

ABB BALDOR RELIANCE III

Customer information packet

CEM7045T

7.5//5HP, 3520//2935RPM, 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	3600 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	9.000 A @ 460.0 V 7.800 A @ 380.0 V 19.000 A @ 208.0 V 18.000 A @ 230.0 V 15.600 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.	37WGL869
Layout	37LYH238
Eff. date	02-15-2024
CD Diagram	CD0005
Poles	02
Leads	9#14
Proprietary	False
Created date	01-28-2021

Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
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	7.8 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	X3728M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	20.33 IN
Power Factor	84
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	2935 rpm 3520 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.	37H238L869G1								
CAT.NO.	CEM7045T								
HP	7.5//5	T. CODE	T3C						
VOLTS	230/460//190/380								
AMPS	18/9//15.6/7.8								
RPM	3520//2935								
HZ	60//50	PH	3	CL	B				
SER.F.	1.00	DES	A	CODE	J				
RATING	40C AMB-CONT								
FRAME	213TC	NEMA-NOM-EFF							89.5
		PF	84						
BLANK									

AC Induction Motor Performance Data

Record # 86810

Preliminary Data Sheet

Winding: 37WGL869-R003			Type: 3728M		Enclosure: XPFC		
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		7.5		Full Load Torque		11.2 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		18/9		Breakdown Torque		40.3 LB-FT	
R.P.M.		3520		Pull-up Torque		19.7 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		21.8 LB-FT	
NEMA Design Code		A	KVA Code	J	Starting Current		68.4 A
Service Factor (S.F.)		1		No-load Current		3.52 A	
NEMA Nom. Eff.		89.5	Power Factor	84	Line-line Res. @ 25°C		1.19 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		50°C	
				Locked-rotor Power Factor		38.1	
				Rotor inertia		0.255 lb-ft²	

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	49	71	81	86	88	89
Efficiency	83.9	89.7	91	90.9	90.2	89.2
Speed	3580	3560	3540	3518	3494	3468
Line amperes	4.1	5.4	7.06	8.96	11	13.2

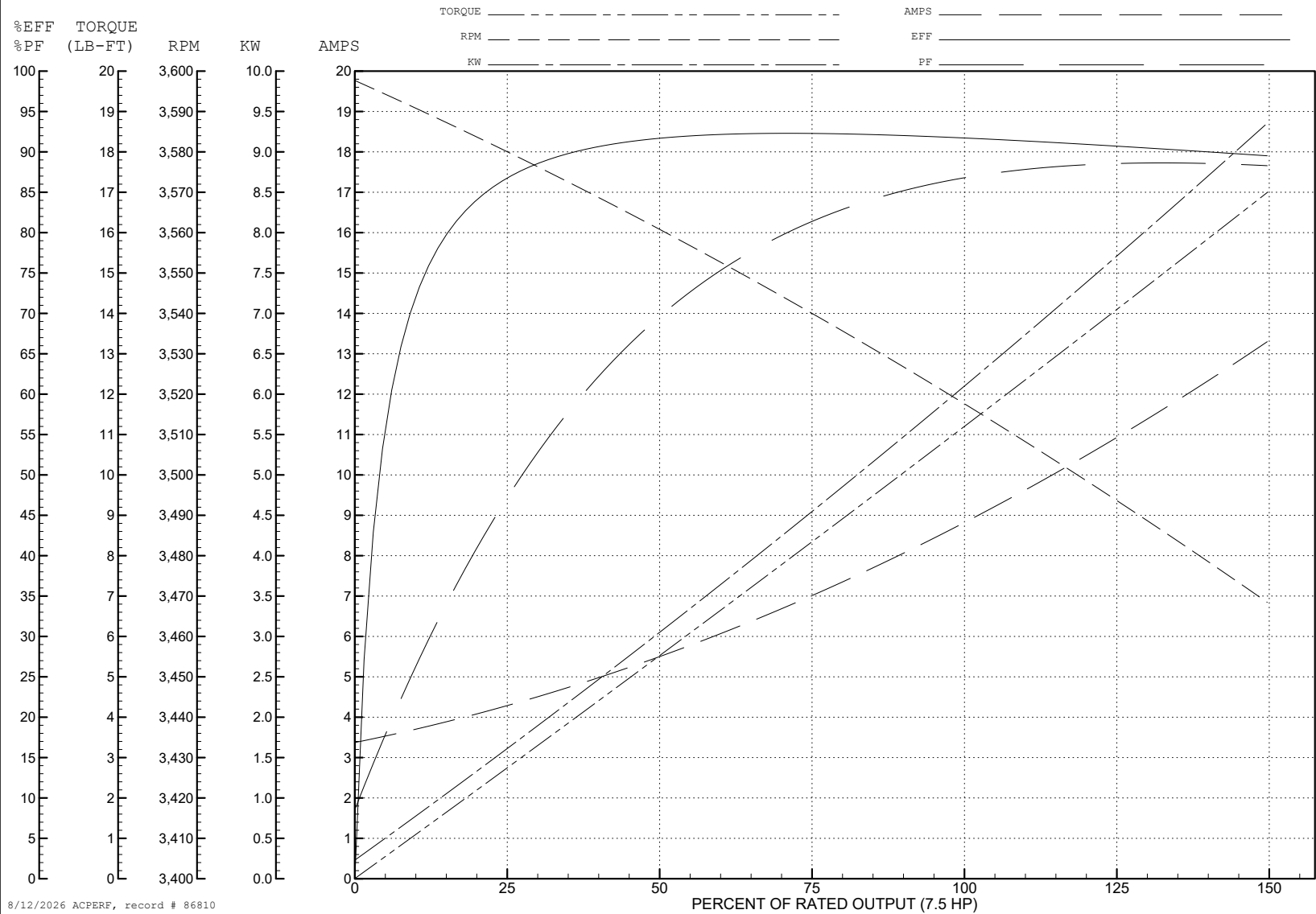
ABB Motors and Mechanical Inc.

WINDING # 37WGL869

Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 3520 RPM 460 V 3728M

TORQUES (LB-FT): PO=40.3 PU=19.7 LR=21.8 LRA=68.4



AC Induction Motor Performance Data

Record # 86811

Preliminary Data Sheet

Winding: 37WGL869-R003			Type: 3728M		Enclosure: XPFC	
Nameplate Data			380 V, 50 Hz: High Voltage Connection			
Rated Output (HP)		5	Full Load Torque		8.95 LB-FT	
Volts		190/380	Start Configuration		direct on line	
Full Load Amps		15.6/7.8	Breakdown Torque		45.7 LB-FT	
R.P.M.		2935	Pull-up Torque		22.2 LB-FT	
Hz	50	Phase	3	Locked-rotor Torque		24.5 LB-FT
NEMA Design Code		A	KVA Code		K	
Service Factor (S.F.)		1	Starting Current		66 A	
NEMA Nom. Eff.		89.5	Power Factor		81	
Rating - Duty		40C	AMB-CONT			
			Line-line Res. @ 25°C		1.19 Ω	
			Temp. Rise @ Rated Load		36°C	
			Locked-rotor Power Factor		43.8	
			Rotor inertia		0.255 lb-ft²	

Load Characteristics 380 V, 50 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	41	63	74	80	85	87
Efficiency	81.1	88	89.8	90.1	89.8	88.8
Speed	2984	2969	2952	2934	2915	2889
Line amperes	4.32	5.18	6.39	7.81	9.34	11.4

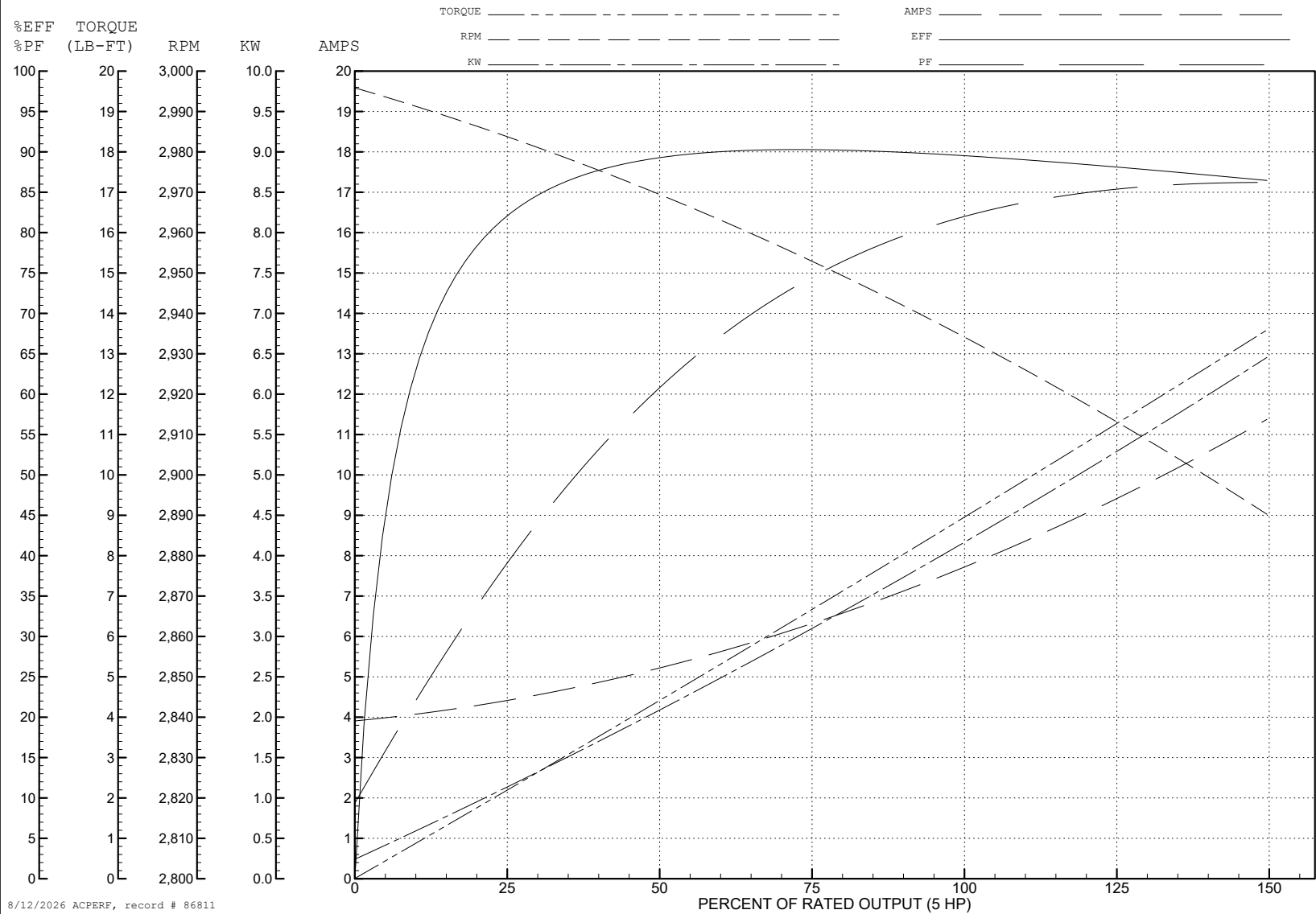
ABB Motors and Mechanical Inc.

WINDING # 37WGL869

Typical performance - not guaranteed values.

5 HP 3 PH 50 HZ 2935 RPM 380 V 3728M

TORQUES (LB-FT): PO=45.7 PU=22.2 LR=24.5 LRA=66





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