

# ABB BALDOR RELIANCE III

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## Customer information packet

### SUM73004SM-4

30HP, 1760RPM, 3PH, 60HZ, 250TY, XPNV, V1

Class - CLI GP C,D

Division - Not Applicable

**Specifications**

<b>Enclosure</b>	XPNV
<b>Frame</b>	250TY
<b>Frame Material</b>	Iron
<b>Frequency</b>	60.00 Hz
<b>Haz Area Class and Group</b>	CLI GP C,D
<b>Haz Area Division</b>	Not Applicable
<b>Motor Letter Type</b>	Three Phase
<b>Phase</b>	3
<b>Agency Approvals</b>	CCSA US
<b>Base Indicator</b>	Rigid
<b>Bearing Grease Type</b>	Polyrex EM (-20F +300F)
<b>Cable Length</b>	25 FOOT
<b>Design Code</b>	B
<b>Drip Cover</b>	No Drip Cover
<b>Duty Rating</b>	CONT
<b>Haz Area Temp Code</b>	T3C
<b>Heater Indicator</b>	No Heater
<b>Insulation Class</b>	F
<b>Inverter Code</b>	Not Inverter
<b>IP Rating</b>	IP68
<b>KVA Code</b>	G
<b>Lifting Lugs</b>	Standard Lifting Lugs
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	M
<b>Mounting Arrangement</b>	V1
<b>Number of Poles</b>	4
<b>Product Family</b>	Pump - Centrifugal
<b>Pulley End Bearing Type</b>	Ball
<b>Pulley Face Code</b>	Standard
<b>Service Factor</b>	1.15
<b>Shaft Diameter</b>	1.437 IN
<b>Shaft Rotation</b>	Reversible

**Part Detail**

<b>Revision</b>	E
<b>Type</b>	AC
<b>Mech. spec.</b>	
<b>Base</b>	
<b>Status</b>	PRD/A
<b>Elec. spec.</b>	85909
<b>Layout</b>	619738-006
<b>Eff. date</b>	12-10-2024
<b>CD Diagram</b>	416820-036
<b>Poles</b>	///
<b>Leads</b>	
<b>Proprietary</b>	False
<b>Created date</b>	05-24-2021

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

**Nameplate**

**000613007MS**

<b>CAT.NO.</b>	SUM73004SM-4	<b>SPEC NO.</b>	S25-CWS0-0011				
<b>SER.NO.</b>		<b>FRAME SIZE</b>	250TY				
	<b>HP</b>	<b>RPM</b>	<b>VOLTS</b>	<b>AMPS</b>	<b>HZ</b>	<b>S.F.</b>	
	30	1760	230/460	73/36.5	6-60	1.00	
	30	1760	230/460	73/36.5	60	1.15	
<b>CONSTANT HP RPM</b>		@	<b>HZ</b>	<b>CODE</b>	G		
<b>TYPE</b>	P	<b>INSUL.CLASS</b>	F	<b>TORQUE</b>	10:1_VT	<b>DESIGN</b>	B
<b>D.E. BRG.</b>	60BC03JPP30A	<b>ENCL</b>	TENV	<b>DUTY</b>	15 MIN	<b>PH</b>	3
<b>O.D.E. BRG.</b>	40BC02JPG30A	<b>MOTOR WEIGHT</b>		<b>AMB</b>	40		
FINAL CONN VOLTAGE = 460 *15							
MIN IN AIR ;SUB. IN SEWAGE /							
WATER ONLY							

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**000613007RC**

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<b>CLASS I GROUP</b>	C D X	<b>NO.</b>	
<b>CLASS II GROUP</b>	X X X		
<b>OPERATING TEMP CODE</b>	T3C		

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**000692000MB**

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

**000613007MS**

<b>CAT.NO.</b>	SUM73004SM-4	<b>SPEC NO.</b>	S25-CWS0-0011			
<b>SER.NO.</b>		<b>FRAME SIZE</b>	250TY			
	<b>HP</b>	<b>RPM</b>	<b>VOLTS</b>	<b>AMPS</b>	<b>HZ</b>	<b>S.F.</b>
	30	1760	230/460	73/36.5	6-60	1.00
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	FINAL CONN VOLTAGE = 460 *15					
	MIN IN AIR ;SUB. IN SEWAGE /					
	WATER ONLY					

**AC Induction Motor performance data**

Record #85909 - Typical performance - not guaranteed values

Winding	09WGA0209
Type	0954M
Enclosure	PART

Nameplate data

Rated Output			30
Volts			230/460
Full Load Amps			68/34
R.P.M.			1760
Hz	60	Phase	3
KVA Code			G
S.F.			1.15
NEMA Nom. Eff.	92.4	Power Factor	91
Duty			15 MIN
S.F. Amps			

460 V, 60 Hz:

High Voltage Connection

Full Load Torque	89.4 LB-FT
Start Configuration	direct on line
Breakdown Torque	243 LB-FT
Pull-up Torque	103 LB-FT
Locked-rotor Torque	128 LB-FT
Starting Current	193 A
No-load Current	8.71
Line-line Res. @ 25°C	0.351 Ω
Temp. Rise @ Rated Load	101°C
Temp. Rise @ S.F. Load	119°C
Locked-rotor Power Factor	33.5
Rotor inertia	2.36 lb-ft <sup>2</sup>

Load Characteristics 460 V, 60 Hz, 30 HP

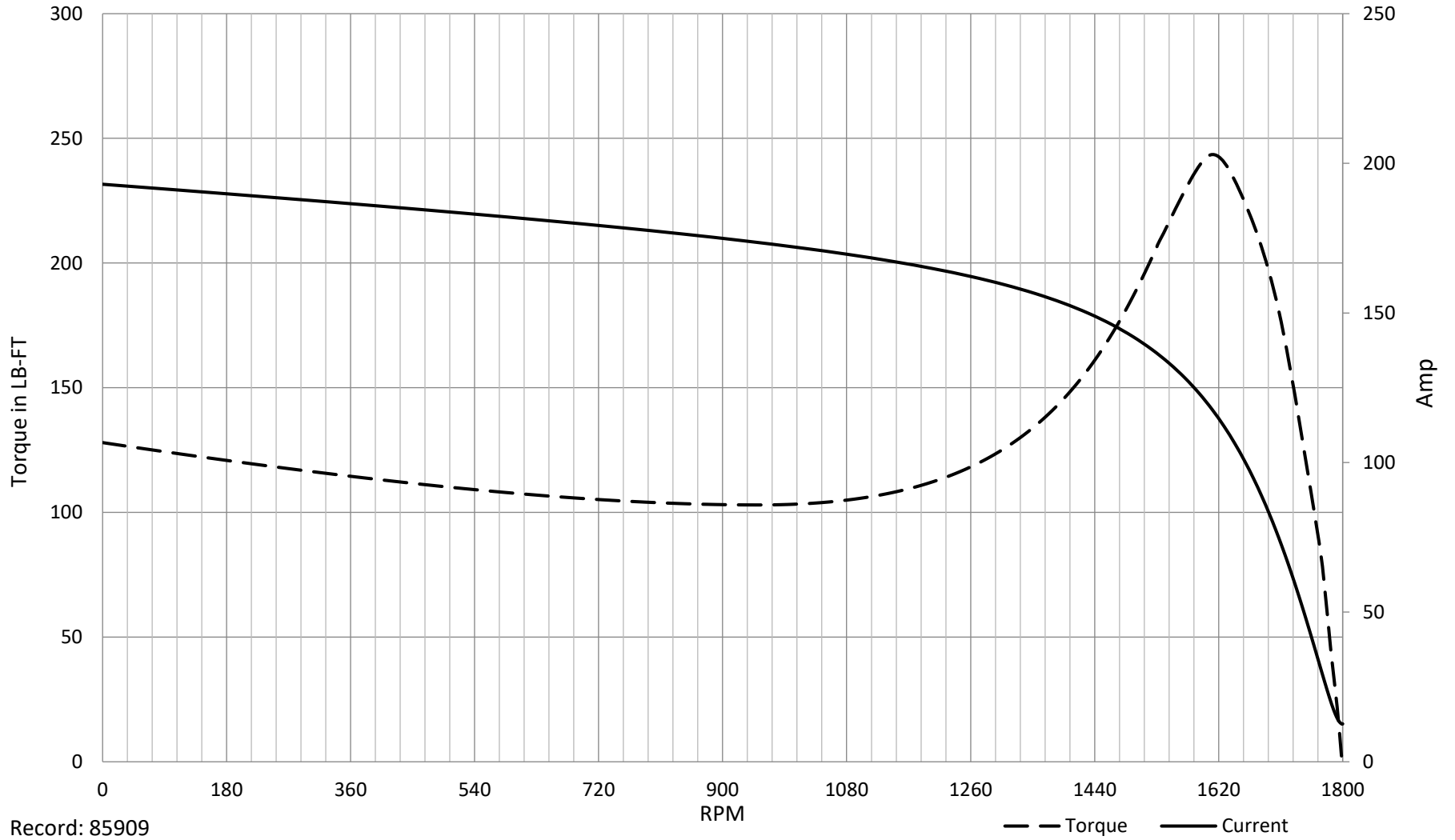
% of Rated Load	NL	25	50	75	100	125	150	SF
Power Factor	10	72	89	92	91	90	89	90
Efficiency	0	85.7	90.7	92.2	92.4	92.1	90.9	92.2
Speed	1799	1792	1783	1775	1765	1755	1741	1759
Line amperes	8.71	11.42	17.37	24.9	33.41	42.48	52.34	38.9

**SPEED TORQUE / SPEED CURRENT CURVES**

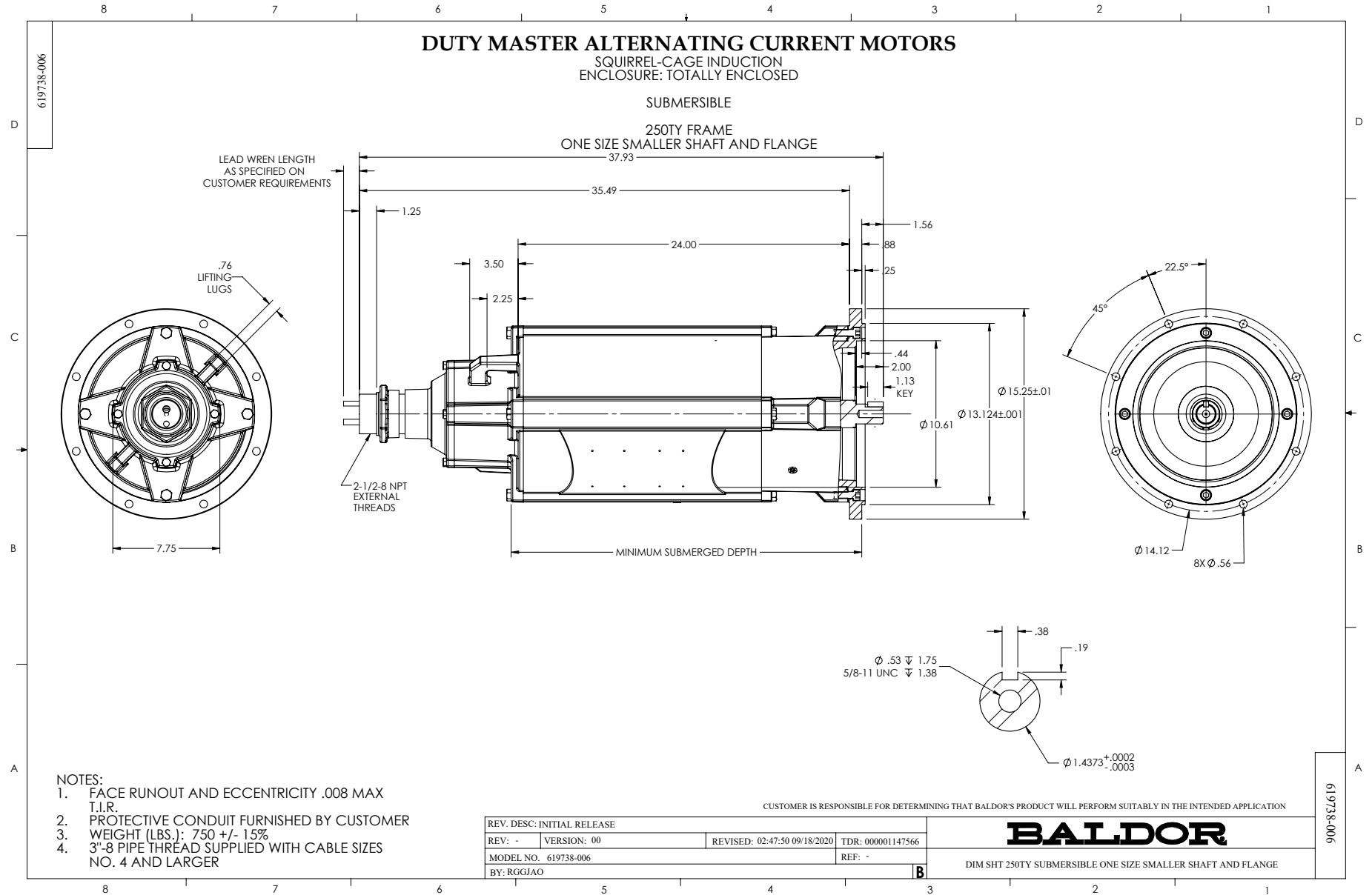


09WGA0209

30HP 460V 60HZ



Record: 85909



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: -

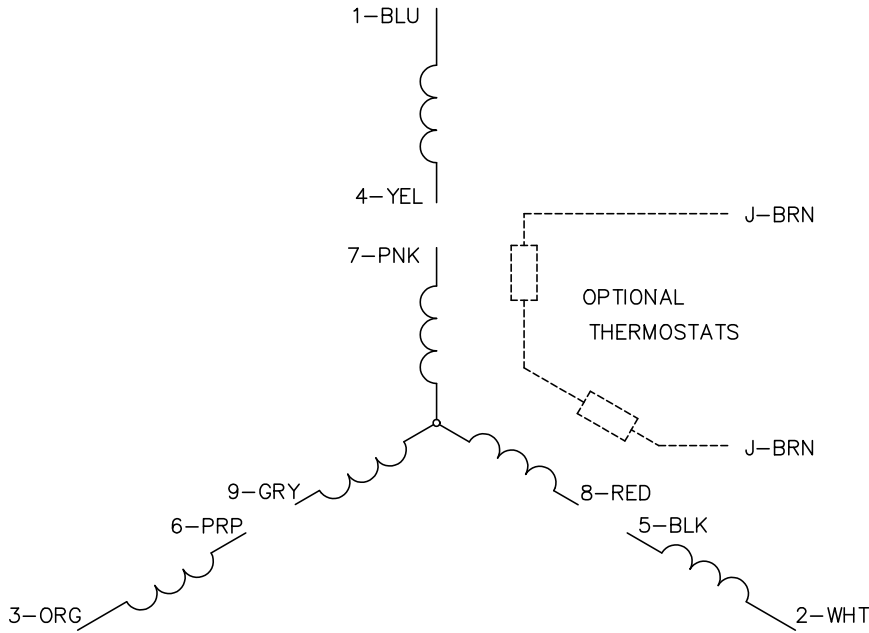
BY: RAGRA

**BALDOR**

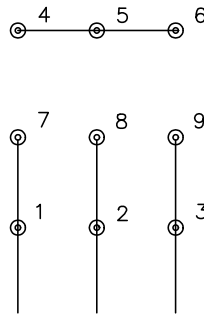
CONN DIAG - STANDARD 3 LEAD

SH 1 of 1

CD0005

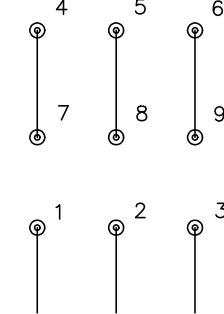


LOW VOLTAGE  
(2Y)



LINE

HIGH VOLTAGE  
(1Y)



LINE

**NOTES:**

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
S00000		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS