

ABB BALDOR RELIANCE III

Customer information packet

CEM7045T-I

7.5//5HP, 3520//2930RPM, 3PH, 60//50HZ, 213T

Class - CLI GP C,D

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 C,D
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 UL CSA EEV CSA
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 7.700 A @ 380.0 V 19.400 A @ 208.0 V 18.000 A @ 230.0 V 15.400 A @ 190.0 V
Design Code	A

Part Detail

Revision	H
Type	AC
Mech. spec.	37M353
Base	
Status	PRD/A
Elec. spec.	37WGR224
Layout	37LYM353
Eff. date	02-28-2024
CD Diagram	CD0005
Poles	02
Leads	9#14
Proprietary	False
Created date	11-22-2013

Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	7.7 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3728M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	20.32 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
Service Factor	1.15
Shaft Diameter	1.375 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible

Shaft Slinger Indicator	Shaft Slinger
Speed	2930 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

NP0977XPSLEV												
NO.							CC	010A				
SER.							TEMP CODE		T3C			
SPEC.	37M353R224G1											
CAT.NO.	CEM7045T-I											
HP	7.5//5											
VOLTS	230/460//190/380											
AMPS	18/9//15.4/7.7											
RPM	3520//2930 75C RISE						MOTOR WEIGHT		149			
HERTZ	60//50	PH	3	CL	F	DE BRG		6307				
SER.F.	1.15	DES	A	CODE		J	ODE BRG		6206			
FRAME	213TC		GREASE		POLYREX EM							
RATING	40C AMB-CONT											
					NEMA-NOM-EFF		89.5		PF	84		
	NEMA MG-1 PT 5,IP55											

AC Induction Motor Performance Data

Record # 38348

Typical performance - not guaranteed values

Winding: 37WGR224-R005				Type: 3728M		Enclosure: XPFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		7.5//5		Full Load Torque		10.9 LB-FT	
Volts		208-230/460//190/380		Start Configuration		direct on line	
Full Load Amps		19.4-18/9//15.4/7.7		Breakdown Torque		40.4 LB-FT	
R.P.M.		3520//2930		Pull-up Torque		20.6 LB-FT	
Hz		60//50		Phase		3	
NEMA Design Code		A		KVA Code		J	
Service Factor (S.F.)		1.15		No-load Current		3.73 A	
NEMA Nom. Eff.		89.5		Power Factor		84	
Rating - Duty		40C		AMB-CONT			
S.F. Amps				Locked-rotor Power Factor		33	
				Rotor inertia		0.255 LB-FT2	

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	45	69	79	84	87	89	86
Efficiency	81.5	88.8	90.5	90.6	90.1	89.2	90.3
Speed	3580.5	3562.7	3541.6	3520.3	3496.3	3470.9	3506
Line amperes	4.22	5.36	7.03	8.94	11	13.1	10.2

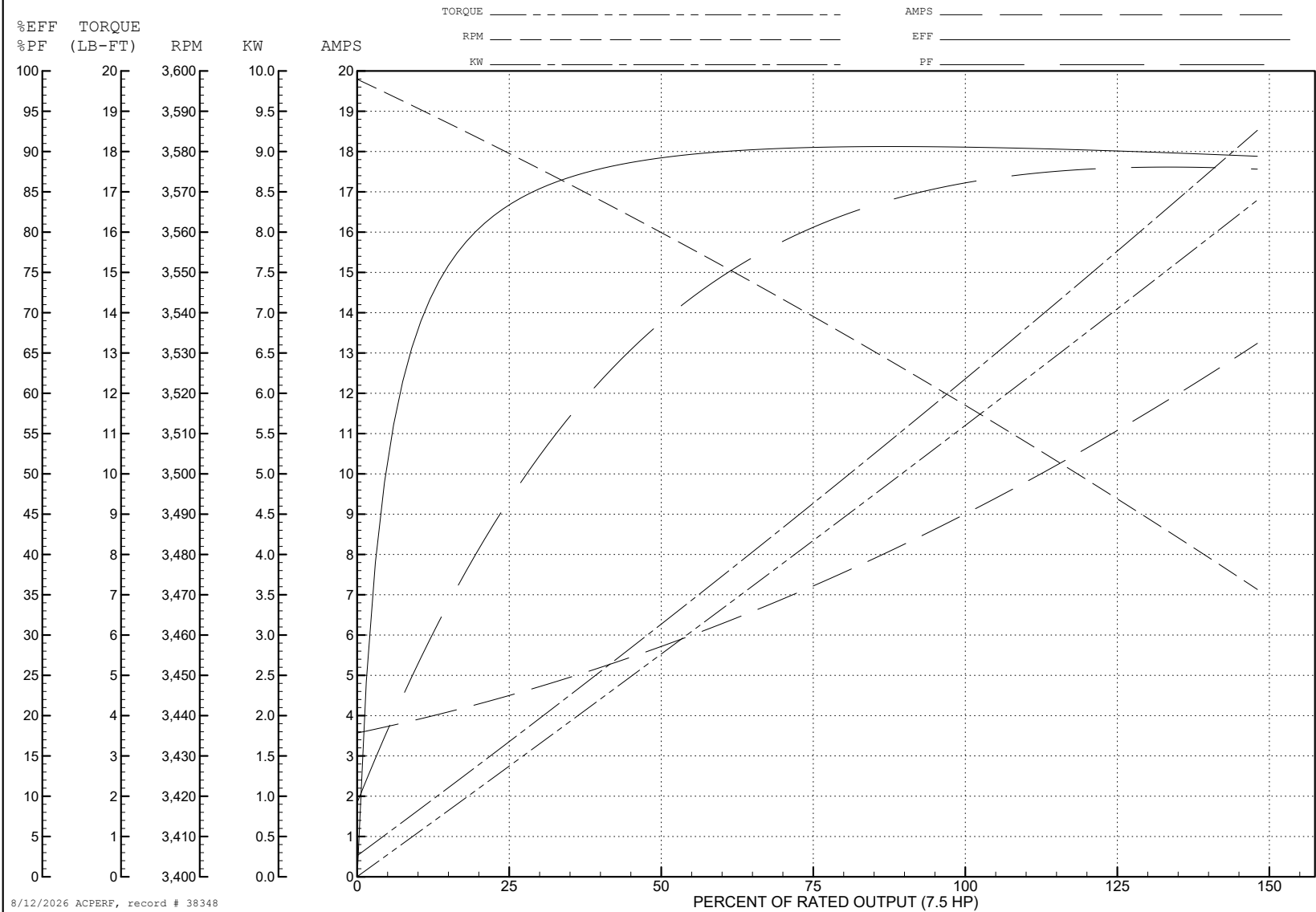
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WINDING # 37WGR224

Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 3520.3 RPM 460 V 3728M

TORQUES (LB-FT): PO=40.4 PU=20.6 LR=21.8 LRA=68.4



AC Induction Motor Performance Data

Record # 38350

Typical performance - not guaranteed values

Winding: 37WGR224-R005				Type: 3728M		Enclosure: XPFC	
Nameplate Data				380 V, 50 Hz: High Voltage Connection			
Rated Output (HP)		7.5//5		Full Load Torque		8.71 LB-FT	
Volts		208-230/460//190/380		Start Configuration		direct on line	
Full Load Amps		19.4-18/9//15.4/7.7		Breakdown Torque		38.5 LB-FT	
R.P.M.		3520//2930		Pull-up Torque		21.8 LB-FT	
Hz	60//50	Phase	3	Locked-rotor Torque		23 LB-FT	
NEMA Design Code		A	KVA Code	J	Starting Current		66.3 A
Service Factor (S.F.)		1.15		No-load Current		3.63 A	
NEMA Nom. Eff.		89.5	Power Factor	84	Line-line Res. @ 25°C		1.1 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		35°C	
S.F. Amps				Temp. Rise @ S.F. Load		42°C	
				Locked-rotor Power Factor		37	
				Rotor inertia		0.255 LB-FT2	

Load Characteristics 380 V, 50 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	42	65	76	82	85	88	84
Efficiency	73.7	83.9	86.9	87.9	87.7	87.5	87.8
Speed	2983	2968	2951	2934	2914	2894	2922
Line amperes	4.01	4.88	6.18	7.66	9.26	10.9	8.62

ABB Motors and Mechanical Inc.

WINDING # 37WGR224

Typical performance - not guaranteed values.

5 HP 3 PH 50 HZ 2934 RPM 380 V 3728M

TORQUES (LB-FT): PO=38.5 PU=21.8 LR=23 LRA=66.3

