6	85.3	80.8	74.9	82.6
Speed	3541	3485	3420	3344	3244	3094	3284
Line amperes	1.59	2.84	4.3	5.94	8.03	10.45	7.19

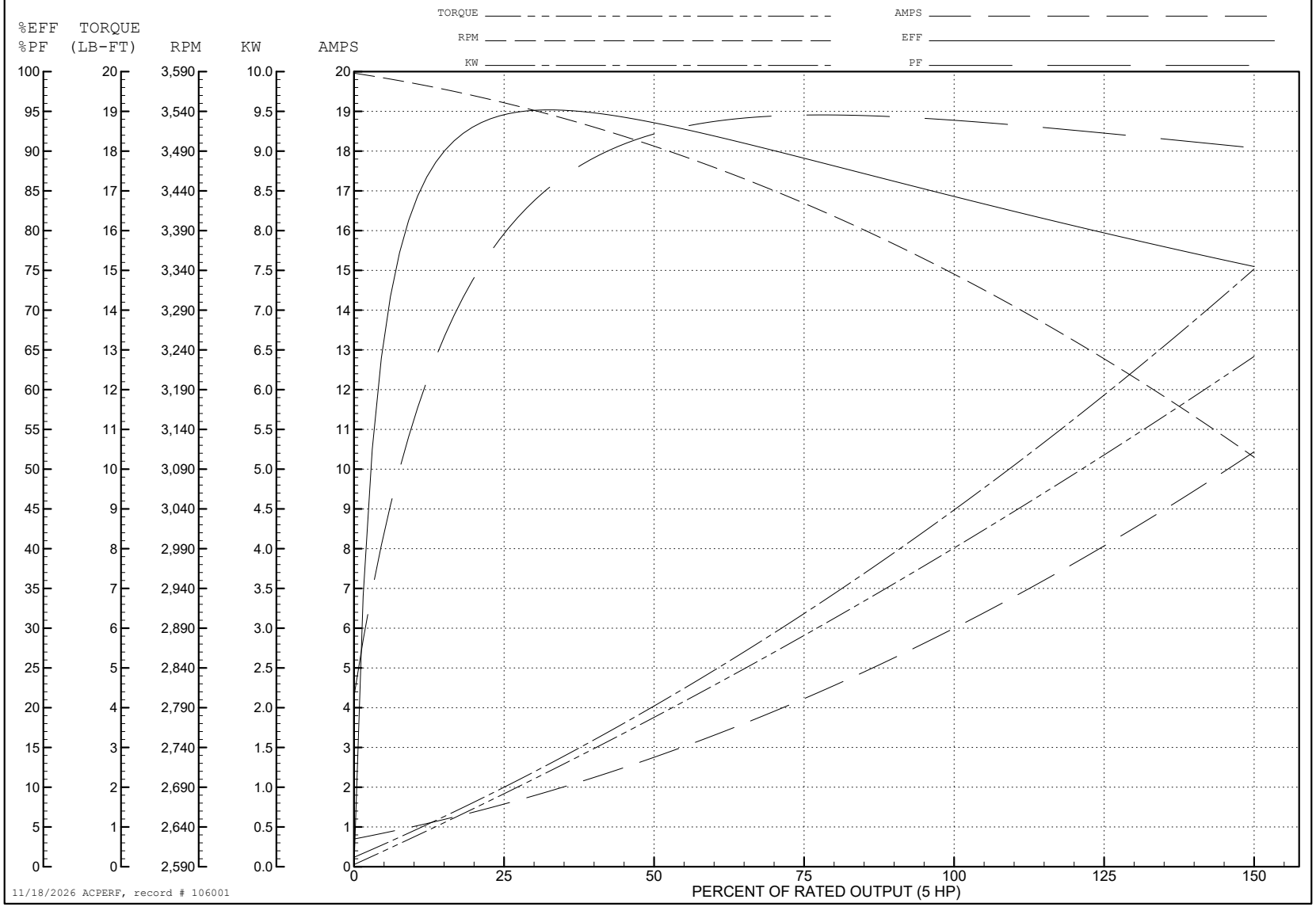
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WINDING # 06WGX823

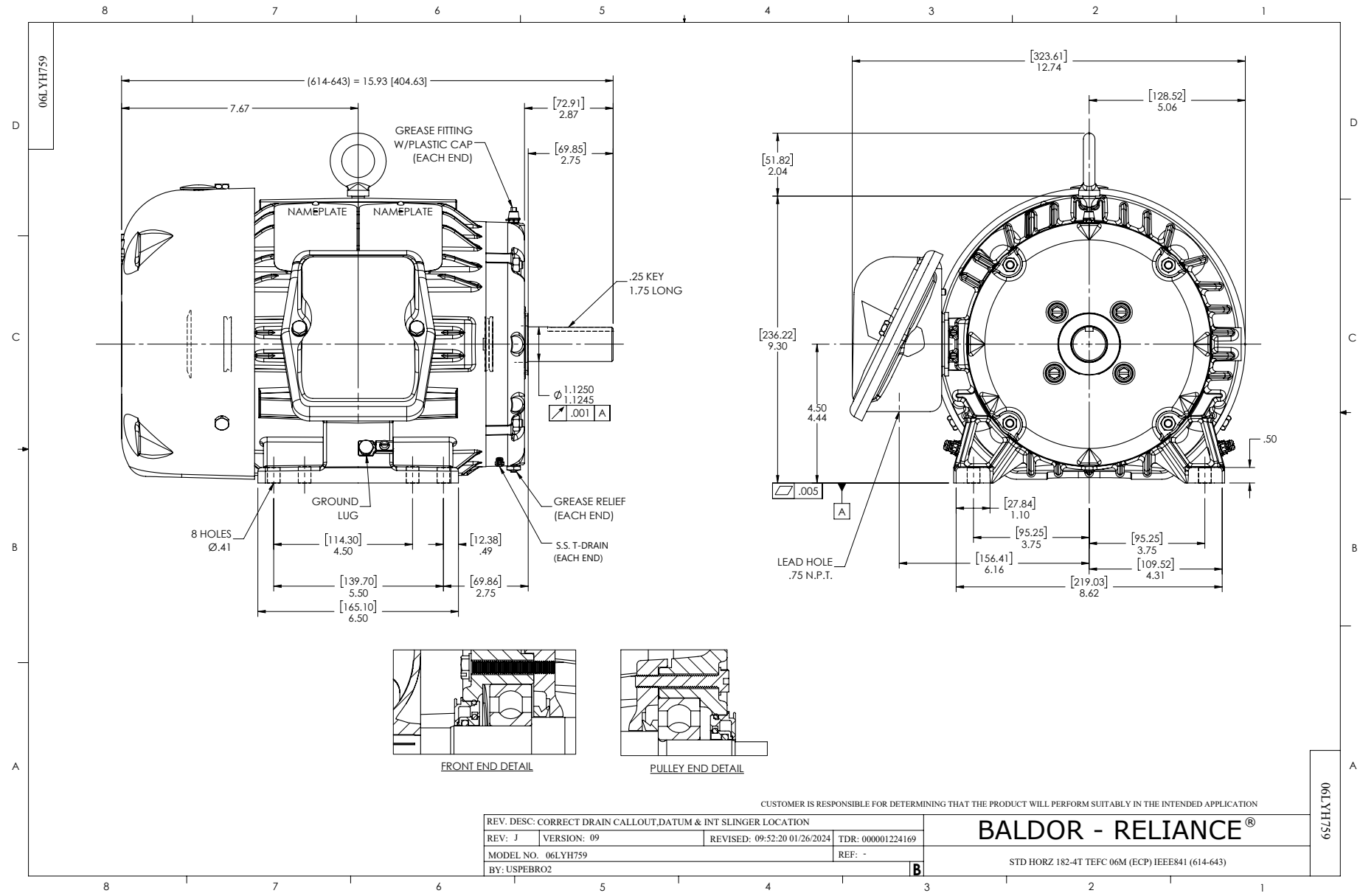
5 HP 3 PH 60 HZ 3440 RPM 460 V 0642M

Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=21.8 PU=8.8 LR=14.9 LRA=29.7

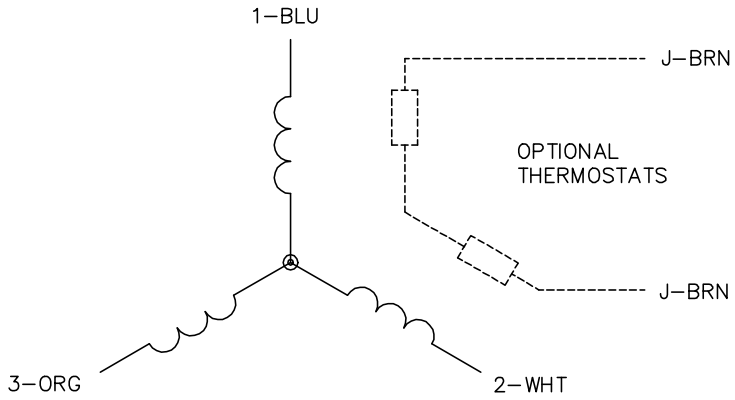


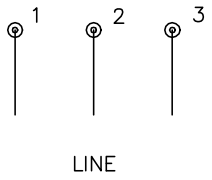
11/18/2026 ACPERF, record # 106001


06LYH759
(614-643) = 15.93 [404.63]
7.67
[72.91] 2.87
[69.85] 2.75
GREASE FITTING W/PLASTIC CAP (EACH END)
NAMEPLATE
NAMEPLATE
.25 KEY 1.75 LONG
Ø 1.1250 1.1245
.001 A
GROUND LUG
GREASE RELIEF (EACH END)
8 HOLES Ø.41
[114.30] 4.50
[12.38] .49
S.S. T-DRAIN (EACH END)
[139.70] 5.50
[69.86] 2.75
[165.10] 6.50
[323.61] 12.74
[128.52] 5.06
[51.82] 2.04
[236.22] 9.30
4.50 4.44
.50
.005
A
[27.84] 1.10
[95.25] 3.75
[95.25] 3.75
LEAD HOLE .75 N.P.T.
[156.41] 6.16
[109.52] 4.31
[219.03] 8.62
FRONT END DETAIL
PULLEY END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CORRECT DRAIN CALLOUT,DATUM & INT SLINGER LOCATION
REV: J
VERSION: 09
REVISED: 09:52:20 01/26/2024
TDR: 000001224169
MODEL NO. 06LYH759
REF: -
BY: USPEBRO2
B
BALDOR - RELIANCE®
STD HORZ 182-4T TEFC 06M (ECP) IEEE841 (614-643)
06LYH759

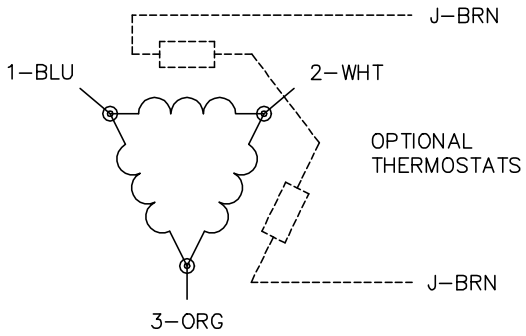
CD0006

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