

ABB BALDOR RELIANCE III

Customer information packet 1409W

40M 4P GRINDER

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	7.5
Number of Poles	4 4
Output @ Frequency	7.500 HP @ 50 HZ 7.500 HP @ 60 HZ
Phase	3 3
Shaft Diameter	1.250 IN 1.250 IN
Speed	1500 rpm 1800 rpm 1500 rpm 1800 rpm
Synchronous Speed @ Frequency	1500 RPM @ 50 HZ
Voltage	575 V
Voltage @ Frequency	575.0 V @ 60 HZ 575.0 V @ 50 HZ
Agency Approvals	CSA
Ambient Temperature	40 °C
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Current @ Voltage	8.000 A @ 575.0 V
Design Code	B
Duty Rating	CONT
Feedback Device	NO FEEDBACK

Part Detail

Revision	E
Type	AC
Mech. spec.	G14-116
Base	
Status	PRD/A
Elec. spec.	G4WG0120
Layout	G4LY0116
Eff. date	06-05-2026
CD Diagram	CD0252
Poles	04
Leads	3#14
Proprietary	False
Created date	11-20-2020

Insulation Class	B
KVA Code	H
Motor Lead Quantity/Wire Size	3 @ 14 AWG
Motor Standards	Other
Motor Type	3740M
Mounting Arrangement	F1
Overall Length	37.39 IN
Product Family	Grinder
Service Factor	1.00
Shaft Rotation	Phase Seq-Opp Std Rot (CWODE)
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

NP3412L			
CAT.NO.	1409W		
HP	7.5	VOLTS	575
PHASE	3	AMPS	8
HZ	50//60	RPM	1500//1800
SER.NO			
SPEC.	G14-116A-0120		
BLANK			

Accessories

Part number	Description	Multiplier
GA20	PEDESTAL INDUSTRIAL, CAST IRON 8"-14"	A8
GA9	PAIR LIGHTED EYESHIELDS	A8
GA9-1	SINGLE LIGHTED EYESHIELD	A8
GA9S	PAIR EYESHIELDS W/ ON-OFF SWITCH	A8
GA11	PAIR EYESHIELDS	A8
B147	14" 30 GRIT GRINDING WHEEL	A8
B148	14" 46 GRIT GRINDING WHEEL	A8
DC14-3	DUST CONTROL FOR 14 IN GRINDER	A8

AC Induction Motor Performance Data

Record # 85539

Preliminary Data Sheet

Winding: G4WG0120-R001		Type: G1440M	Enclosure: TENV
Nameplate Data		575 V, 60 Hz: Single Voltage Motor	
Rated Output (HP)	7.5	Full Load Torque	22.4 LB-FT
Volts	575	Start Configuration	direct on line
Full Load Amps	8	Breakdown Torque	50.6 LB-FT
R.P.M.	1500//1800	Pull-up Torque	20 LB-FT
Hz	50//60 Phase	Locked-rotor Torque	25.5 LB-FT
NEMA Design Code	B KVA Code	Starting Current	31.5 A
Service Factor (S.F.)	1	No-load Current	2.28 A
NEMA Nom. Eff.	0 Power Factor	Line-line Res. @ 25°C	3.79 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	
		Locked-rotor Power Factor	40.1
		Rotor inertia	0.984 lb-ft ²

Load Characteristics 575 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	56	78	85	88	89	88
Efficiency	90.1	92.2	91.8	90.8	89.3	87.4
Speed	1791	1783	1773	1763	1751	1737
Line amperes	2.8	3.94	5.39	7.03	8.87	11

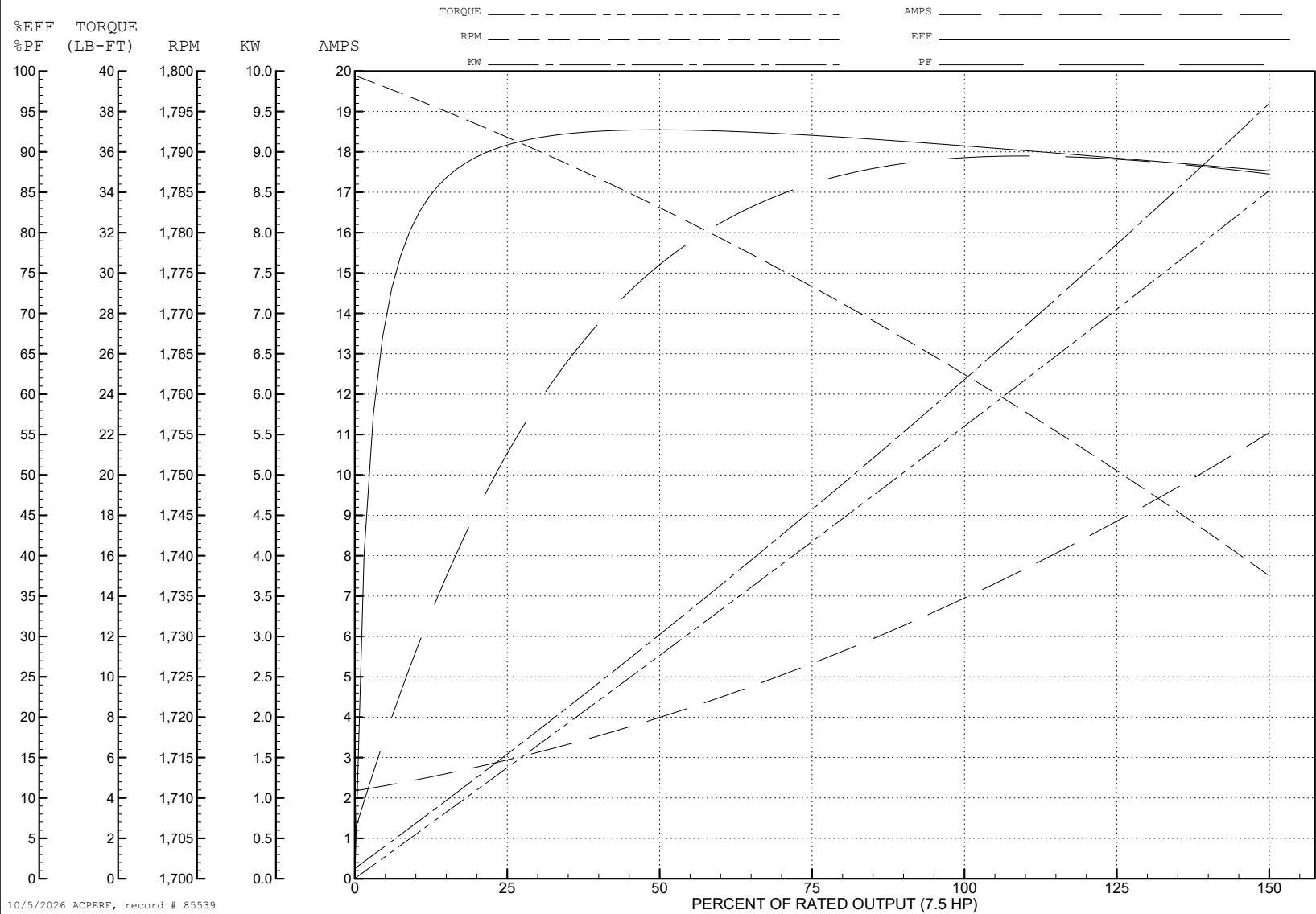
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WINDING # G4WG0120

Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 1763 RPM 575 V G1440M

TORQUES (LB-FT): PO=50.6 PU=20 LR=25.5 LRA=31.5



AC Induction Motor Performance Data

Record # 85540

Preliminary Data Sheet

Winding: G4WG0120-R001			Type: G1440M		Enclosure: TENV	
Nameplate Data				575 V, 50 Hz: Single Voltage Motor		
Rated Output (HP)		7.5	Full Load Torque		26.8 LB-FT	
Volts		575	Start Configuration		direct on line	
Full Load Amps		8	Breakdown Torque		71.2 LB-FT	
R.P.M.		1500//1800	Pull-up Torque		20 LB-FT	
Hz	50//60	Phase	3	Locked-rotor Torque		39.8 LB-FT
NEMA Design Code		B	KVA Code	H	Starting Current	
Service Factor (S.F.)		1	No-load Current		3.14 A	
NEMA Nom. Eff.		0	Power Factor	0	Line-line Res. @ 25°C	
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load	
				Locked-rotor Power Factor		45.7
				Rotor inertia		0.984 lb-ft²

Load Characteristics 575 V, 50 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	45	69	80	85	87	88
Efficiency	88	91	91.1	90.3	89	87.3
Speed	1493	1485	1478	1469	1460	1449
Line amperes	3.52	4.5	5.8	7.34	9.07	11

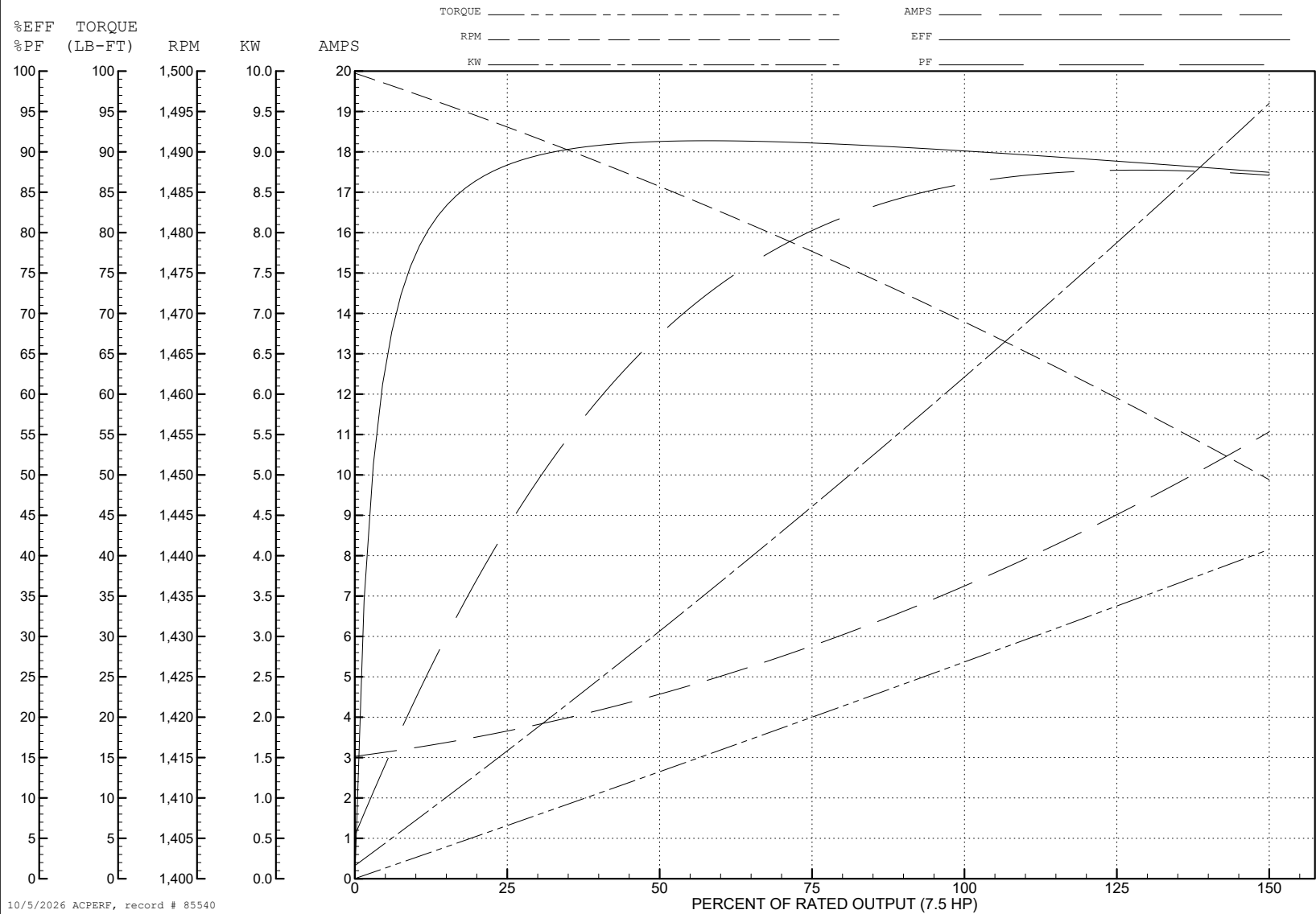
ABB Motors and Mechanical Inc.

WINDING # G4WG0120

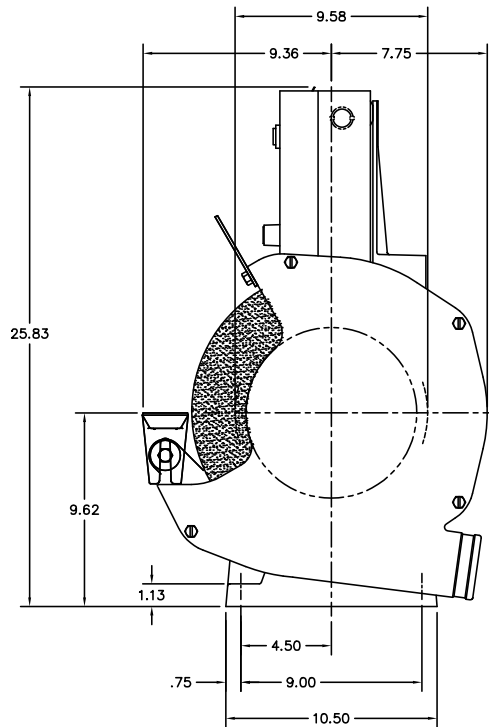
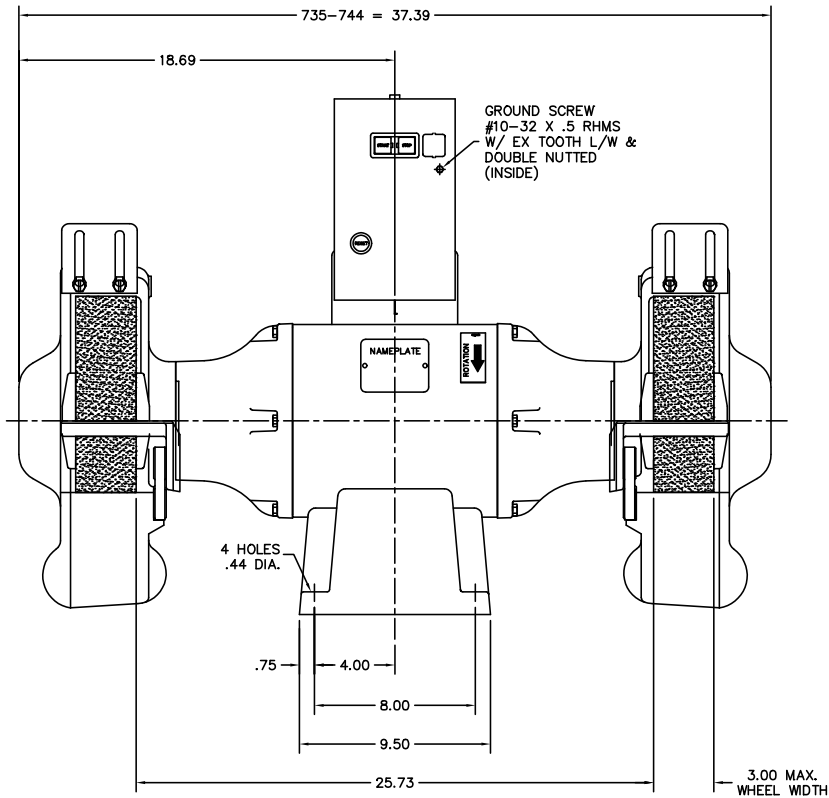
Typical performance - not guaranteed values.

7.5 HP 3 PH 50 HZ 1469 RPM 575 V G1440M

TORQUES (LB-FT): PO=71.2 PU=20 LR=39.8 LRA=37.7



G4LY0116



CUST. NAME		CUST. P.O.		CERTIFIED BY		MODEL		INSUL	AMB	
H.P.	MTG	TYPE	R.P.M.	VOLTS		ENCL	PHASE	FREQ	FRAME	
REV. DESC: MOVED STARTER BOX TO CENTER OF MOTOR						BALDOR ELECTRIC Co.				
REV. LTR: A		BY: JD	REVISED: 01/07/00 1:55		TDR: 0199019					
FILE: AAA00066297				MDL: -						
MTL: -						STD 14" GRINDER 37 W/REAR EXHAUST & 'GE' MAGNETIC STARTER				

G4LY0116

