

ABB BALDOR RELIANCE III

Customer information packet

VEM7044T-I

5 55C AMB @ 1.0SFHP, 1750 75C RISERPM, 3

Class - CLI GP C,D

Division - Division I

Specifications

Enclosure	XPFC
Frame	184TC
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	3.000 HP @ 50 HZ 5.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	380.0 V @ 50 HZ 230.0 V @ 60 HZ 190.0 V @ 50 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV CSA UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	5.200 A @ 380.0 V 6.500 A @ 460.0 V 13.600 A @ 208.0 V 13.000 A @ 230.0 V 10.400 A @ 190.0 V
Design Code	B
Drip Cover	No Drip Cover

Part Detail

Revision	G
Type	AC
Mech. spec.	36M654
Base	
Status	PRD/A
Elec. spec.	36WGT031
Layout	36LYM654
Eff. date	02-21-2024
CD Diagram	CD0005
Poles	04
Leads	9#16
Proprietary	False
Created date	10-12-2015

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	5.2 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3644M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	20.84 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 COMPLIANT
Service Factor	1.15
Shaft Diameter	1.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible

Shaft Slinger Indicator	Shaft Slinger
Speed	1450 rpm 1750 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.	36M654T031G3											
CAT.NO.	VEM7044T-I											
HP	5//3 55C AMB @ 1.0SF											
VOLTS	230/460//190/380											
AMPS	13/6.5//10.4/5.2											
RPM	1750//1450 75C RISE				MOTOR WEIGHT		115					
HERTZ	60//50	PH	3	CL	F	DE BRG	6206					
SER.F.	1.15	DES	B	CODE	K	ODE BRG	6205					
FRAME	184TC	GREASE		POLYREX EM								
RATING	40C AMB-CONT											
					NEMA-NOM-EFF		89.5		PF	80		
	NEMA MG-1 PT 5,IP55											

AC Induction Motor Performance Data

Record # 32376

Typical performance - not guaranteed values

Winding: 36WGT031-R071			Type: 3644M		Enclosure: XPFC			
Nameplate Data					460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		5//3		Full Load Torque		15.1 LB-FT		
Volts		230/460//190/380		Start Configuration		direct on line		
Full Load Amps		13/6.5//10.4/5.2		Breakdown Torque		59.57 LB-FT		
R.P.M.		1750//1450		Pull-up Torque		25.39 LB-FT		
Hz		60//50	Phase	3	Locked-rotor Torque		38.53 LB-FT	
NEMA Design Code		B		KVA Code	K	Starting Current		54.47 A
Service Factor (S.F.)				1.15		No-load Current		3.32 A
NEMA Nom. Eff.		89.5	Power Factor		80	Line-line Res. @ 25°C		2.26 Ω
Rating - Duty				40C AMB-CONT		Temp. Rise @ Rated Load		54°C
S.F. Amps						Temp. Rise @ S.F. Load		65°C
						Locked-rotor Power Factor		51.7
						Rotor inertia		0.409 LB-FT2

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	39	61	73	80	84	86	82
Efficiency	84.8	89.6	90.3	90.2	88.9	87.7	90
Speed	1790	1779	1767	1755	1742	1725	1746
Line amperes	3.62	4.36	5.37	6.55	7.9	9.67	7.3

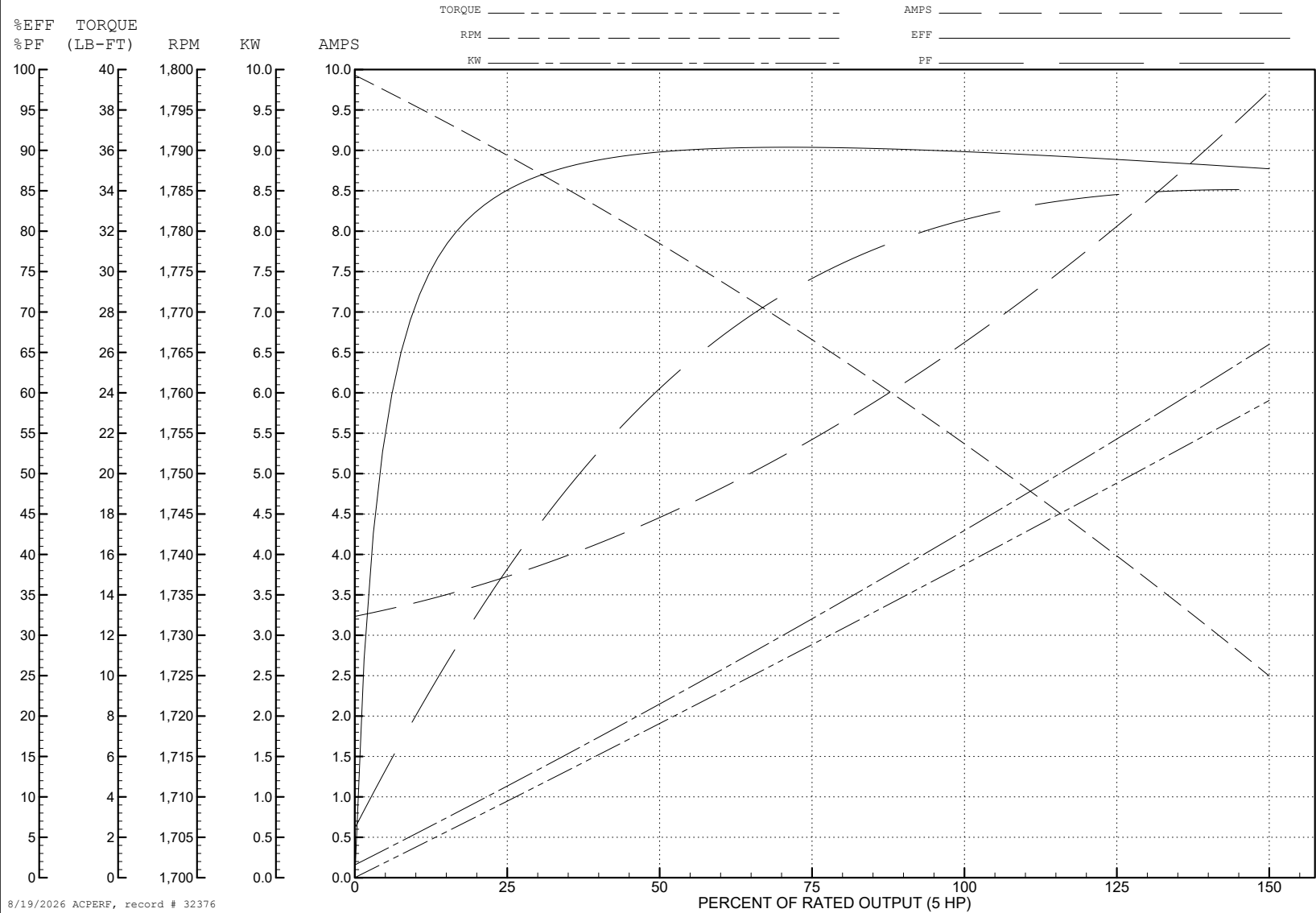
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WINDING # 36WGT031

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1755 RPM 460 V 3644M

TORQUES (LB-FT) : PO=59.57 PU=25.39 LR=38.53 LRA=54.47



AC Induction Motor Performance Data

Record # 38923

Typical performance - not guaranteed values

Winding: 36WGT031-R071			Type: 3644M		Enclosure: XPFC			
Nameplate Data				380 V, 50 Hz: High Voltage Connection				
Rated Output (HP)		5//3		Full Load Torque		10.84 LB-FT		
Volts		230/460//190/380		Start Configuration		direct on line		
Full Load Amps		13/6.5//10.4/5.2		Breakdown Torque		55.83 LB-FT		
R.P.M.		1750//1450		Pull-up Torque		25.63 LB-FT		
Hz		60//50	Phase	3	Locked-rotor Torque		38.89 LB-FT	
NEMA Design Code		B		KVA Code	K	Starting Current		51.63 A
Service Factor (S.F.)		1.15		No-load Current		3.28 A		
NEMA Nom. Eff.		89.5	Power Factor	80	Line-line Res. @ 25°C		2.26 Ω	
Rating - Duty		40C		AMB-CONT		Temp. Rise @ Rated Load		38°C
S.F. Amps						Temp. Rise @ S.F. Load		44°C
						Locked-rotor Power Factor		57.1
						Rotor inertia		0.409 LB-FT2

Load Characteristics 380 V, 50 Hz, 3 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	31	51	64	73	78	82	76
Efficiency	81	87.8	89.3	89.7	88.7	87.9	89.2
Speed	1492	1484	1475	1467	1457	1444	1467
Line amperes	3.46	3.9	4.52	5.26	6.15	7.34	5.8

ABB Motors and Mechanical Inc.

WINDING # 36WGT031

Typical performance - not guaranteed values.

3 HP 3 PH 50 HZ 1467 RPM 380 V 3644M

TORQUES (LB-FT) : PO=55.83 PU=25.63 LR=38.89 LRA=51.63

