

ABB BALDOR RELIANCE III

Customer information packet

SUM70754-4

7.5HP, 1745RPM, 3PH, 60HZ, 180TY, XPNV, V1

Class - CLI GP C,D

Division - Not Applicable

Specifications

Enclosure	XPNV
Frame	180TY
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)
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	IP68
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Motor Standards	NEMA
Motor Type	M
Mounting Arrangement	V1
Number of Poles	4
Product Family	Pump - Centrifugal
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Service Factor	1.15
Shaft Diameter	1.250 IN
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger

Part Detail

Revision	C
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	85768
Layout	619738-001
Eff. date	12-16-2024
CD Diagram	
Poles	///
Leads	
Proprietary	False
Created date	10-25-2021

Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Winding	Normally Closed Thermostat

Nameplate

000613007MS										
CAT.NO.	SUM70754-4			SPEC NO.	S18-CWS0-0005					
SER.NO.					FRAME SIZE	180TY				
CONSTANT HP RPM	HP	RPM	VOLTS		AMPS		HZ		S.F.	
	7.5	1745	230/460		22.2/11.1		6-60		1.00	
	7.5	1745	230/460		22.2/11.1		60		1.15	
		@		HZ	CODE	H				
	TYPE	P	INSUL.CLASS		F	TORQUE	10:1_VT			DESIGN
D.E. BRG.	50BC02JPP30A			ENCL	TENV		DUTY	15 MIN	PH	3
O.D.E. BRG.	25BC02JPG30A			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									
CAT.NO.	SUM70754-4		SPEC NO.	S18-CWS0-0005					
SER.NO.				FRAME SIZE	180TY				
	HP	RPM	VOLTS	AMPS	HZ	S.F.			
	7.5	1745	230/460	22.2/11.1	6-60	1.00			
	7.5	1745	230/460	22.2/11.1	60	1.15			
CONSTANT HP RPM		@		HZ	CODE	H			
TYPE	P	INSUL.CLASS	F	TORQUE	10:1_VT		DESIGN	B	
D.E. BRG.	50BC02JPP30A		ENCL	TENV	DUTY	15 MIN	PH	3	
O.D.E. BRG.	25BC02JPG30A		MOTOR WEIGHT		AMB	40			
	FINAL CONN VOLTAGE = 460 *15								
	MIN IN AIR ;SUB. IN SEWAGE /								
	WATER ONLY								

AC induction motor performance data

Record #85768 - Typical performance - not guaranteed values

Winding	36WGA0034
Type	3634M
Enclosure	PART

Nameplate data

Rated Output	7.5		
Volts	230/460		
Full Load Amps	22.2/11.1		
R.P.M.	1745		
Hz	60	Phase	3
KVA Code	H		
S.F.	1.15		
NEMA Nom. Eff.	91.7	Power Factor	67
Duty	15 MIN		
S.F. Amps			

460 V, 60 Hz:

High Voltage Connection

Full Load Torque	22.68 LB-FT
Start Configuration	direct on line
Breakdown Torque	71.3 LB-FT
Pull-up Torque	38.66 LB-FT
Locked-rotor Torque	45.66 LB-FT
Starting Current	65.32 A
No-load Current	7.43
Line-line Res. @ 25°C	2.17 Ω
Temp. Rise @ Rated Load	80°C
Temp. Rise @ S.F. Load	123°C
Locked-rotor Power Factor	50.7
Rotor inertia	0.317 lb-ft²

Load Characteristics 460 V, 60 Hz, 7.5 HP

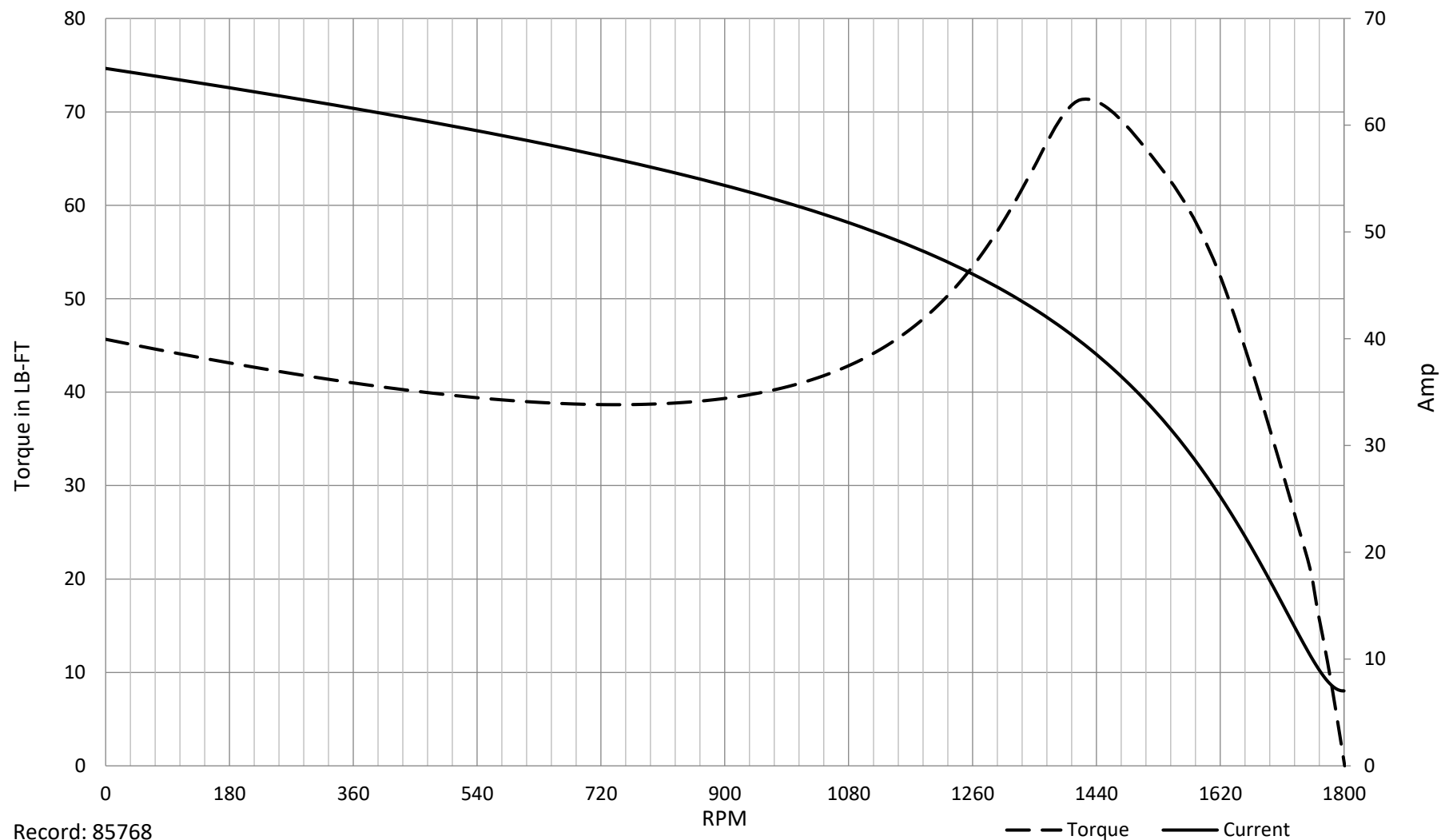
% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	3	24	44	58	67	73	77	71
Efficiency	0	96.6	98.7	97.2	94.5	91.6	85.3	92.8
Speed	1801	1789	1776	1761	1745	1727	1703	1734
Line amperes	7.43	7.49	8.13	9.43	11.09	13.19	16.16	12.3

SPEED TORQUE / SPEED CURRENT CURVES



36WGA0034

7.5HP 460V 60HZ



Record: 85768

