

**BALDOR® • RELIANCE™**

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# Customer information packet

## D2304

1HP, 1750RPM, DC, 56, 3535D, TEFC, F1

Class - None

Division -

## Specifications

Armature Voltage	230 V
Base Speed	1750 rpm
Enclosure	TEFC
Field Voltage	230 V
Frame	56
Frame Material	Steel
Haz Area Class and Group	None
Output Power	1.000 HP
Agency Approvals	CSA UR
Ambient Temperature	40 °C
Armature Current	4.0 a
Armature Inertia	13.657 lb-ft <sup>2</sup>
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Drip Cover	No Drip Cover
Duty Rating	CONT
Feedback Device	NO FEEDBACK
Field Winding Type	COMPOUND
Heater Indicator	No Heater
Lifting Lugs	No Lifting Lugs
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	2 @ 14 AWG 2 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Mounting Arrangement	F1
Overall Length	15.44 IN
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
Service Factor	1.00
Shaft Diameter	0.625 IN

## Part detail

Revision	T
Type	DC
Mech. spec.	35P328
Base	
Status	PRD/A
Elec. spec.	35WGZ395
Layout	35LYP328
Eff. date	10-28-2024
CD Diagram	CD0862B01
Poles	00
Leads	
Proprietary	False
Created date	01-01-0001

<b>Shaft Extension Location</b>	<b>Pulley End</b>
<b>Shaft Ground Indicator</b>	<b>No Shaft Grounding</b>
<b>Shaft Rotation</b>	<b>Reversible</b>
<b>Shaft Slinger Indicator</b>	<b>Shaft Slinger</b>

**Nameplate**

<b>NP0111L</b>			
<b>CAT.NO.</b>	D2304		
<b>SPEC.</b>	35P328Z395		
<b>HP</b>	1	<b>ENCL</b>	TEFC
<b>RPM</b>	1750		
<b>FRAME</b>	56	<b>TYPE</b>	3535D
<b>ARM V</b>	230	<b>ARM A</b>	4
<b>FLD V</b>	230	<b>FLD A</b>	.25
<b>INSUL</b>	F	<b>AMB.</b>	40
<b>DUTY</b>	CONT	<b>SUPPLY</b>	A
<b>BRG/DE</b>	6205	<b>BRG/ODE</b>	6203
<b>BRUSHES</b>	2/BP5000T15		
	--	<b>BLANK</b>	
<b>SER.</b>			
<b>BLANK</b>	IEEE 45		
<b>APRV-CSA</b>		<b>APRV-UL</b>	

**DC Motor Performance Data**

Record # 281

Typical performance - not guaranteed values

Winding: 35WGZ395-R001		Type: 3535D	Enclosure: TEFC
<b>Nameplate Data</b>		<b>General Characteristics</b>	
Rated Output (HP)	1	Armature Resistance @ 25°C	3.18 Ω
R.P.M.	1750	Commutating Winding Resistance @ 25°C	2.35 Ω
Armature Volts	230	Series Winding Resistance @ 25°C	7.34 Ω
Armature Amps	4	Shunt Winding Resistance @ 25°C	868 Ω
Field Volts	230		
Field Amps	0.25	Armature Inertia	13.657 LI <sup>2</sup>
Rating - Duty	40C AMB-CONT		
Power Supply Code	D		
		Temp. Rise @ Rated Load	88°C

**Load Characteristics at 230 Armature Volts, 230 Field Volts, 0.26 Field Amps**

Load Point	1	2	3	4	5	6	7
Armature Amps	0.55	1.4	2.15	3.1	3.9	4.75	5.65
R.P.M.	1858	1797	1736	1682	1644	1596	1554
Torque ( LB-FT )	0	0.75	1.5	2.25	3	3.75	4.5

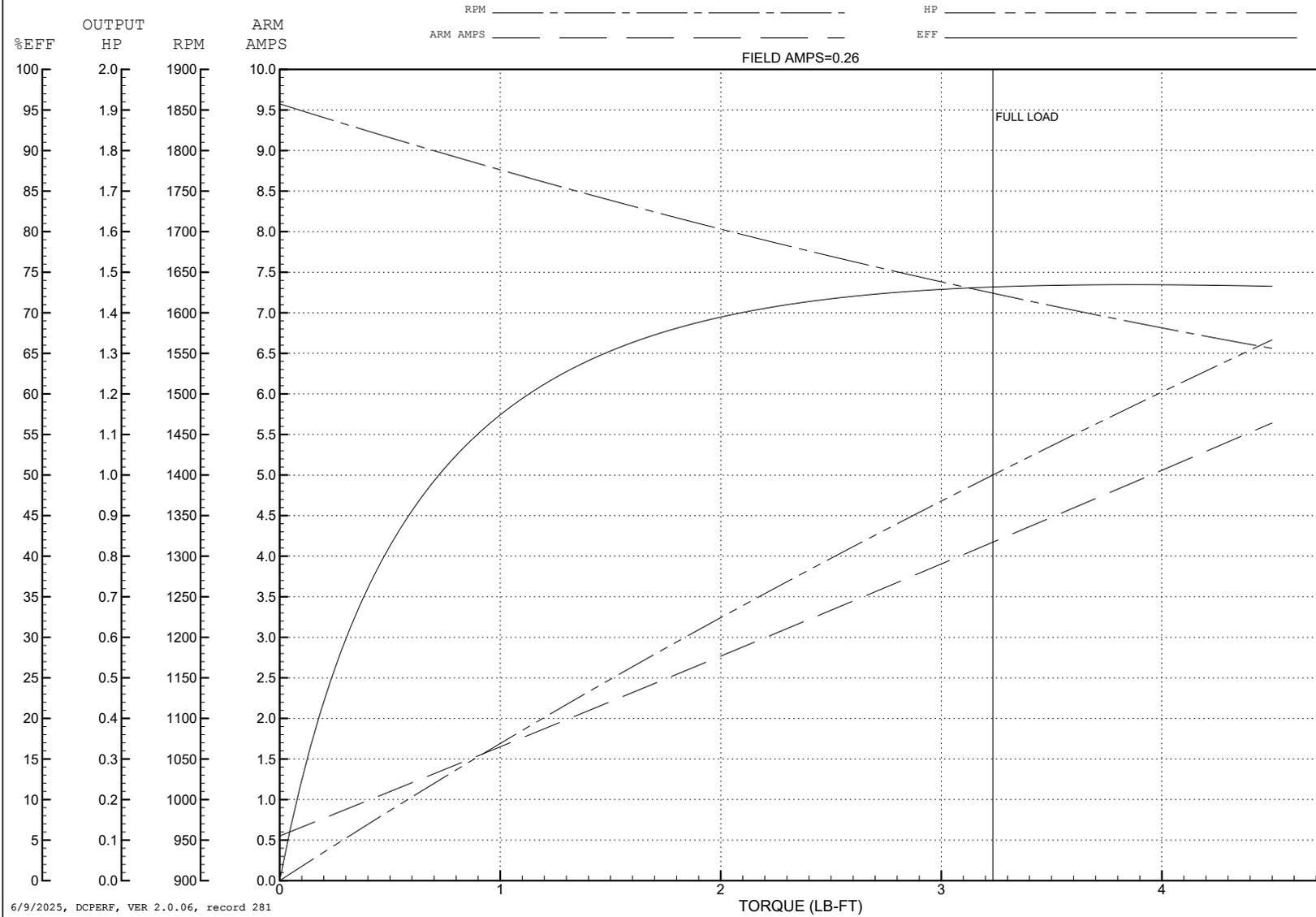
ABB Motors and Mechanical Inc.

WINDING # 35WGZ395

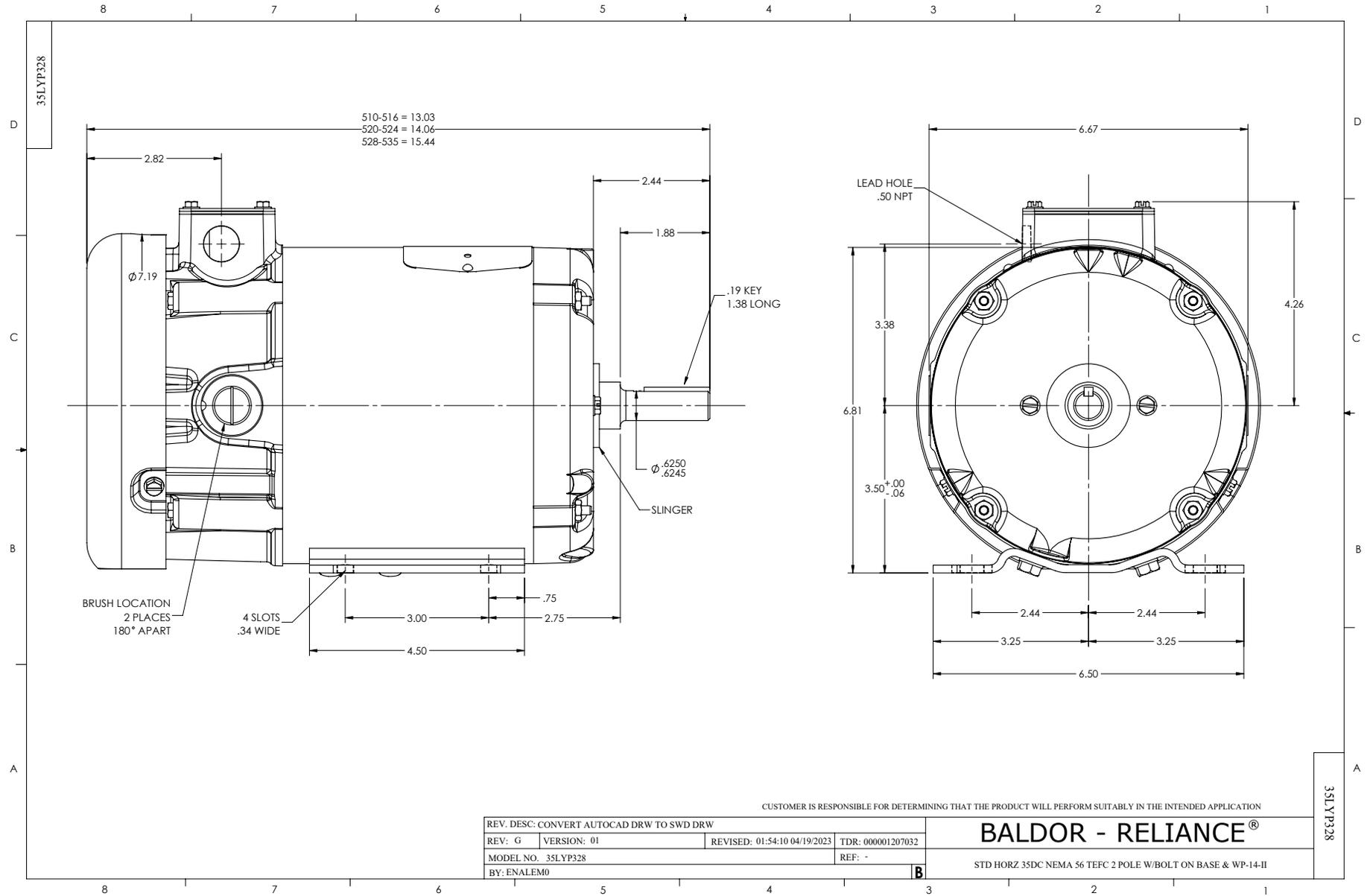
Typical performance - not guaranteed values.

1 HP DC 1750 RPM 230 V ARM 230 V FLD 3535D

ENCL: TEFC DUTY: CONT CL: F

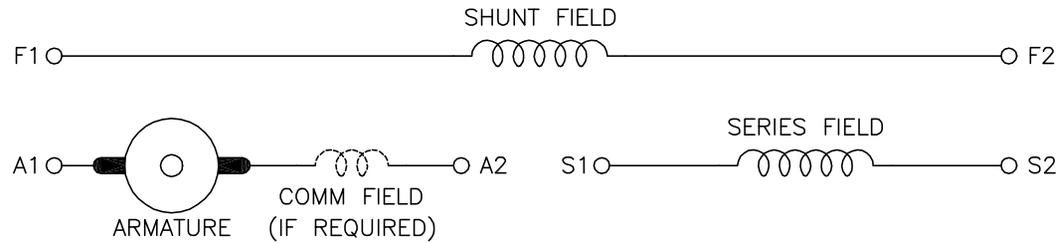


6/9/2025, DCPERF, VER 2.0.06, record 281



CD0862B01

# COMPOUND WOUND



DIRECTION OF ROTATION			
CWDE		CCWDE	
POS TERM (+)	NEG TERM (-)	POS TERM (+)	NEG TERM (-)
A1	S2	A2	S2
F1	F2	F1	F2
CONNECT A2 & S1		CONNECT A1 & S1	

NOTES:

- LIMIT STARTING INRUSH CURRENT TO NOT MORE THAN 3 TIMES RATED AMPERES BY ENERGIZING THE FULL SHUNT FIELD BEFORE BRINGING THE ARMATURE VOLTAGE UP SLOWLY OR IN STEPS.
- OPTIONAL FIELD REOSTAT MAY BE CONNECTED IN SERIES WITH THE SHUNT FIELD.
- OPTIONAL THERMOSTAT LEADS ARE MARKED J,J.

REV. DESC: NEW, REPLACE CD0862			
REV. LTR: -	BY: JLP	REVISED: 16:10:51 11/03/2004	TDR: 347796
CD0862B01		FILE: AAA00121482	REF: CD0862B01
		MTL: -	

**BALDOR ELECTRIC Co.**

DC CONNECTION DIAGRAM, COMPOUND FIELD, 6 LEAD

CD0862B01