ABB BALDOR RELIANCE

Customer information packet

1408W

5HP, 1500/1800RPM, 3PH, 50/60HZ, 3735M, GRND

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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
Product Style	GRINDER
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	5.500 A @ 575.0 V
Design Code	B
Duty Rating	CONT
Feedback Device	NO FEEDBACK
Insulation Class	B

Part Detail

Revision	AA
Type	AC
Mech. spec.	G14-116
Base	
Status	PRD/A
Elec. spec.	G4WG0047
Layout	G4LY0116
Eff. date	06-05-2026
CD Diagram	CD0252
Poles	04
Leads	3#14
Proprietary	False
Created date	01-01-0001

KVA Code	H
Motor Lead Quantity/Wire Size	3 @ 14 AWG
Motor Standards	Other
Motor Type	3735M
Mounting Arrangement	F1
Overall Length	37.39 IN
Product Family	Grinder
Service Factor	1.00
Shaft Extension Location	Double Shaft
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.	1408W		
HP	5	**VOLTS**	575
PHASE	3	**AMPS**	5.5
HZ	50//60	**RPM**	1500//1800
SER.NO			
SPEC.	G14-116D-0047		
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 # 16695
Typical performance - not guaranteed values

Winding: G4WG0047-R001	**Type:** 3735M	**Enclosure:** TENV

Nameplate Data				**575 V, 50 Hz: Single Voltage Motor**	
Rated Output (HP)			5	**Full Load Torque**	18.1 LB-FT
Volts			575	**Start Configuration**	direct on line
Full Load Amps			5.5	**Breakdown Torque**	73.1 LB-FT
R.P.M.			1500//1800	**Pull-up Torque**	40 LB-FT
Hz	50//60	**Phase**	3	**Locked-rotor Torque**	44 LB-FT
NEMA Design Code	B	**KVA Code**	H	**Starting Current**	37.6 A
Service Factor (S.F.)			1	**No-load Current**	2.61 A
NEMA Nom. Eff.	0	**Power Factor**	0	**Line-line Res. @ 25ºC**	3.55 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	
				Locked-rotor Power Factor	47
				Rotor inertia	0.74 LB-FT2

Load Characteristics 575 V, 50 Hz, 5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**
Power Factor	43	64	76	83	86	88
Efficiency	75.6	84.1	86.6	87.2	87.1	86.4
Speed	1489	1478	1467	1456	1443	1430
Line amperes	2.89	3.47	4.26	5.2	6.24	7.37

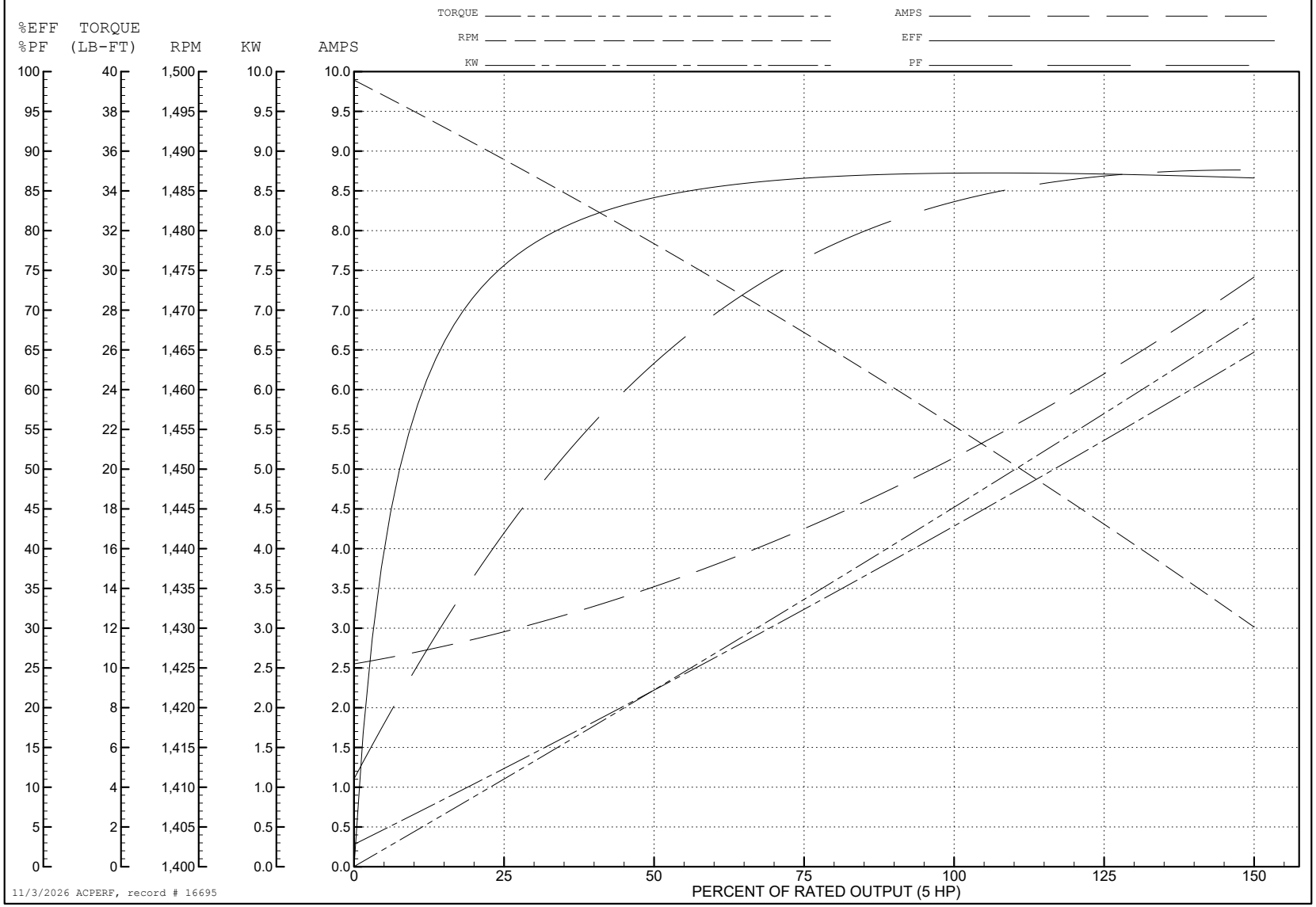
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WINDING # G4WG0047

5 HP 3 PH 50 HZ 1456 RPM 575 V 3735M

Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=73.1 PU=40 LR=44 LRA=37.6



AC Induction Motor Performance Data
Record # 16697
Typical performance - not guaranteed values

Winding: G4WG0047-R001	**Type:** 3735M	**Enclosure:** TENV

Nameplate Data				**575 V, 60 Hz: Single Voltage Motor**	
Rated Output (HP)			5	**Full Load Torque**	15.1 LB-FT
Volts			575	**Start Configuration**	direct on line
Full Load Amps			5.5	**Breakdown Torque**	51.1 LB-FT
R.P.M.			1500//1800	**Pull-up Torque**	23 LB-FT
Hz	50//60	**Phase**	3	**Locked-rotor Torque**	26.4 LB-FT
NEMA Design Code	B	**KVA Code**	H	**Starting Current**	31.3 A
Service Factor (S.F.)			1	**No-load Current**	1.92 A
NEMA Nom. Eff.	0	**Power Factor**	0	**Line-line Res. @ 25ºC**	3.55 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	
				Locked-rotor Power Factor	40
				Rotor inertia	0.74 LB-FT2

Load Characteristics 575 V, 60 Hz, 5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**
Power Factor	54	74	83	87	89	90
Efficiency	77.4	85.2	87.4	87.8	87.5	86.7
Speed	1786	1774	1761	1747	1731	1715
Line amperes	2.27	2.97	3.87	4.88	5.98	7.18

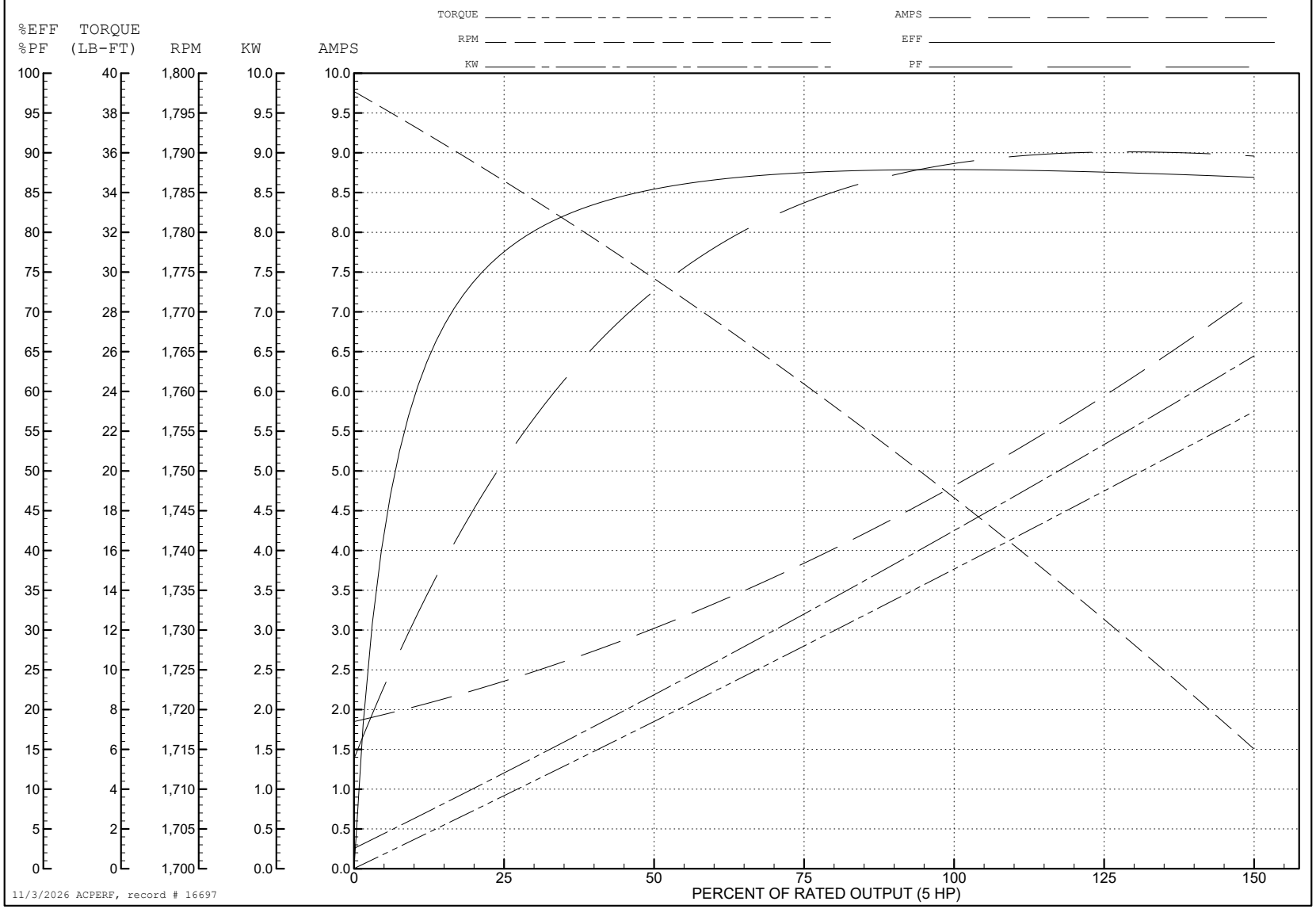
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WINDING # G4WG0047

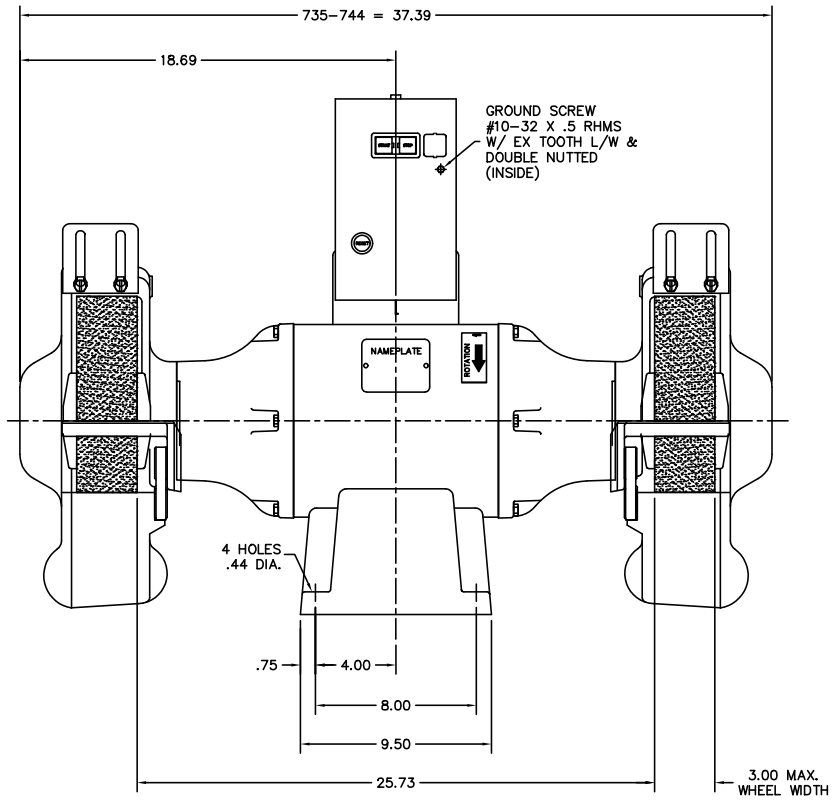
5 HP 3 PH 60 HZ 1747 RPM 575 V 3735M

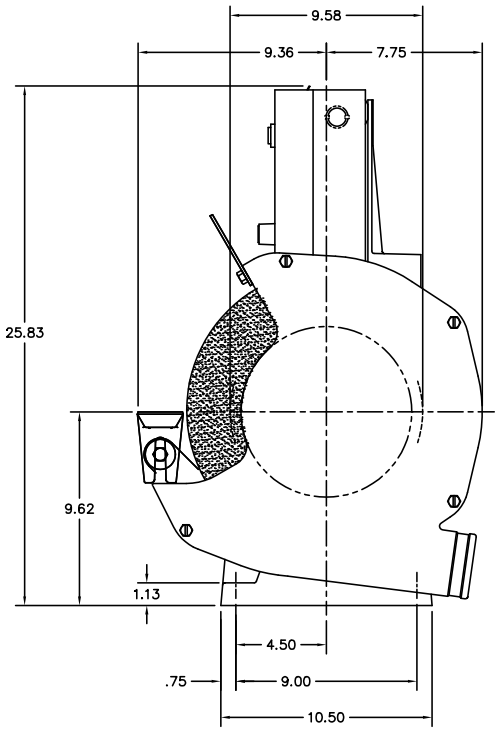
Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=51.1 PU=23 LR=26.4 LRA=31.3



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					
REV. LTR: A	BY: JD	REVISED: 01/07/00 1:55	TDR: 0199019		
FILE: AAA00066297			MDL: –		
MTL: –					

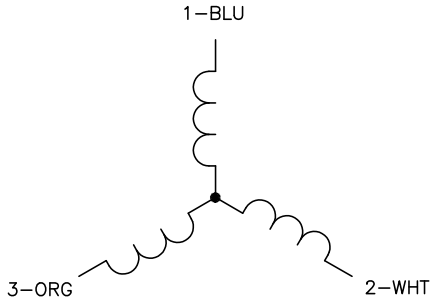
BALDOR ELECTRIC Co.

STD 14" GRINDER 37 W/REAR EXHAUST & 'GE' MAGNETIC STARTER

G4LY0116

CD0252

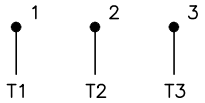
MOTOR



NOTES:

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

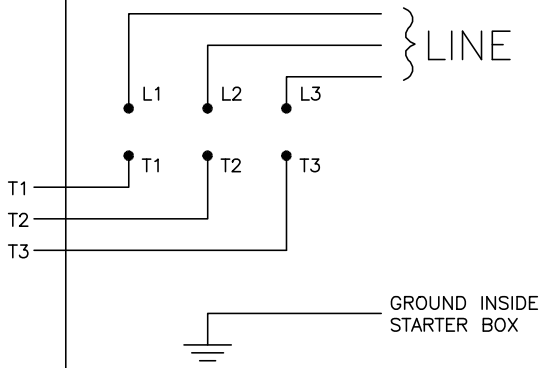
STARTER BRACKET CONDUIT BOX



NOTE:

THE MOTOR VOLTAGE IS MATCHED TO THE MAGNETIC STARTER.

STARTER

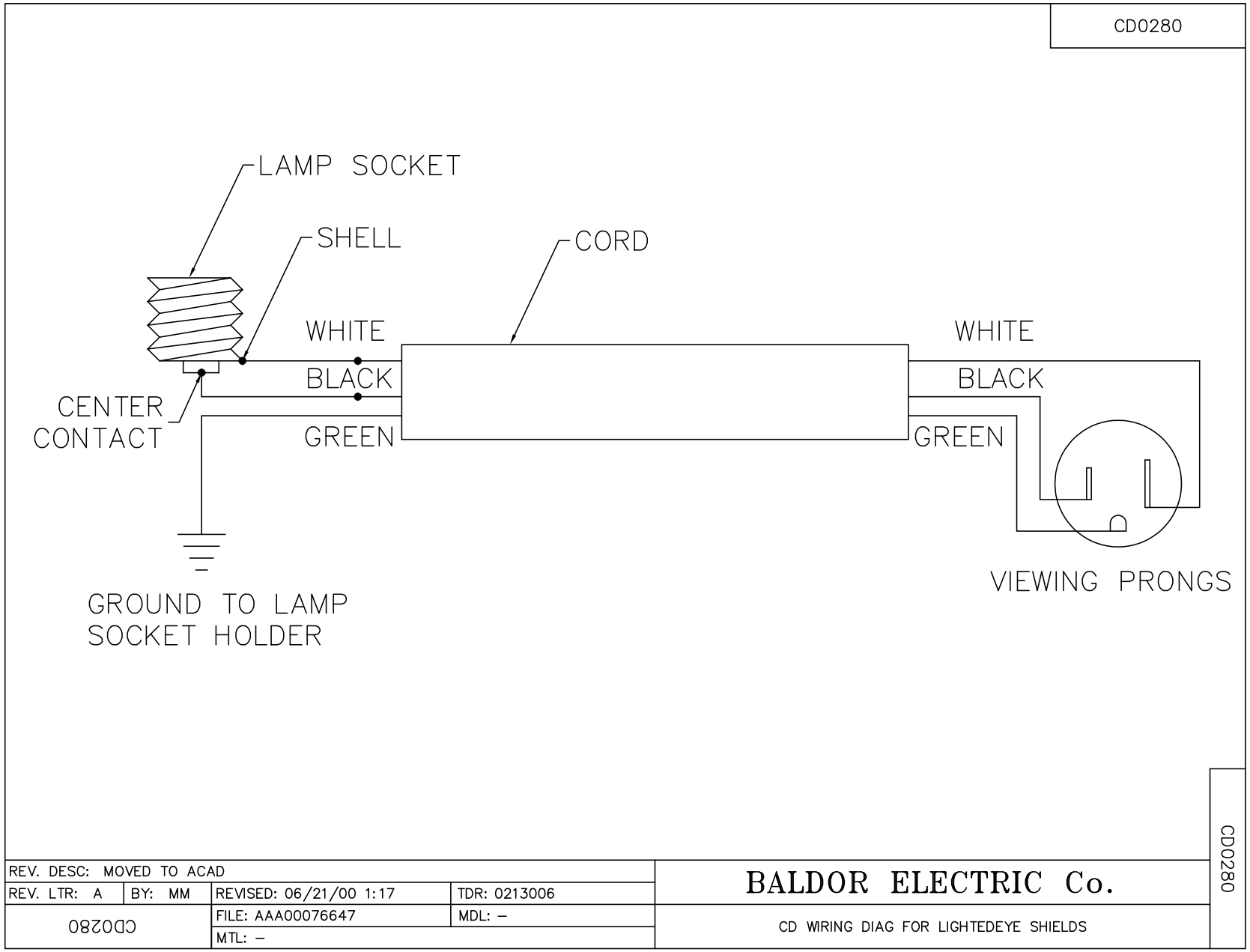


NOTE:

INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.

CD0252

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: B	BY: EAH	REVISED: 05/05/99 10:02	TDR: 0179909
CD0252		FILE: AAA00051767	MDL: –
		MTL: –	3PH, SV, 3 LEAD, GRINDER OR BUFFER W/MAGNETIC STARTER


CD0280
LAMP SOCKET
SHELL
CORD
WHITE
BLACK
GREEN
CENTER CONTACT
WHITE
BLACK
GREEN
VIEWING PRONGS
GROUND TO LAMP SOCKET HOLDER
CD0280
REV. DESC: MOVED TO ACAD
REV. LTR: A
BY: MM
REVISED: 06/21/00 1:17
TDR: 0213006
FILE: AAA00076647
MDL: –
MTL: –
CD0280
BALDOR ELECTRIC Co.
CD WIRING DIAG FOR LIGHTEDEYE SHIELDS