

ABB BALDOR RELIANCE III

Customer information packet

8102W

24M 4P GRNDR

Specifications

Enclosure	TENV
Frame Material	Steel
Frequency	50.00 Hz 60.00 Hz 50.00 Hz 60.00 Hz
Motor Letter Type	Three Phase
Nameplate Output	.75
Number of Poles	4 4
Output @ Frequency	.750 HP @ 60 HZ .750 HP @ 50 HZ
Phase	3 3
Shaft Diameter	0.750 IN 0.750 IN
Speed	1500 rpm 1800 rpm 1500 rpm 1800 rpm
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage	208 V 230 V 460 V
Voltage @ Frequency	208.0 V @ 50 HZ 208.0 V @ 60 HZ 460.0 V @ 60 HZ 460.0 V @ 50 HZ 230.0 V @ 60 HZ 230.0 V @ 50 HZ
Agency Approvals	CSA
Ambient Temperature	40 °C
Base Indicator	Rigid

Part Detail

Revision	A
Type	AC
Mech. spec.	G8-166
Base	
Status	PRD/A
Elec. spec.	G8WG0377
Layout	G8LY0166
Eff. date	07-17-2024
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	02-23-2023

Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	3.000 A @ 230.0 V
	3.000 A @ 208.0 V
	1.500 A @ 460.0 V
Design Code	-
Duty Rating	CONT
Feedback Device	NO FEEDBACK
Insulation Class	B
KVA Code	-
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Standards	Other
Motor Type	3524M
Mounting Arrangement	F1
Overall Length	23.24 IN
Product Family	Grinder
Service Factor	1.00
Shaft Rotation	Phase Seq-Opp Std Rot (CWOE)
Shaft Slinger Indicator	No Slinger
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Winding	None
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP0113			
CAT.NO.	8102W		
HP	.75	VOLTS	208-230/460
PHASE	3	AMPS	3/1.5
HZ	50//60	RPM	1500//1800
SER.NO			
SPEC.	G8-166G0377		

Accessories

Part number	Description	Multiplier
GA16	PEDESTAL INDUSTRIAL, CAST IRON 6" - 10"	A8
GA14	PEDESTAL FABRICATED STEEL W/SHELVES	A8
GA20	PEDESTAL INDUSTRIAL, CAST IRON 8"-14"	A8
GA20E	PEDESTAL LIGHT INDUSTRIAL,STEEL	A8
GA24	WATER POT	A8
B80	8" 36 GRIT GRINDING WHEEL	A8
B81	8" 60 GRIT GRINDING WHEEL	A8
GA9	PAIR LIGHTED EYESHIELDS	A8
GA9-1	SINGLE LIGHTED EYESHIELD	A8
GA9S	PAIR EYESHIELDS W/ ON-OFF SWITCH	A8
GA11	PAIR EYESHIELDS	A8
DC8	DUST CONTROL UNIT	A8

AC Induction Motor Performance Data

Record # 91058

Preliminary Data Sheet

Winding: G8WG0377-R001			Type: G824M		Enclosure: TENV			
Nameplate Data			460 V, 50 Hz: High Voltage Connection					
Rated Output (HP)			.75	Full Load Torque		2.69 LB-FT		
Volts			208-230/460	Start Configuration		direct on line		
Full Load Amps			2.75-2.9/1.45//2.48-2.4/1.2	Breakdown Torque		15.71 LB-FT		
R.P.M.			1500//1800	Pull-up Torque		12.63 LB-FT		
Hz		50//60	Phase	3	Locked-rotor Torque		14.64 LB-FT	
NEMA Design Code		- KVA Code		-	Starting Current		13.78 A	
Service Factor (S.F.)			1	No-load Current		1.3 A		
NEMA Nom. Eff.		0	Power Factor		0	Line-line Res. @ 25°C		24 Ω
Rating - Duty			40C AMB-CONT	Temp. Rise @ Rated Load		77°C		
				Locked-rotor Power Factor		83.3954		
				Rotor inertia		0.173 lb-ft²		

Load Characteristics 460 V, 50 Hz, 0.75 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	24	36	47	58	66	72
Efficiency	57.6	71.5	77.2	79	80	79.8
Speed	1489	1480	1470	1460	1449	1438
Line amperes	1.31	1.35	1.43	1.54	1.67	1.83

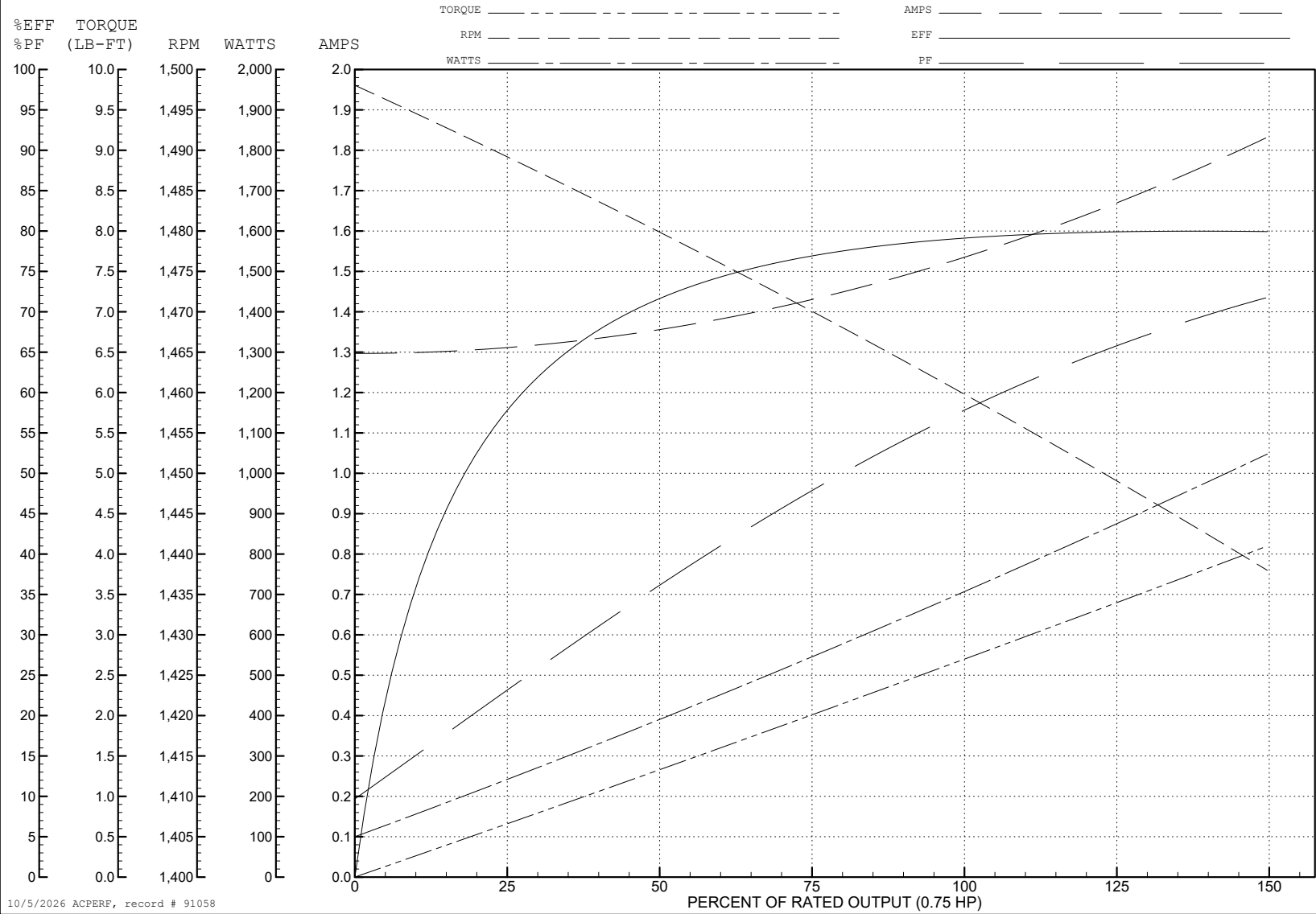
ABB Motors and Mechanical Inc.

WINDING # G8WG0377

Typical performance - not guaranteed values.

0.75 HP 3 PH 50 HZ 1460 RPM 460 V G824M

TORQUES (LB-FT): PO=15.71 PU=12.63 LR=14.64 LRA=13.78



AC Induction Motor Performance Data

Record # 91059

Preliminary Data Sheet

Winding: G8WG0377-R001			Type: G824M		Enclosure: TENV	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		.75	Full Load Torque		2.25 LB-FT	
Volts		208-230/460	Start Configuration		direct on line	
Full Load Amps		2.75-2.9/1.45//2.48-2.4/1.2	Breakdown Torque		12.14 LB-FT	
R.P.M.		1500//1800	Pull-up Torque		9.18 LB-FT	
Hz		50//60	Phase		3	
NEMA Design Code		-	KVA Code		-	
Service Factor (S.F.)		1	No-load Current		0.946 A	
NEMA Nom. Eff.		0	Power Factor		0	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		55°C	
			Locked-rotor Power Factor		77.6342	
			Rotor inertia		0.173 lb-ft²	

Load Characteristics 460 V, 60 Hz, 0.75 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	28	44	57	67	74	79
Efficiency	65.5	77	81.4	82.7	82.7	82
Speed	1787	1776	1765	1752	1739	1725
Line amperes	0.965	1.03	1.13	1.27	1.43	1.62

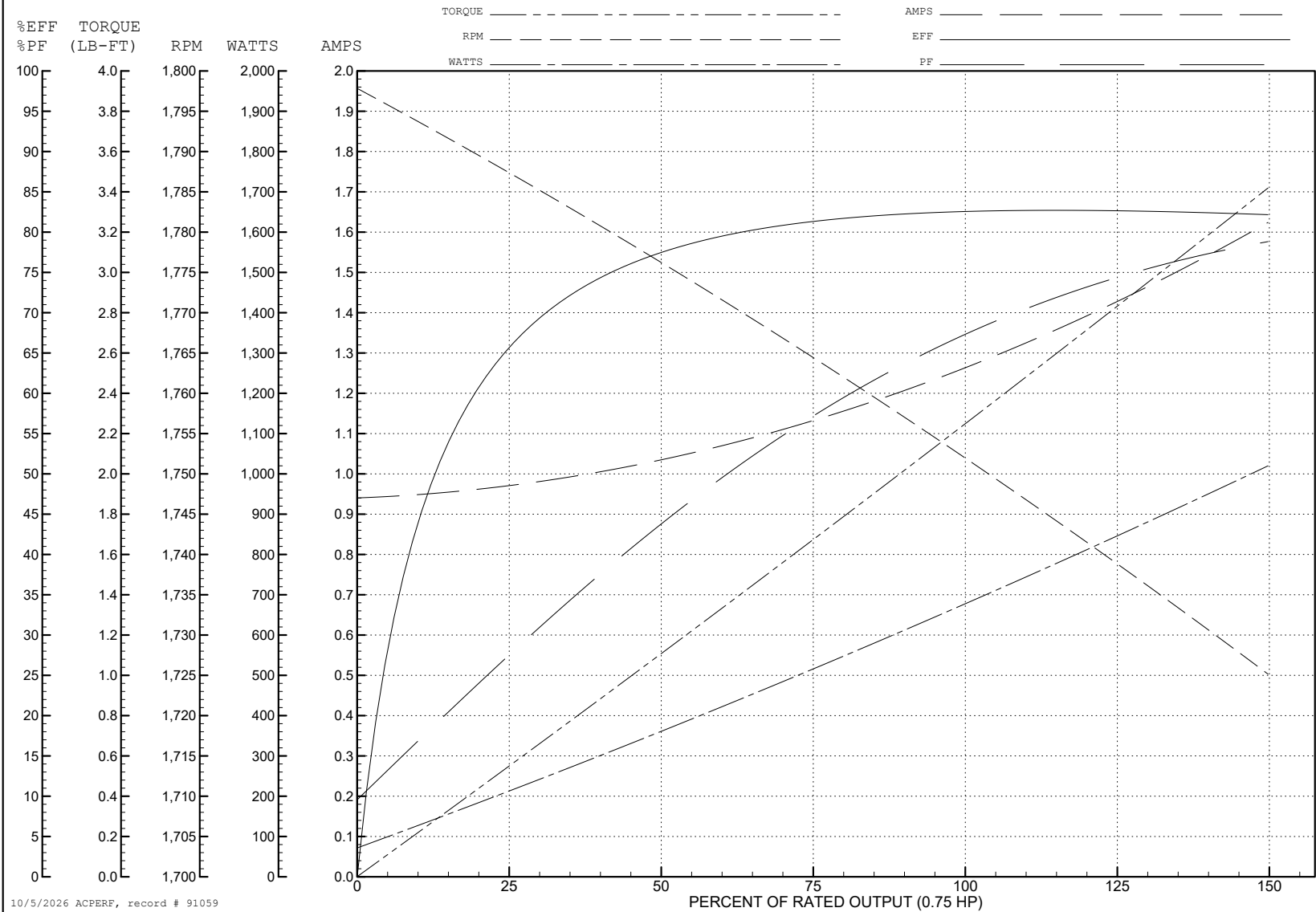
ABB Motors and Mechanical Inc.

WINDING # G8WG0377

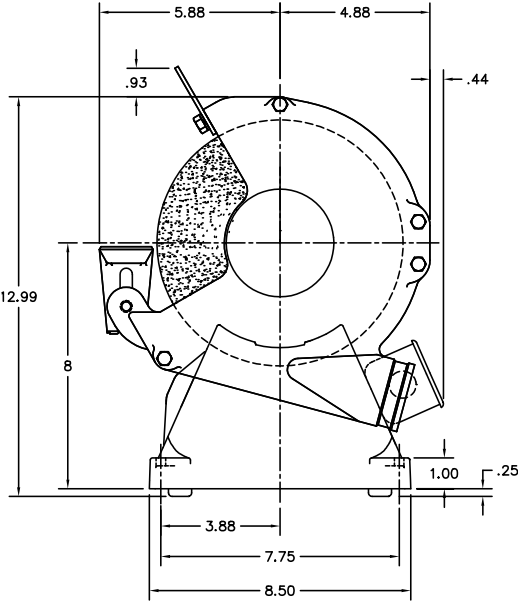
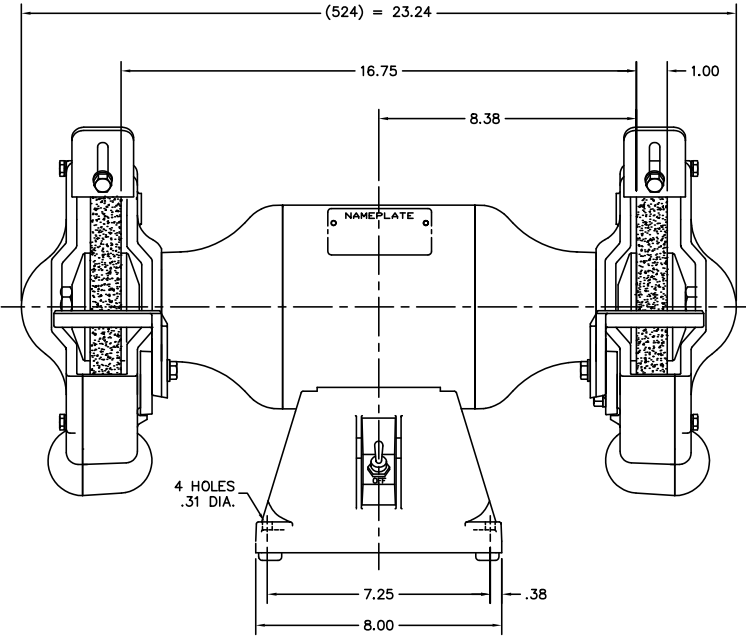
Typical performance - not guaranteed values.

0.75 HP 3 PH 60 HZ 1752 RPM 460 V G824M

TORQUES (LB-FT): PO=12.14 PU=9.18 LR=10.64 LRA=12.71



GBLY0166



CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

REV. DESC: OMITTED FELT WSHR HA1025A03 & CHG'D TO SEALED BRGS			
REV. LTR: H	BY: SSS	REVISED: 09/29/00 12:54	TDR: 0212666
FILE: AAA00064345			REF: -
MTL: -			

BALDOR ELECTRIC Co.

8" GRINDER TENV MODEL 524M

GBLY0166

