ABB BALDOR RELIANCE

Customer information packet

2048-153D

1.5HP, 3600RPM, 3PH, 60HZ, 3516M, 3516M, TEFC

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Specifications

Enclosure	TEFC
Frame	143
Frame Material	Steel
Frequency	60.00 Hz
	60.00 Hz
Motor Letter Type	Three Phase
Nameplate Output	1 1/2
Number of Poles	2
	2
Output @ Frequency	1.500 HP @ 60 HZ
Phase	3
	3
Product Style	BELT SANDER
Speed	3450 rpm
	3450 rpm
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage	208 V
	230 V
	460 V
Voltage @ Frequency	208.0 V @ 60 HZ
	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	UR
Ambient Temperature	40 °C
Base Indicator	Rigid
Current @ Voltage	2.300 A @ 460.0 V
	4.600 A @ 230.0 V
	5.000 A @ 208.0 V
Design Code	B
Duty Rating	CONT
Efficiency @ 100% Load	75.5 %
Insulation Class	B

Part Detail

Revision	AU
Type	AC
Mech. spec.	B2-3
Base	
Status	PRD/A
Elec. spec.	35WG0082
Layout	B2LY0003
Eff. date	12-15-2021
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	01-01-0001

KVA Code	G
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Standards	NEMA
Motor Type	3516M
Mounting Arrangement	F1
Power Factor	76
Product Family	Belt Sander
Service Factor	1.15
Shaft Extension Location	Pulley End
Shaft Rotation	Phase Seq-Opp Std Rot (CWODE)
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Winding	None

Nameplate

NP3118			
CAT.NO.	2048-153D		
HP	1 1/2	**VOLTS**	208-230/460
PHASE	3	**AMPS**	5-4.6/2.3
HZ	50//60	**RPM**	3000//3600
SER.NO			
SPEC.	B2-3C		

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
AB248	2' X 48" 80 GRIT GRINDER BELT	A8

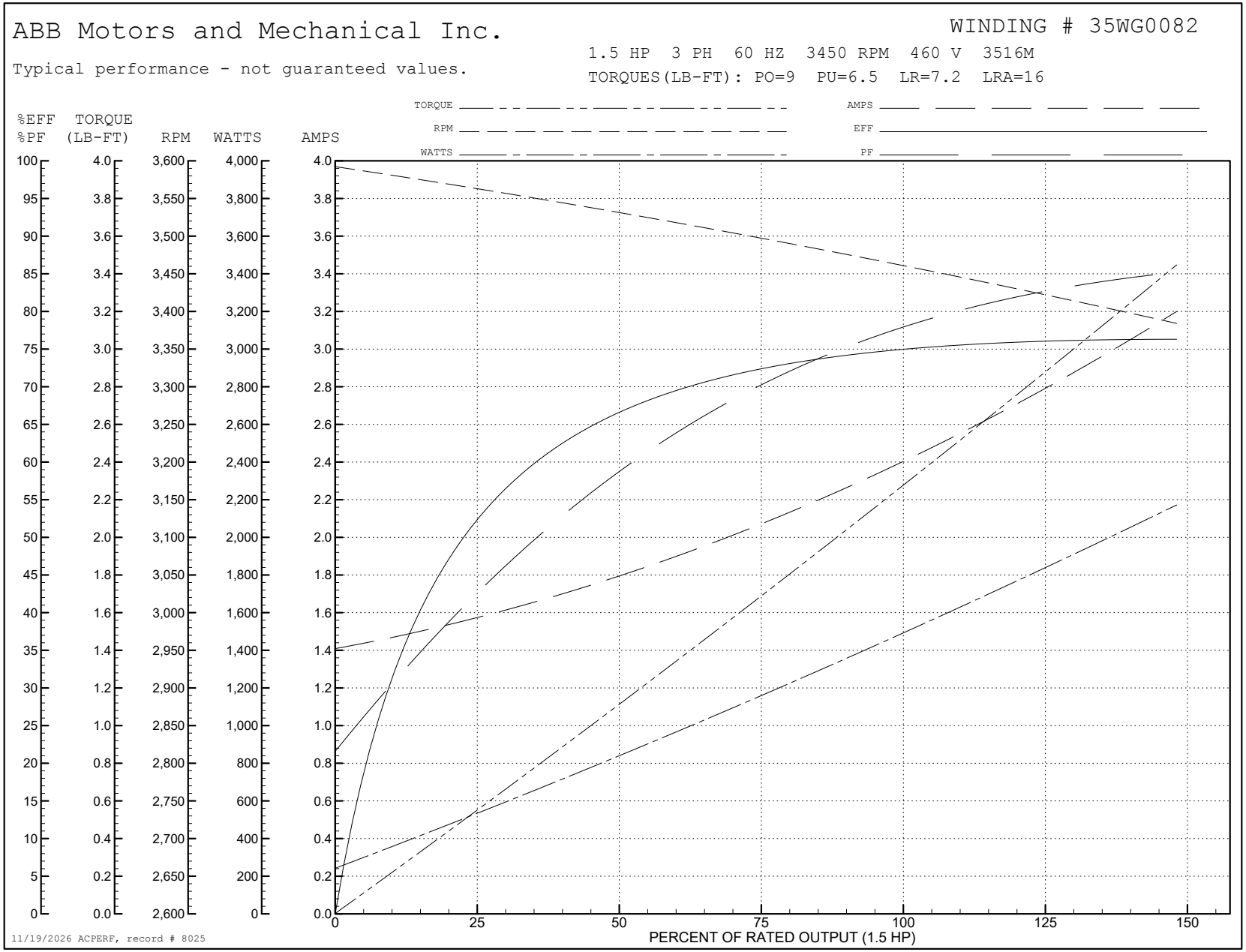
AC Induction Motor Performance Data
Record # 8025
Typical performance - not guaranteed values

Winding: 35WG0082-R001	**Type:** 3516M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			1.5	**Full Load Torque**	2.3 LB-FT
Volts			208-230/460	**Start Configuration**	direct on line
Full Load Amps			5-4.6/2.3	**Breakdown Torque**	9 LB-FT
R.P.M.			3450	**Pull-up Torque**	6.5 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	7.2 LB-FT
NEMA Design Code	B	**KVA Code**	G	**Starting Current**	16 A
Service Factor (S.F.)			1.15	**No-load Current**	1.4 A
NEMA Nom. Eff.	75.5	**Power Factor**	76	**Line-line Res. @ 25ºC**	11.8 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	63°C
S.F. Amps				**Temp. Rise @ S.F. Load**	70°C
				Locked-rotor Power Factor	67
				Rotor inertia	0.0443 LB-FT2

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	43	59	71	79	83	86	81
Efficiency	52.2	66.7	72.7	75.5	76.2	76.1	75.9
Speed	3558	3528	3496	3461	3424	3382	3439
Line amperes	1.6	1.8	2.1	2.4	2.8	3.2	2.64


ABB Motors and Mechanical Inc.
WINDING # 35WG0082
1.5 HP 3 PH 60 HZ 3450 RPM 460 V 3516M
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=9 PU=6.5 LR=7.2 LRA=16
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
PERCENT OF RATED OUTPUT (1.5 HP)
11/19/2026 ACPERF, record # 8025

AC Induction Motor Performance Data
Record # 20302
Typical performance - not guaranteed values

Winding: 35WG0082-R008	**Type:** 3516M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			1.5	**Full Load Torque**	2.3 LB-FT
Volts			208-230/460	**Start Configuration**	direct on line
Full Load Amps			5-4.6/2.3	**Breakdown Torque**	9 LB-FT
R.P.M.			3450	**Pull-up Torque**	6.5 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	7.2 LB-FT
NEMA Design Code	B	**KVA Code**	G	**Starting Current**	16 A
Service Factor (S.F.)			1.15	**No-load Current**	1.4 A
NEMA Nom. Eff.	75.5	**Power Factor**	76	**Line-line Res. @ 25ºC**	11.8 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	63°C
S.F. Amps				**Temp. Rise @ S.F. Load**	70°C
				Locked-rotor Power Factor	67
				Rotor inertia	0.0443 LB-FT2

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	43	59	71	79	83	86	81
Efficiency	52.2	66.7	72.7	75.5	76.2	76.1	75.9
Speed	3558	3528	3496	3461	3424	3382	3439
Line amperes	1.6	1.8	2.1	2.4	2.8	3.2	2.64

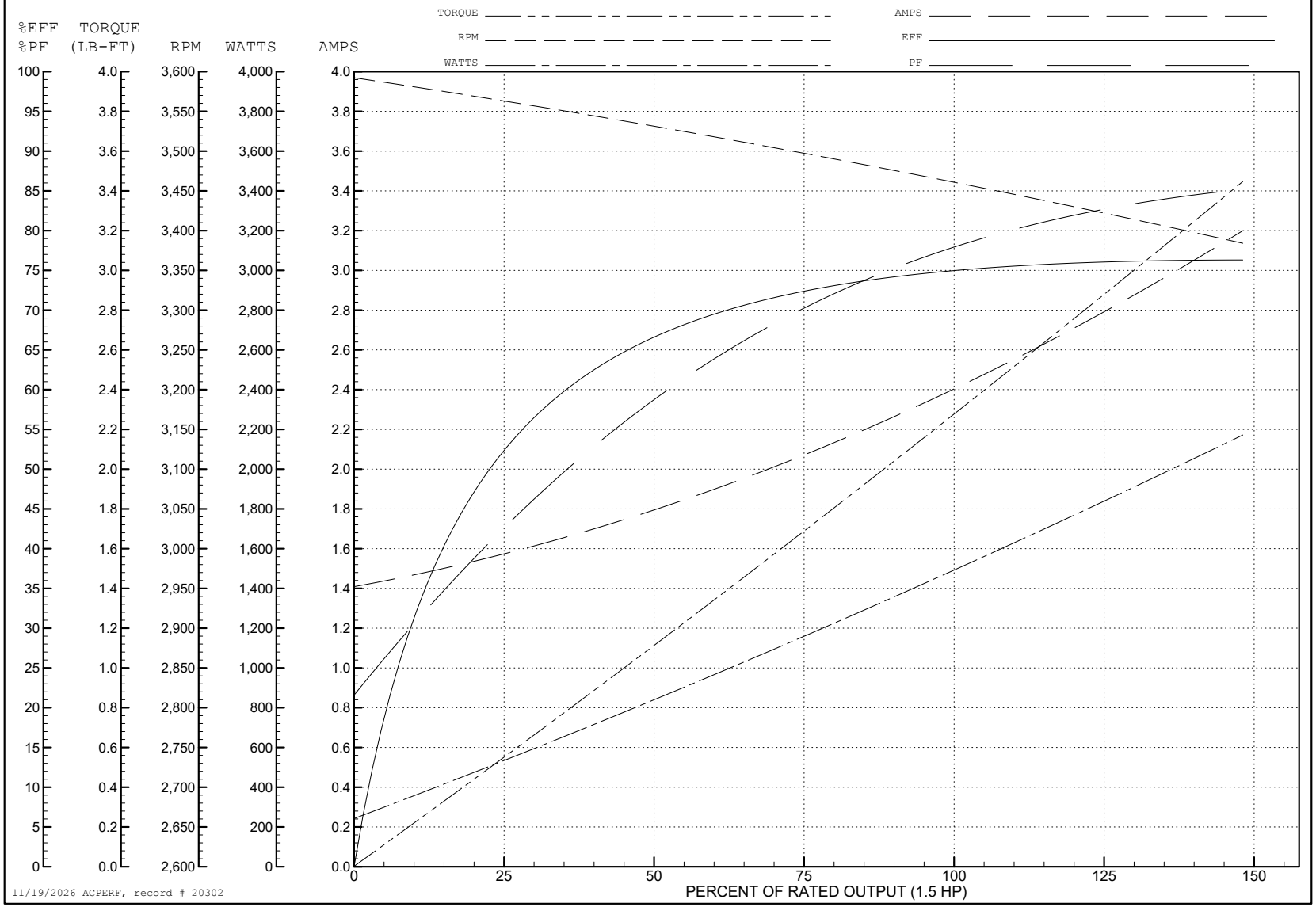
ABB Motors and Mechanical Inc.

WINDING # 35WG0082

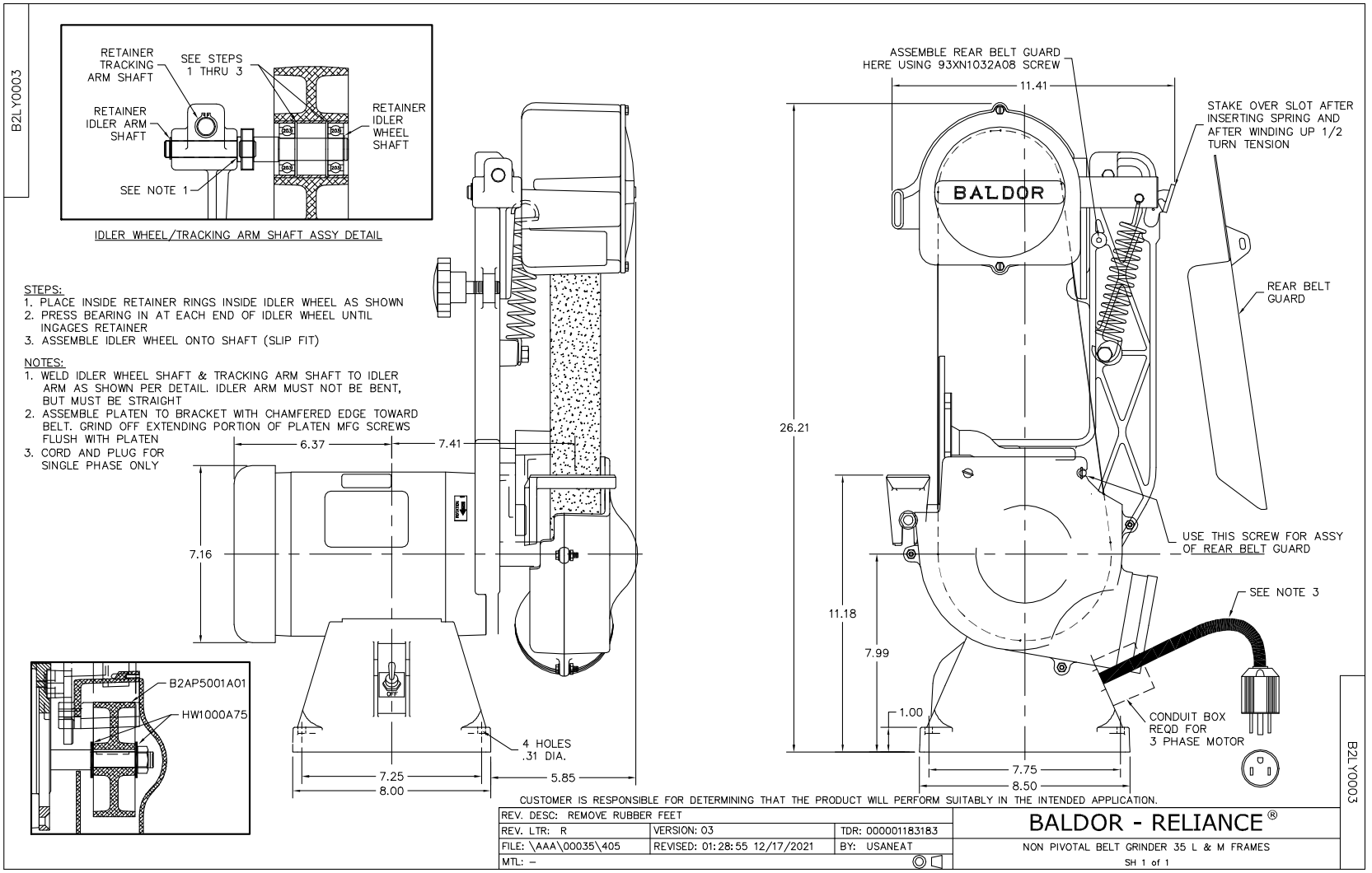
1.5 HP 3 PH 60 HZ 3450 RPM 460 V 3516M

Typical performance - not guaranteed values.

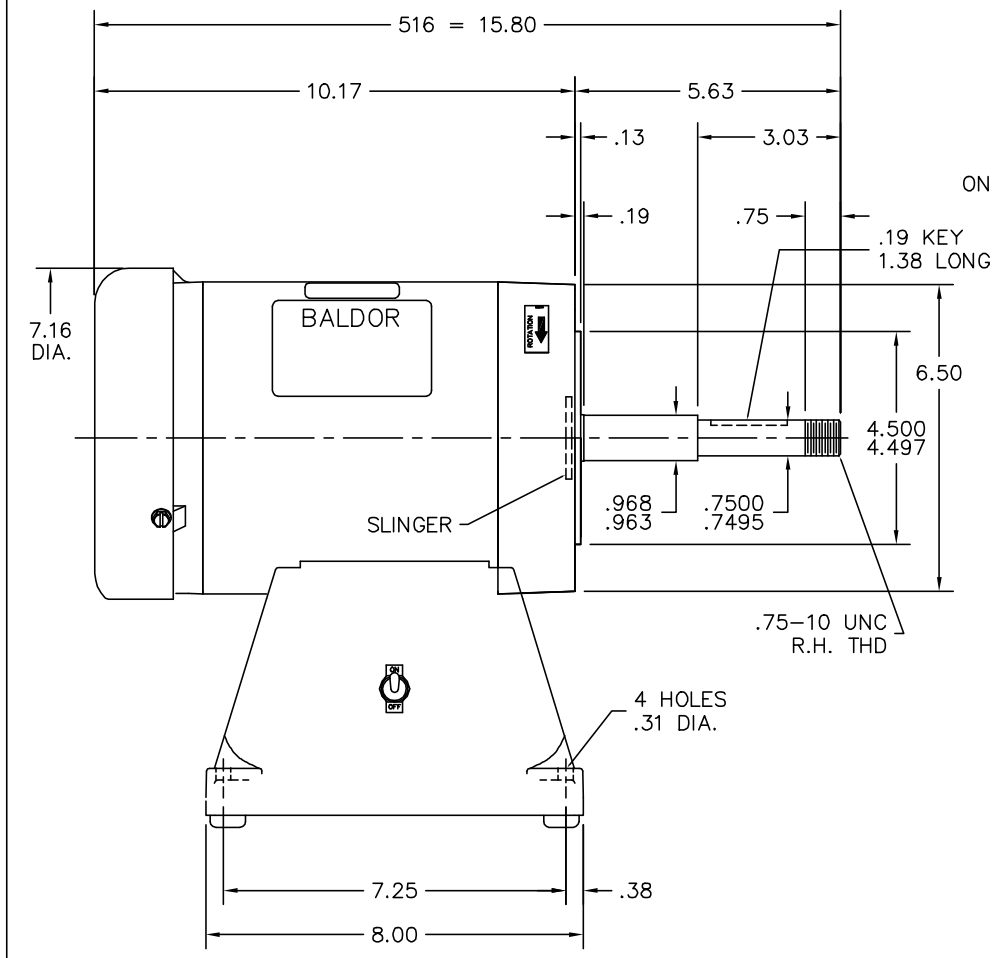
TORQUES(LB-FT): PO=9 PU=6.5 LR=7.2 LRA=16

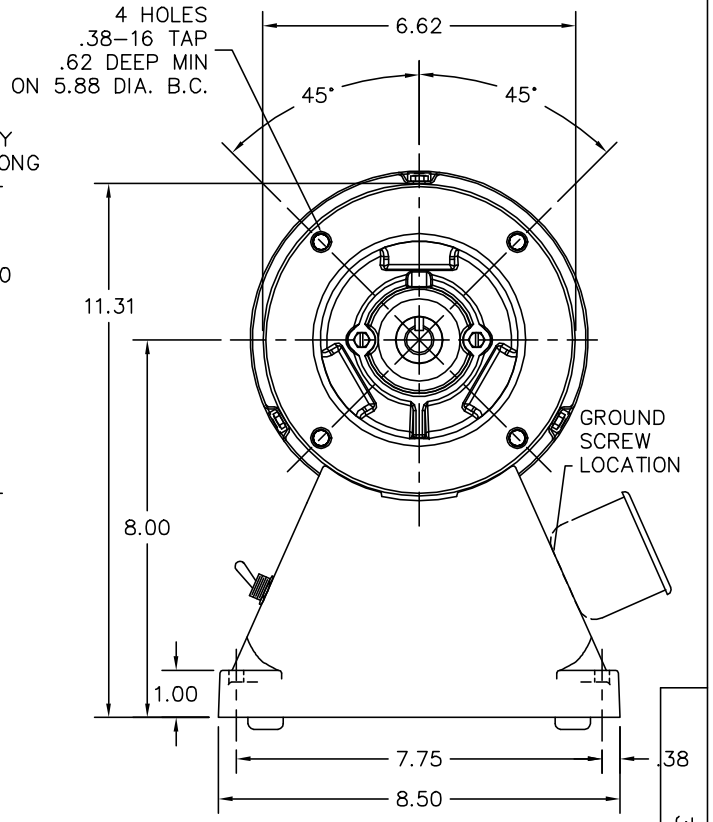


11/19/2026 ACPERF, record # 20302


B2LY0003
RETAINER TRACKING ARM SHAFT
SEE STEPS 1 THRU 3
RETAINER IDLER ARM SHAFT
RETAINER IDLER WHEEL SHAFT
SEE NOTE 1
IDLER WHEEL/TRACKING ARM SHAFT ASSY DETAIL
STEPS:
1. PLACE INSIDE RETAINER RINGS INSIDE IDLER WHEEL AS SHOWN
2. PRESS BEARING IN AT EACH END OF IDLER WHEEL UNTIL INGAGES RETAINER
3. ASSEMBLE IDLER WHEEL ONTO SHAFT (SLIP FIT)
NOTES:
1. WELD IDLER WHEEL SHAFT & TRACKING ARM SHAFT TO IDLER ARM AS SHOWN PER DETAIL. IDLER ARM MUST NOT BE BENT, BUT MUST BE STRAIGHT
2. ASSEMBLE PLATEN TO BRACKET WITH CHAMFERED EDGE TOWARD BELT. GRIND OFF EXTENDING PORTION OF PLATEN MFG SCREWS FLUSH WITH PLATEN
3. CORD AND PLUG FOR SINGLE PHASE ONLY
6.37
7.41
7.16
4 HOLES .31 DIA.
7.25
8.00
5.85
B2AP5001A01
HW1000A75
ASSEMBLE REAR BELT GUARD HERE USING 93XN1032A08 SCREW
11.41
STAKE OVER SLOT AFTER INSERTING SPRING AND AFTER WINDING UP 1/2 TURN TENSION
BALDOR
REAR BELT GUARD
26.21
USE THIS SCREW FOR ASSY OF REAR BELT GUARD
SEE NOTE 3
11.18
7.99
1.00
CONDUIT BOX REQD FOR 3 PHASE MOTOR
7.75
8.50
B2LY0003
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.
REV. DESC: REMOVE RUBBER FEET
REV. LTR: R
VERSION: 03
TDR: 000001183183
FILE: \AAA\00035\405
REVISED: 01:28:55 12/17/2021
BY: USANEAT
MTL: –
BALDOR - RELIANCE®
NON PIVOTAL BELT GRINDER 35 L & M FRAMES
SH 1 of 1

35LYH714





CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: REPLACE ENDPLATES		
REV. LTR: U	VERSION: 02	TDR: 000001063223
FILE: \AAA\00044\327	REVISED: 08:57:07 03/07/2018	BY: FGCHAH1
MTL: –		

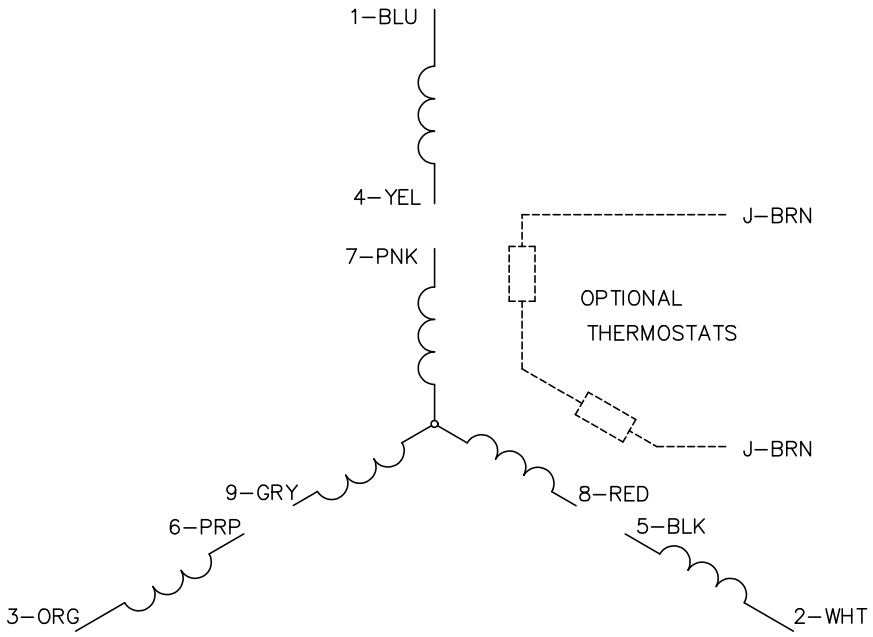
BALDOR

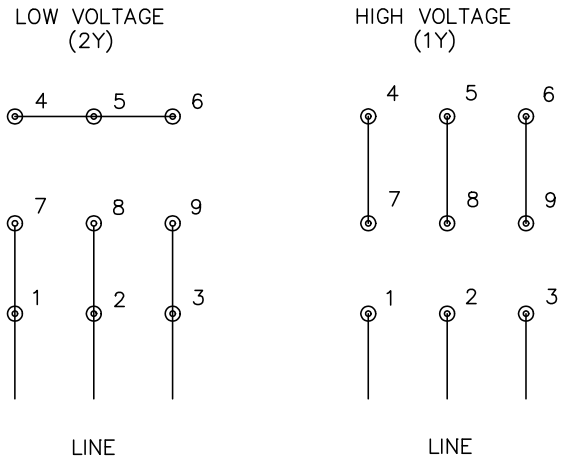
HORZ 56C TEFC 35M FOR B2–3 NON–PIVOTAL BELT GRINDER

SH 1 of 1

35LYH714

CD0005





NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS