

ABB BALDOR RELIANCE III

Customer information packet

CEM7047T

7.5//5HP, 1770//1475RPM, 3PH, 60//50HZ, 213T

Class - CLI GP D; CLII GP F,G

Division - Division I

Specifications

Enclosure	XPFC
Frame	213TC
Frame Material	Steel
Frequency	50.00 Hz 60.00 Hz
Haz Area Class and Group	CLI GP D; CLII GP F,G
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	7.500 HP @ 60 HZ 5.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	190.0 V @ 50 HZ 230.0 V @ 60 HZ 380.0 V @ 50 HZ 460.0 V @ 60 HZ
Agency Approvals	UR CSA CSA EEV
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
Current @ Voltage	9.500 A @ 460.0 V 8.100 A @ 380.0 V 20.000 A @ 208.0 V 19.000 A @ 230.0 V 16.200 A @ 190.0 V
Design Code	A
Drip Cover	No Drip Cover

Part Detail

Revision	C
Type	AC
Mech. spec.	37H238
Base	
Status	PRD/A
Elec. spec.	37WGL864
Layout	37LYH238
Eff. date	02-15-2024
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	02-02-2021

Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	8.1 a
Insulation Class	B
Inverter Code	Not Inverter
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	X3738M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	21.08 IN
Power Factor	80
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
Service Factor	1.00
Shaft Diameter	1.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1475 rpm 1770 rpm

Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP1426XPSLEV									
NO.		CC	010A						
SER.									
SPEC.	37H238L864G1								
CAT.NO.	CEM7047T								
HP	7.5//5	T. CODE	T3C						
VOLTS	230/460//190/380								
AMPS	19/9.5//16.2/8.1								
RPM	1770//1475								
HZ	60//50	PH	3	CL	B				
SER.F.	1.00	DES	A	CODE	J				
RATING	40C AMB-CONT								
FRAME	213TC	NEMA-NOM-EFF							91.7
		PF	80						
BLANK									

AC Induction Motor Performance Data

Record # 86488

Preliminary Data Sheet

Winding: 37WGL864-R003			Type: 3738M		Enclosure: XPFC		
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		7.5		Full Load Torque		22.2 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		19.0/9.5		Breakdown Torque		69.8 LB-FT	
R.P.M.		1770		Pull-up Torque		31.5 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		41 LB-FT	
NEMA Design Code		A	KVA Code	J	Starting Current		70.7 A
Service Factor (S.F.)		1		No-load Current		4.32 A	
NEMA Nom. Eff.		91.7	Power Factor	80	Line-line Res. @ 25°C		1.48 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		64°C	
				Locked-rotor Power Factor		41.9	
				Rotor inertia		0.934 lb-ft²	

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	42	64	75	80	83	84
Efficiency	87.1	91.4	92	91.7	90.7	89.6
Speed	1793	1786	1778	1770	1760	1750
Line amperes	4.83	6.03	7.64	9.5	11.6	13.9

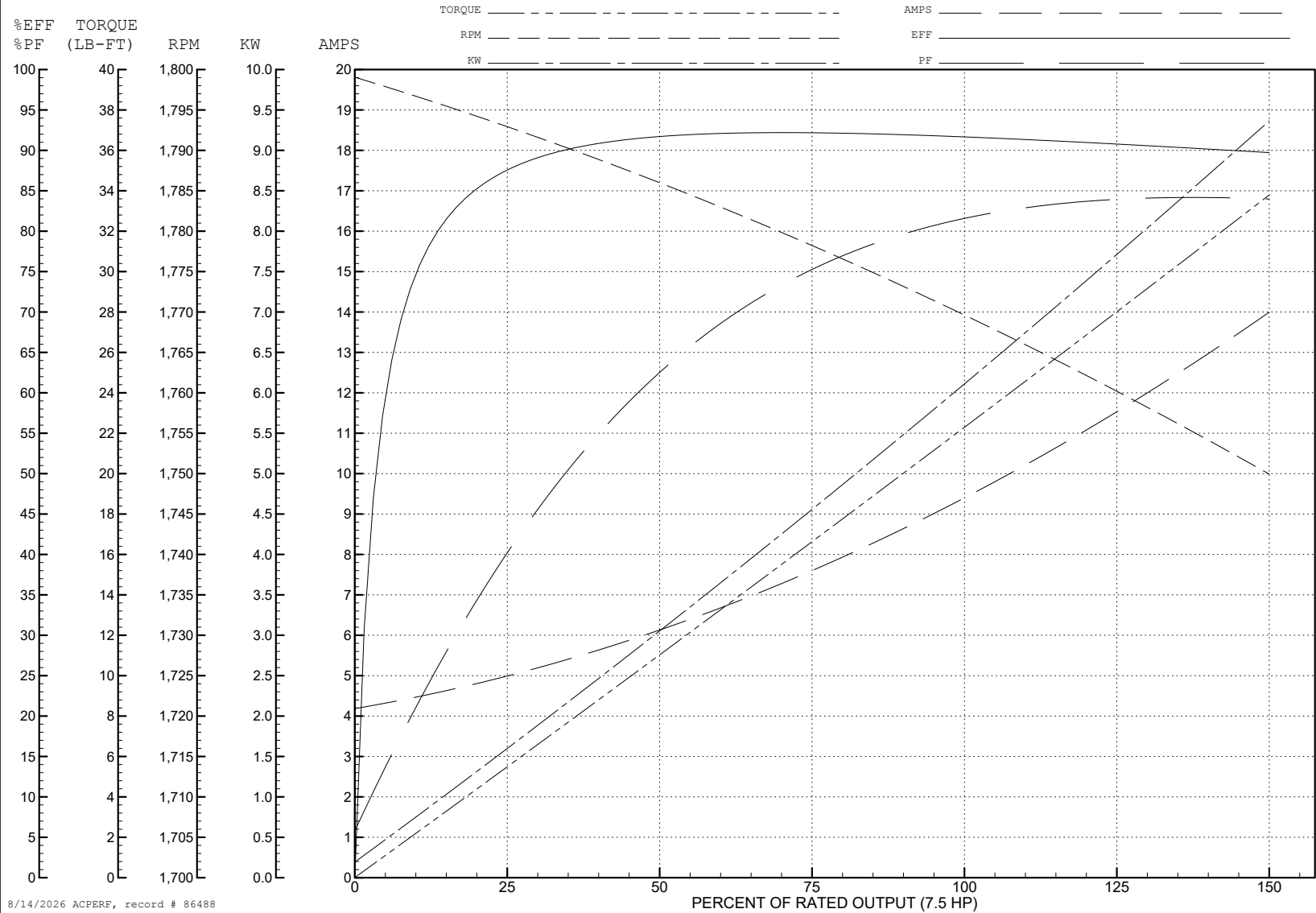
ABB Motors and Mechanical Inc.

WINDING # 37WGL864

Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 1770 RPM 460 V 3738M

TORQUES (LB-FT): PO=69.8 PU=31.5 LR=41 LRA=70.7



AC Induction Motor Performance Data

Record # 86489

Preliminary Data Sheet

Winding: 37WGL864-R003			Type: 3738M		Enclosure: XPFC	
Nameplate Data			380 V, 50 Hz: High Voltage Connection			
Rated Output (HP)		5	Full Load Torque		17.7 LB-FT	
Volts		190/380	Start Configuration		direct on line	
Full Load Amps		16.2/8.1	Breakdown Torque		68.6 LB-FT	
R.P.M.		1475	Pull-up Torque		35.2 LB-FT	
Hz	50 Phase	3	Locked-rotor Torque		37.2 LB-FT	
NEMA Design Code		A	KVA Code	K	Starting Current	
Service Factor (S.F.)		1	No-load Current		4.5 A	
NEMA Nom. Eff.		91	Power Factor		77	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		35°C
			Locked-rotor Power Factor		42.9	
			Rotor inertia		0.934 lb-ft²	

Load Characteristics 380 V, 50 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	36	58	71	78	82	84
Efficiency	83.8	89.9	91.8	91.4	90.6	89.5
Speed	1494	1489	1483	1476	1469	1460
Line amperes	4.71	5.51	6.59	7.97	9.54	11.3

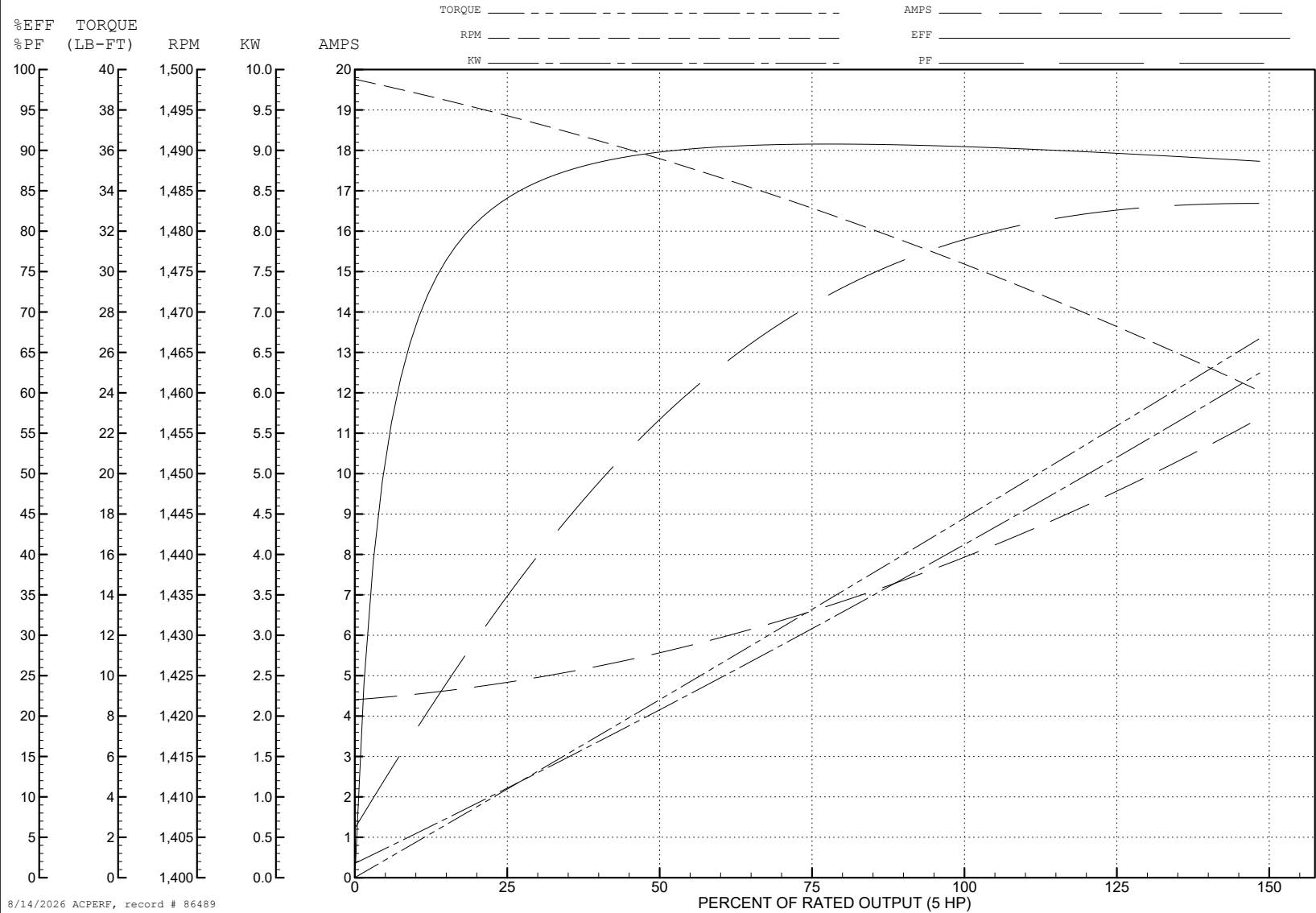
ABB Motors and Mechanical Inc.

WINDING # 37WGL864

Typical performance - not guaranteed values.

5 HP 3 PH 50 HZ 1475 RPM 380 V 3738M

TORQUES (LB-FT): PO=68.6 PU=35.2 LR=37.2 LRA=65





CD0005



- 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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
900000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005