



Customer information packet

SUM72006-4

20HP, 1170RPM, 3PH, 60HZ, 250TY, XPNV, V1

Class - CLI GP C,D

Division - Not Applicable

Specifications

Enclosure	XPNV
Frame	250TY
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP C,D
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Phase	3
Agency Approvals	CCSA US
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Cable Length	25 FOOT
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Haz Area Temp Code	T3C
Heater Indicator	No Heater
Insulation Class	F
Inverter Code	Not Inverter
IP Rating	NONE
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Motor Standards	NEMA
Motor Type	M
Mounting Arrangement	V1
Number of Poles	6
Product Family	Pump - Centrifugal
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	1.750 IN
Shaft Rotation	Reversible

Part detail

Revision	E
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	85274
Layout	619738-005
Eff. date	12-10-2024
CD Diagram	416820-036
Poles	///
Leads	
Proprietary	False
Created date	05-21-2021

Shaft Slinger Indicator	No Slinger
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Winding	Normally Closed Thermostat

Nameplate

000613007MS										
CAT.NO.	SUM72006-4		SPEC NO.		S25-CWS0-0006					
SER.NO.				FRAME SIZE		250TY				
CONSTANT HP RPM	HP	RPM	VOLTS		AMPS		HZ		S.F.	
	20	1170	230/460		58/29		6-60		1.00	
	20	1170	230/460		58/29		60		1.15	
			@		HZ	CODE	G			
	TYPE	P	INSUL.CLASS		F	TORQUE		10:1_VT		DESIGN
D.E. BRG.	60BC03JPP30A		ENCL	TENV		DUTY	15 MIN		PH	3
O.D.E. BRG.	40BC02JPG30A		MOTOR WEIGHT					AMB	40	
FINAL CONN VOLTAGE = 460 *15										
MIN IN AIR ;SUB. IN SEWAGE /										
WATER ONLY										

000613007RC		
CLASS I GROUP	C D X	NO.
CLASS II GROUP	X X X	
OPERATING TEMP CODE	T3C	

000692000MB	
SUITABLE FOR OPERATION ON PWM	
INVERTER EQUIPPED WITH IGBT	
DEVICES AND CAPABLE OF	
CARRIER	
FREQUENCY OF 2 KHZ MINIMUM	

000613007MS

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SER.NO.		FRAME SIZE	250TY			
	HP	RPM	VOLTS	AMPS	HZ	S.F.
	20	1170	230/460	58/29	6-60	1.00
	20	1170	230/460	58/29	60	1.15
CONSTANT HP RPM		@	HZ	CODE	G	
TYPE	P	INSUL.CLASS	F	TORQUE	10:1_VT	DESIGN B
D.E. BRG.	60BC03JPP30A	ENCL	TENV	DUTY	15 MIN	PH 3
O.D.E. BRG.	40BC02JPG30A	MOTOR WEIGHT		AMB	40	
	FINAL CONN VOLTAGE = 460 *15					
	MIN IN AIR ;SUB. IN SEWAGE /					
	WATER ONLY					

AC induction motor performance data

Record #85274 - Typical performance - not guaranteed values

Winding	09WGA0211
Type	0948M
Enclosure	XPNV

Nameplate data

Rated Output	20	
Volts	230/460	
Full Load Amps	58/29	
R.P.M.	1170	
Hz	60	Phase 3
KVA Code	G	
S.F.	1.15	
NEMA Nom. Eff.	88.5	Power Factor 73
Duty	15 MIN	
S.F. Amps		

460 V, 60 Hz:

High Voltage Connection

Full Load Torque	89.59 LB-FT
Start Configuration	direct on line
Breakdown Torque	211 LB-FT
Pull-up Torque	95.45 LB-FT
Locked-rotor Torque	129 LB-FT
Starting Current	142 A
No-load Current	12.41
Line-line Res. @ 25°C	0.611 Ω
Temp. Rise @ Rated Load	73°C
Temp. Rise @ S.F. Load	92°C
Locked-rotor Power Factor	27.2
Rotor inertia	3.86 lb-ft ²

Load Characteristics 460 V, 60 Hz, 20 HP

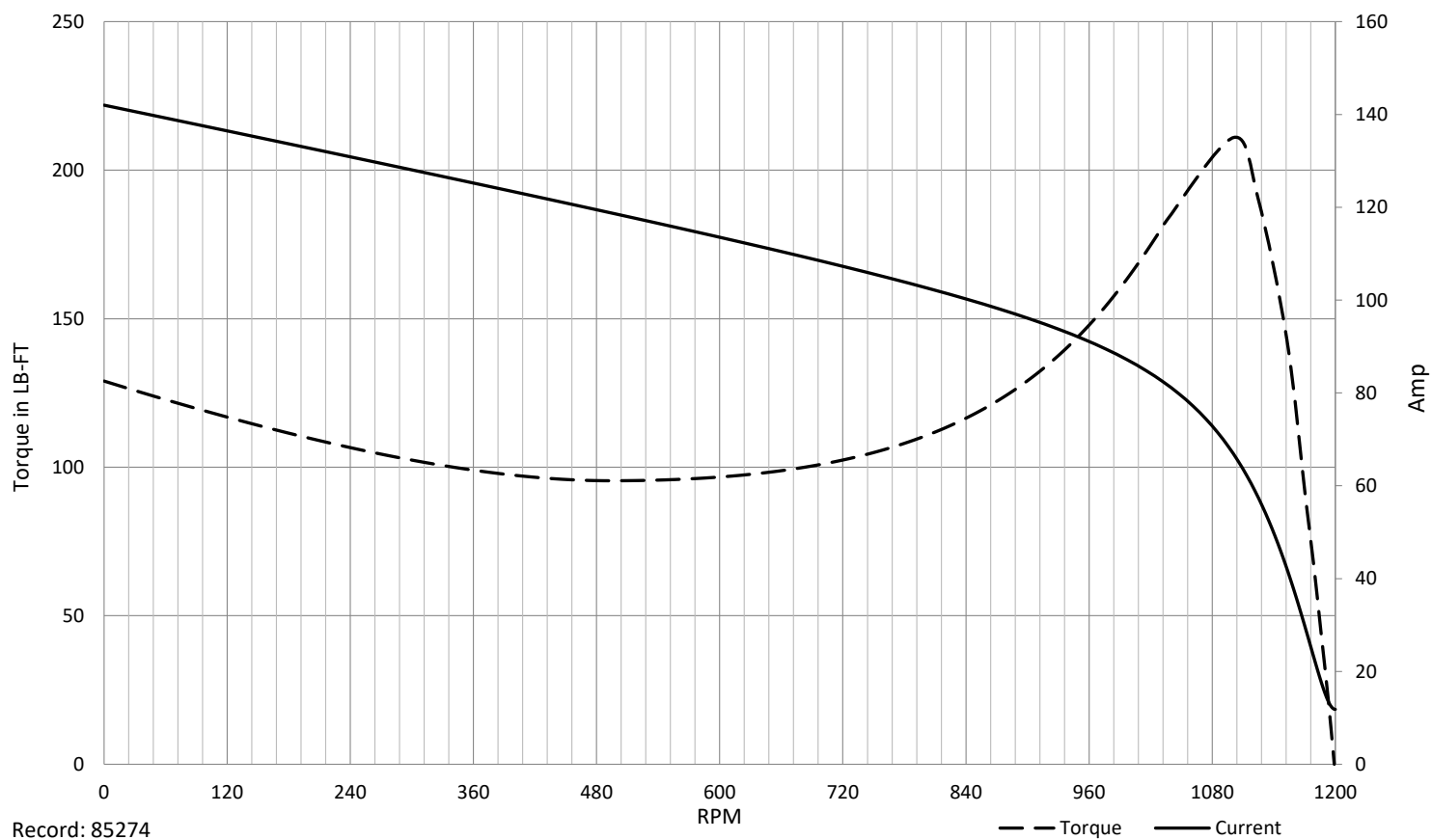
% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	6	41	60	69	73	73	71	73
Efficiency	0	83.1	88.5	89.2	88.7	86.8	84.1	87.6
Speed	1199	1193	1186	1179	1171	1159	1145	1164
Line amperes	12.41	14.05	17.67	22.93	28.94	36.6	46.41	33.5

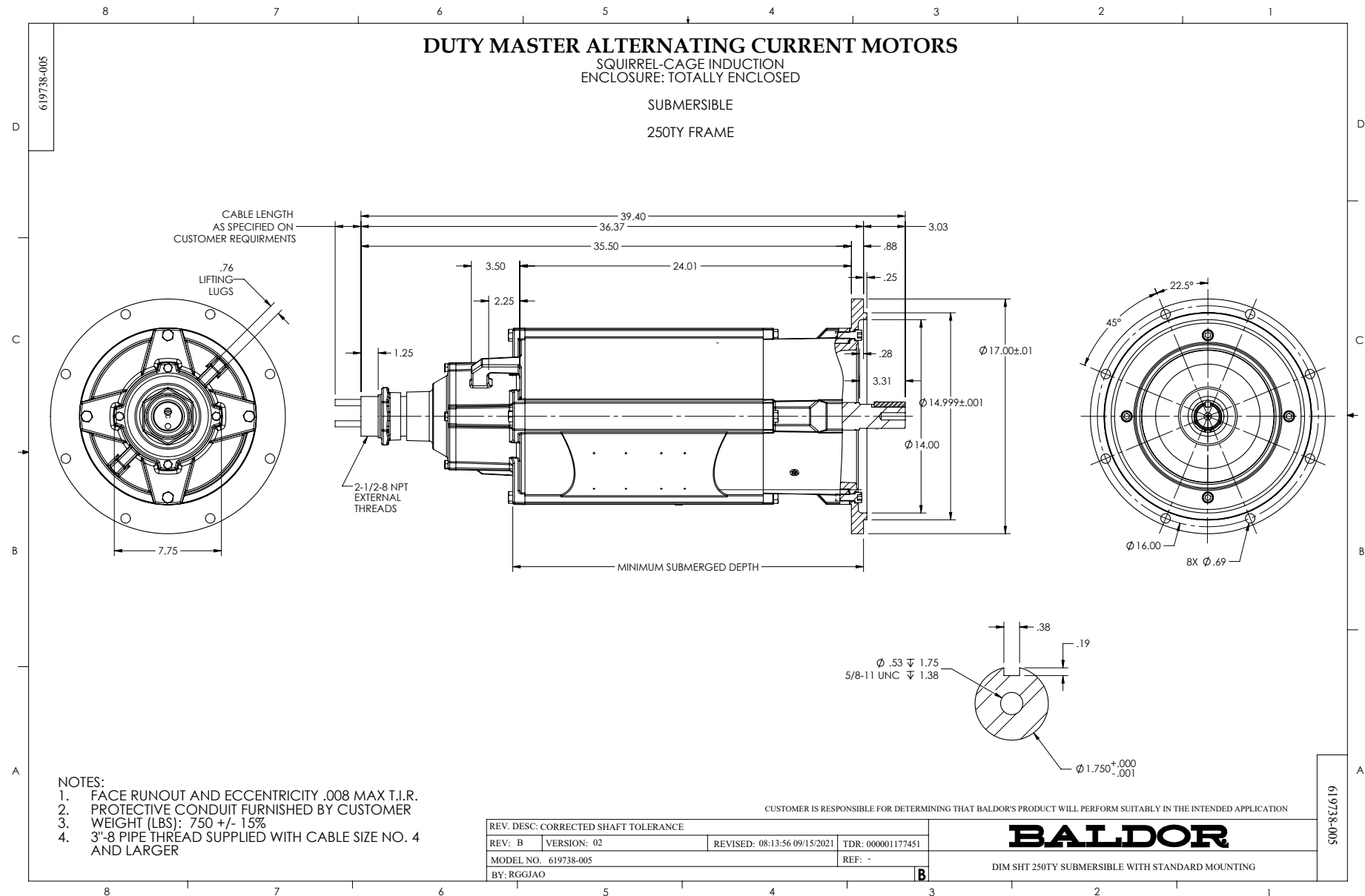
SPEED TORQUE / SPEED CURRENT CURVES

BALDOR • RELIANCE

09WGA0202

20HP 460V 60HZ





416820-036

A-C MOTOR
CONNECTION DIAGRAM
STANDARD 3 LEAD CONNECTED



(N.P. 1575-BA)

416820-036

REV. DESC: LOADED TO BUS, C/R 335225		
REV. LTR: -	VERSION: 00	TDR: 000000538207
FILE: \MGA\00000\682		REVISED: 11: 54: 06 04/30/2010
MTL: -	BY: RAGRA	

BALDOR

CONN DIAG - STANDARD 3 LEAD
SH 1 of 1

