

ABB BALDOR RELIANCE III

Customer information packet 1406W

35M 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	5
Number of Poles	4
	4
Output @ Frequency	5.000 HP @ 60 HZ
	5.000 HP @ 50 HZ
Phase	3
	3
Shaft Diameter	1.250 IN
	1.250 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	460.0 V @ 60 HZ
	460.0 V @ 50 HZ
	208.0 V @ 50 HZ
	208.0 V @ 60 HZ
	230.0 V @ 50 HZ
	230.0 V @ 60 HZ
Agency Approvals	CSA
Ambient Temperature	40 °C
Base Indicator	Rigid

Part Detail

Revision	E
Type	AC
Mech. spec.	G14-116
Base	
Status	PRD/A
Elec. spec.	G4WG0119
Layout	G4LY0116
Eff. date	06-05-2026
CD Diagram	CD0258
Poles	04
Leads	9#14
Proprietary	False
Created date	11-20-2020

Current @ Voltage	6.350 A @ 230.0 V
	12.700 A @ 208.0 V
Design Code	B
Duty Rating	CONT
Insulation Class	B
KVA Code	H
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Standards	Other
Motor Type	3735M
Mounting Arrangement	F1
Product Family	Grinder
Service Factor	1.00
Shaft Rotation	Phase Seq-Opp Std Rot (CWOE)
Speed Code	Single Speed
Starting Method	Direct on line
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3412L			
CAT.NO.	1406W		
HP	5	VOLTS	230
PHASE	3	AMPS	12.7
HZ	50//60	RPM	1500//1800
SER.NO			
SPEC.	G14-116E-0119G1		
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 # 85538

Typical performance - not guaranteed values

Winding: G4WG0119-R001		Type: G1435M	Enclosure: TENV
Nameplate Data		460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	5	Full Load Torque	14.88 LB-FT
Volts	208-230/460	Start Configuration	direct on line
Full Load Amps	12.7/6.35	Breakdown Torque	53.78 LB-FT
R.P.M.	1500//1800	Pull-up Torque	22.93 LB-FT
Hz	50//60 Phase	Locked-rotor Torque	31.17 LB-FT
NEMA Design Code	B KVA Code	Starting Current	41.65 A
Service Factor (S.F.)	1	No-load Current	3.16 A
NEMA Nom. Eff.	0 Power Factor	Line-line Res. @ 25°C	2.06 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	
		Locked-rotor Power Factor	39.4
		Rotor inertia	0.861 lb-ft ²

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	41	63	75	82	85	87
Efficiency	82.7	88.7	89.9	90.1	90	89.4
Speed	1791	1784	1776	1768	1759	1749
Line amperes	3.49	4.18	5.18	6.35	7.63	9.02

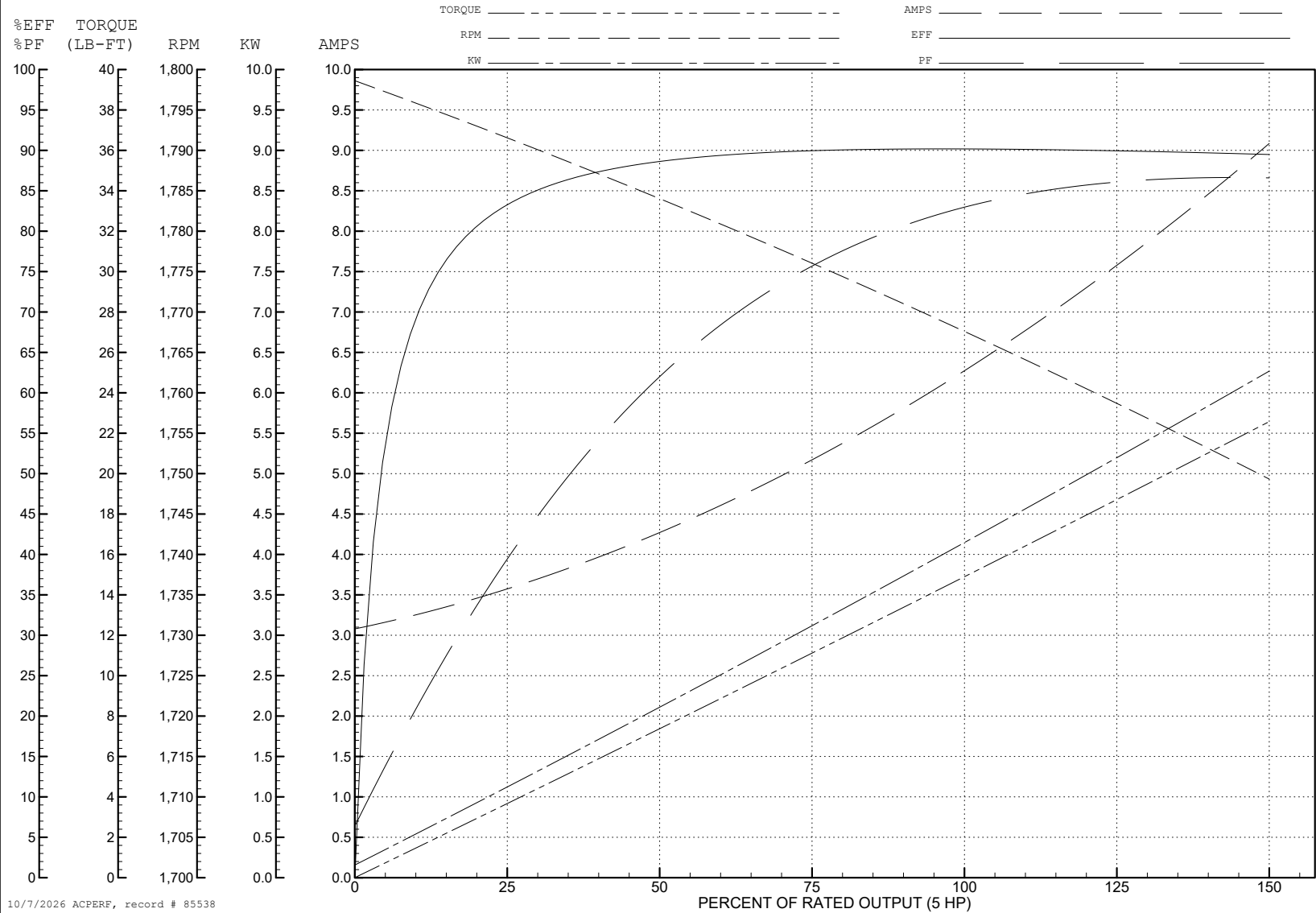
ABB Motors and Mechanical Inc.

WINDING # G4WG0119

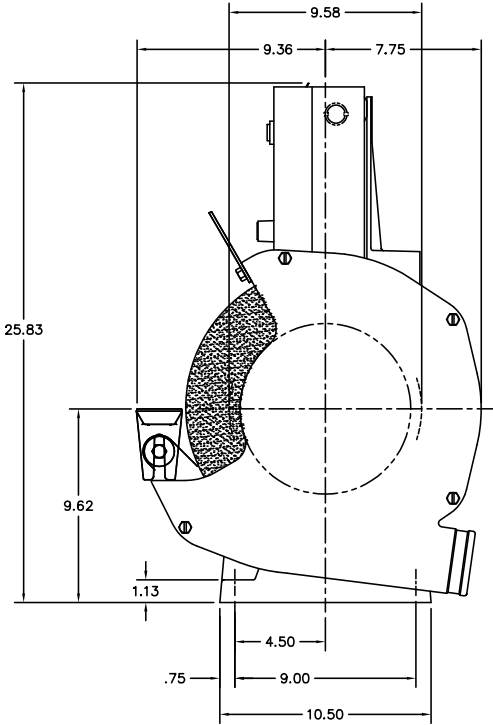
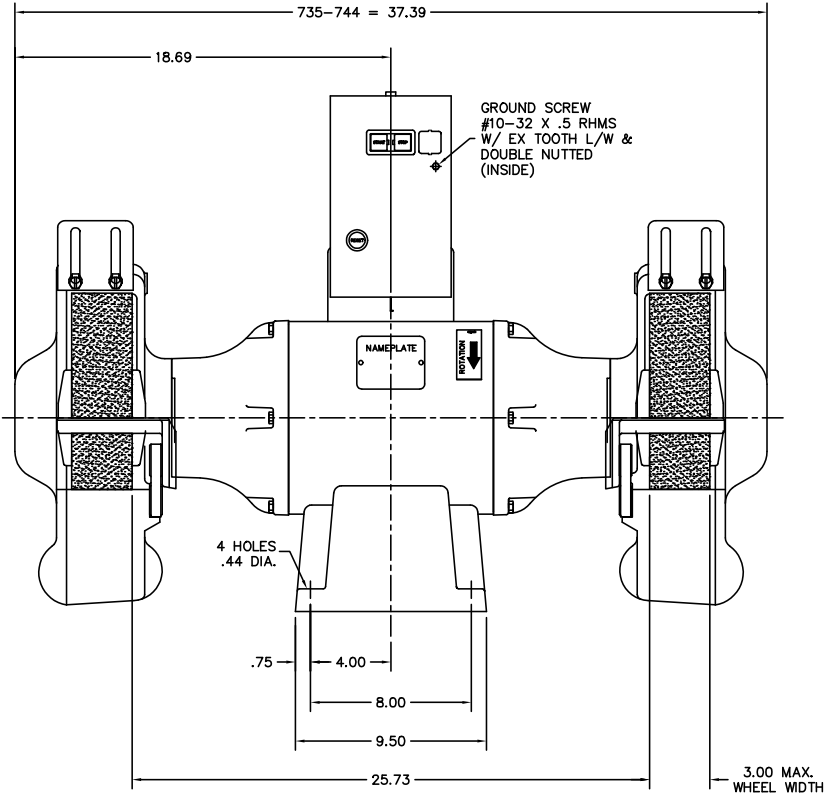
Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1768 RPM 460 V G1435M

TORQUES (LB-FT): PO=53.78 PU=22.93 LR=31.17 LRA=41.65



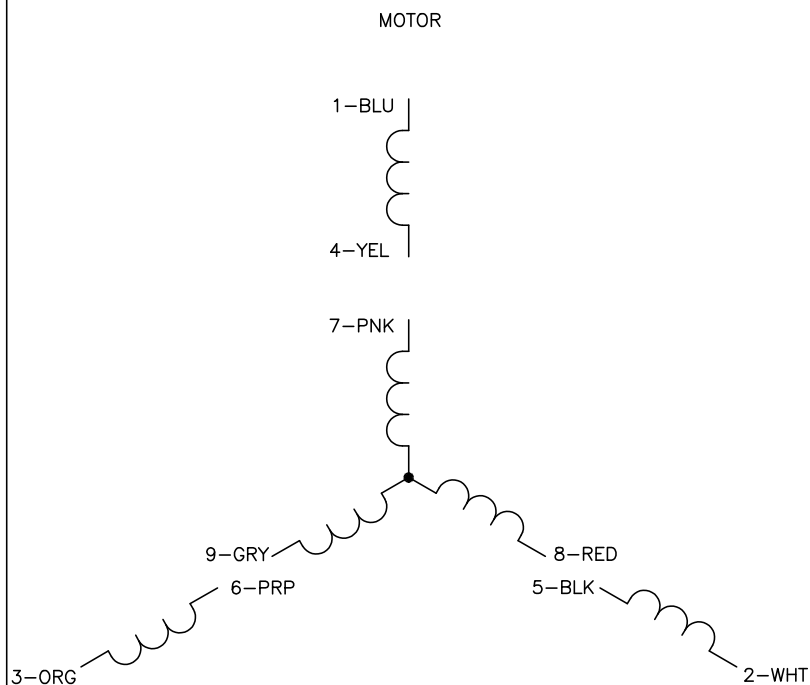
G4LY0116



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

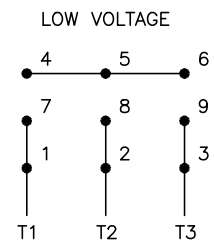
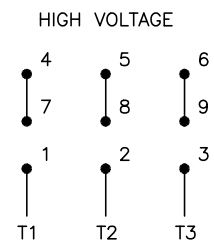
CD0258



NOTES:

1. GROUND BASE TO BAND.
2. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

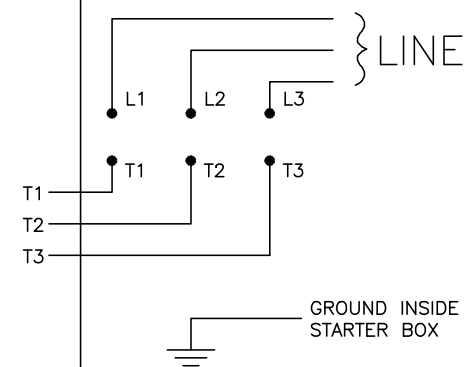
STARTER BRACKET CONDUIT BOX



NOTE:

THE MOTOR IS FACTORY CONNECTED FOR THE SAME VOLTAGE AS THE MAGNETIC STARTER. A MAGNETIC STARTER FOR THE PROPER VOLTAGE EQUIPPED WITH THE CORRECT HEATER ELEMENTS WILL BE NEEDED FOR A VOLTAGE CONNECTION CHANGE.

STARTER



NOTE:

INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: C	BY: EAH	REVISED: 05/05/99 11:35	TDR: 0179909
89Z000		FILE: AAA00051260	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEAD, GRINDER OR BUFFER W/MAGNETIC STARTER

CD0258

