

BALDOR • RELIANCE

Customer information packet

CD5350

.5HP, 1750RPM, DC, 56C, 3520D, TEFC, F1

Class - None

Division -

Specifications

Armature Voltage	90 V
Base Speed	1750 rpm
Enclosure	TEFC
Field Voltage	100 V
	50 V
Frame	56C
Frame Material	Steel
Haz Area Class and Group	None
Output Power	0.500 HP
Agency Approvals	CSA UR
Ambient Temperature	40 °C
Armature Current	5.0 a
Armature Inertia	7.804 lb-ft ²
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	SHUNT
Heater Indicator	No Heater
Lifting Lugs	No Lifting Lugs
Motor Lead Exit	Lead Hole
Motor Lead Quantity/Wire Size	4 @ 18 AWG 2 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Mounting Arrangement	F1
Overall Length	14.91 IN
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
RoHS Status	ROHS COMPLIANT

Part detail

Revision	P
Type	DC
Mech. spec.	35P442
Base	
Status	PRD/A
Elec. spec.	35WGZ388
Layout	35LYP442
Eff. date	10-28-2024
CD Diagram	CD0860C01
Poles	00
Leads	
Proprietary	False
Created date	01-01-0001

Service Factor	1.00
Shaft Diameter	0.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger

Nameplate

NP0111L			
CAT.NO.	CD5350		
SPEC.	35P442Z388		
HP	.5	ENCL	TEFC
RPM	1750		
FRAME	56C	TYPE	3520D
ARM V	90	ARM A	5
FLD V	100/50	FLD A	.44/.88
INSUL	F	AMB.	40
DUTY	CONT	SUPPLY	1.3
BRG/DE	6205	BRG/ODE	6203
BRUSHES	2/BP5000T07		
	BLANK		
SER.			
BLANK			
APRV-CSA	APRV-UL		

Accessories

Part number	Description	Multiplier
TK3500	TACHO MOUTING KIT TK3500	A8

DC Motor Performance Data

Record # 276

Typical performance - not guaranteed values

Winding: 35WGZ388-R001		Type: 3520D	Enclosure: TEFC
Nameplate Data		General Characteristics	
Rated Output (HP)	0.5	Armature Resistance @ 25°C	1.146 Ω
R.P.M.	1750	Commutating Winding Resistance @ 25°C	0.7655 Ω
Armature Volts	90		
Armature Amps	5	Shunt Winding Resistance @ 25°C	213.9 Ω
Field Volts	100 / 50		
Field Amps	0.44 / 0.88		
Rating - Duty	40C AMB-CONT		
Form Factor	1.3		
		Temp. Rise @ Rated Load	96°C

Load Characteristics at 90 Armature Volts, 100 Field Volts, 0.47 Field Amps

Load Point	1	2	3	4	5	6	7
Armature Amps	0.9	1.69	3.21	4.45	5.59	7.46	9.21
R.P.M.	1941	1923	1901	1866	1841	1789	1760
Torque (LB-FT)	0	0.38	0.75	1.13	1.5	1.88	2.25

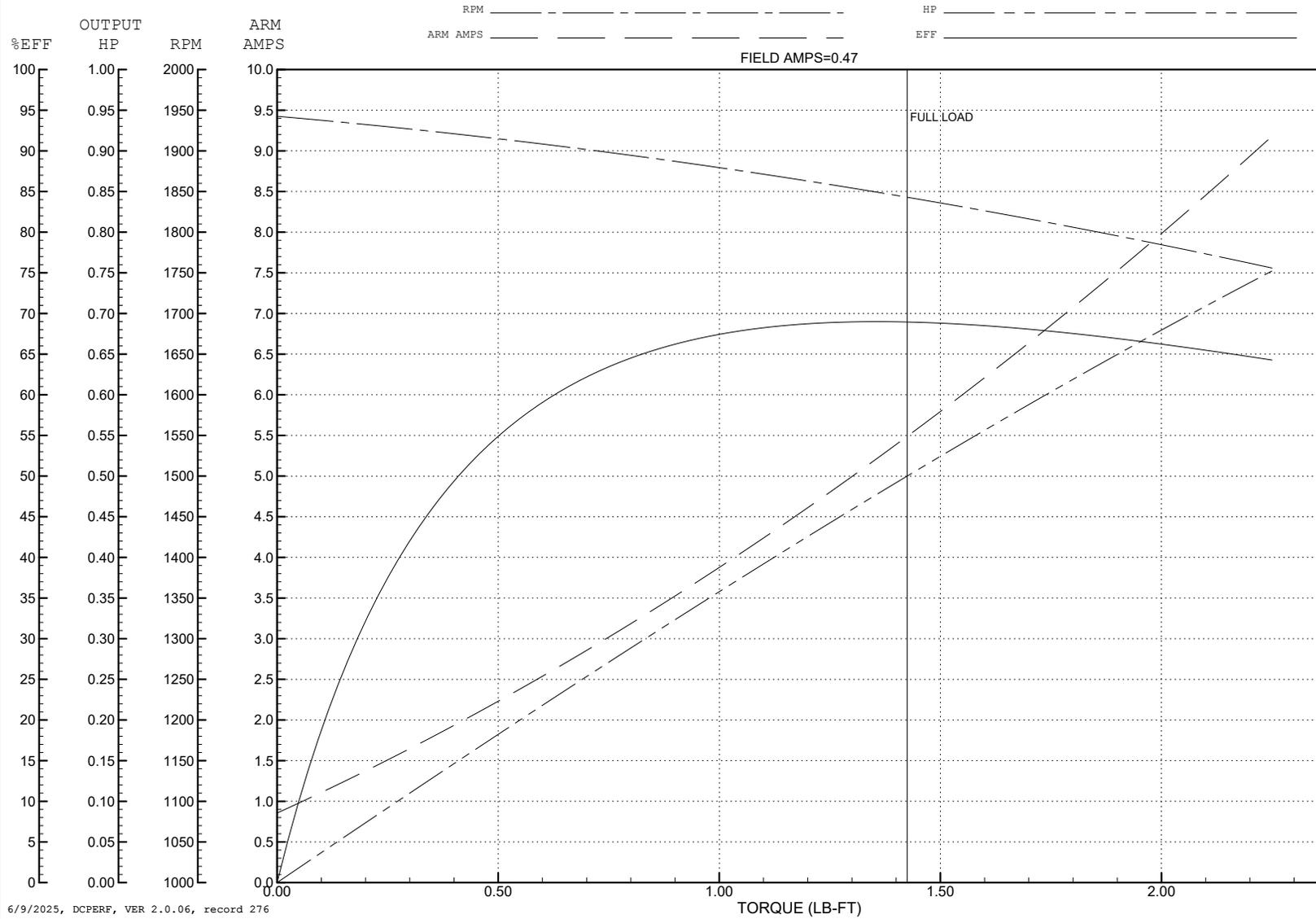
ABB Motors and Mechanical Inc.

WINDING # 35WGZ388

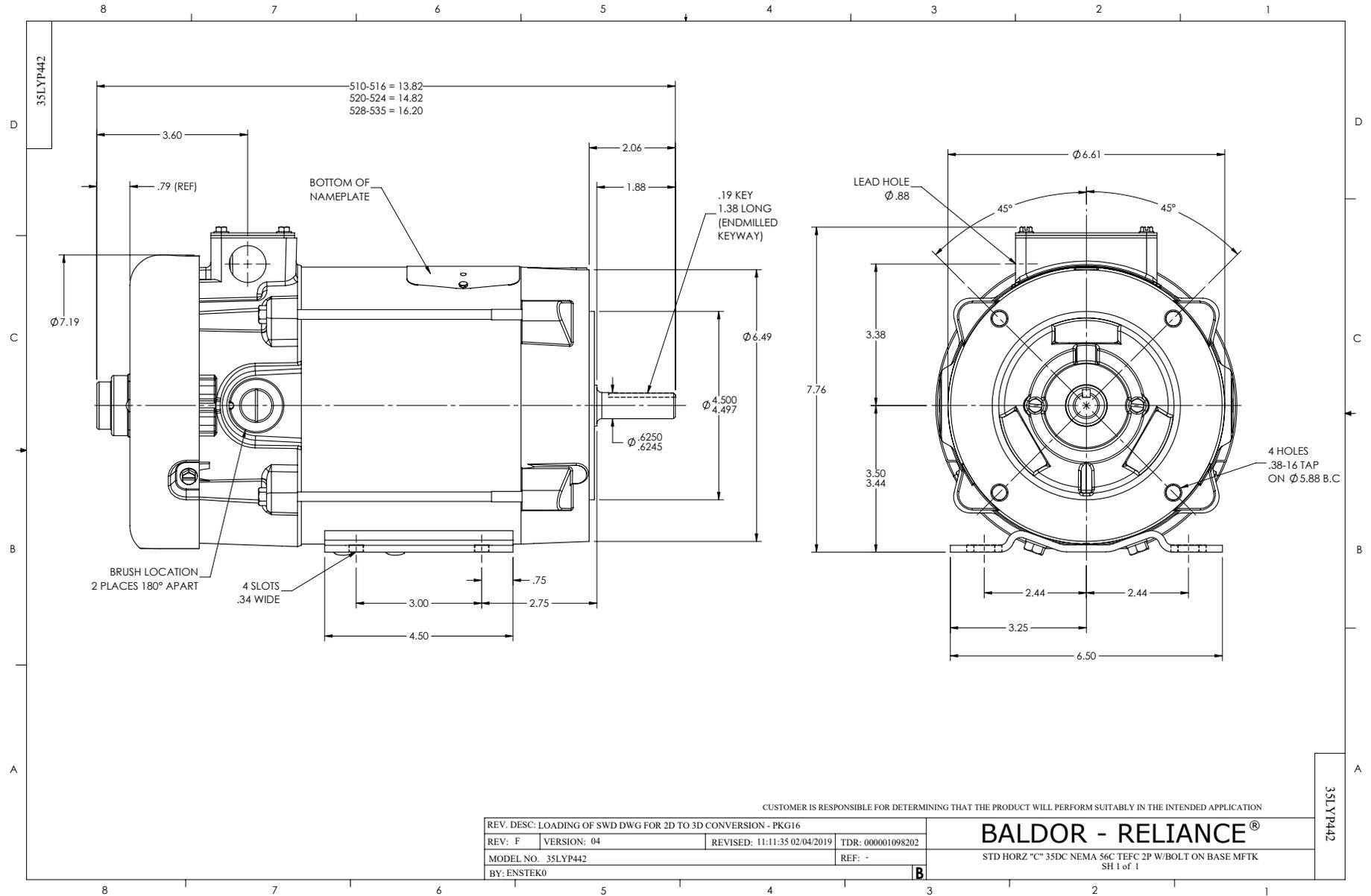
0.5 HP DC 1750 RPM 90 V ARM 100/50 V FLD 3520D

Typical performance - not guaranteed values.

ENCL: TEFC DUTY: CONT CL: F

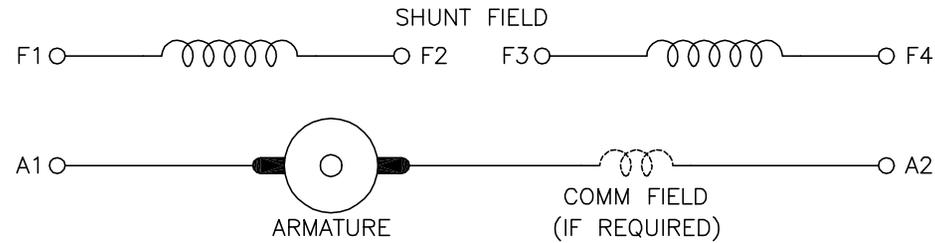


6/9/2025, DCPERF, VER 2.0.06, record 276



CD0860C01

SHUNT WOUND



CONNECTION	DIRECTION OF ROTATION			
	CWDE		CCWDE	
	POS TERM (+)	NEG TERM (-)	POS TERM (+)	NEG TERM (-)
HIGH VOLTAGE	A1 F1 CONNECT F2 & F3	A2 F4	A2 F1 CONNECT F2 & F3	A1 F4
LOW VOLTAGE	A1 F1 & F3	A2 F2 & F4	A2 F1 & F3	A1 F2 & F4

NOTES:

1. 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.
2. OPTIONAL FIELD REOSTAT MAY BE CONNECTED IN SERIES WITH THE SHUNT FIELD.
3. OPTIONAL THERMOSTAT LEADS ARE MARKED J,J.

REV. DESC: NEW, REPLACE CD0860			
REV. LTR: -	BY: JLP	REVISED: 15:35:22 11/03/2004	TDR: 347796
100098000		FILE: AAA00121477	REF: CD0860C01
		MTL: -	

BALDOR ELECTRIC Co.

DC CONNECTION DIAGRAM, SHUNT FIELD, 6 LEAD, DUAL VOLTAGE

CD0860C01