

ABB BALDOR RELIANCE III

Customer information packet

VP3428-14

.37KW/.5HP/3000RPM/TEFC/IEC/71C MOTOR

Class - None

Division - Not Applicable

Specifications

Armature Voltage	180 V
Base Speed	3000 rpm
Enclosure	TEFC
Frame	D71C
Haz Area Class and Group	None
Output Power	0.500 HP
Agency Approvals	CSA
	UR
Ambient Temperature	40 °C
Armature Current	2.5 a
Armature Inertia	6.243 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
Frame Prefix	D
Haz Area Division	Not Applicable
Heater Indicator	No Heater
Insulation Class	F
Lifting Lugs	No Lifting Lugs
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	2 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	IEC
Mounting Arrangement	B34
Overall Length	12.27 IN
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
Service Factor	1.00
Shaft Diameter	0.551 IN
Shaft Extension Location	Pulley End

Part Detail

Revision	Z
Type	DC
Mech. spec.	34-6242
Base	
Status	PRD/A
Elec. spec.	34WGZ132
Layout	34LY6242
Eff. date	10-25-2024
CD Diagram	CD0194
Poles	00
Leads	
Proprietary	False
Created date	01-01-0001

Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger

Nameplate

NP1049L					
CAT.NO.	VP3428-14				
SPEC.	34-6242Z132				
KW/HP	.37/.5 TE			I.P.	44
RPM	3000 1/MIN				
IEC FRAME	D71C	TYPE		3416P	
ARM V	180			ARM A	2.5
FLD V				FLD A	
INSUL	F	AMB.		40	
DUTY	CONT			SUPPLY	1.5
BRG/DE	6203	BRG/ODE			6203
BRUSHES	2/BP5000AW14				
				BLANK	KG15 IC411
SER.					
BLANK	IEC60034-1;-5				
APRV-CE	Y	APRV-CSA	Y	APRV-UL	Y

Parts List

Part number	Description	Quantity
SA005324	SA 34-6242Z132	1.000 ea
AA002973	AA 34-6242Z132	1.000 ea
BP5000AW14SP	CARBON BRUSH - 33P, 180 VOLTS	1.000 ea
HA3210B66	.125 DIA X .281 (AUTO)	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
HW3001B02	BRASS CUP WASHER W/GROUND SYMBOL TAB,	1.000 ea
34EP3103B14	FR ENDPLATE MACH 34PM TEFC F-2 MTG W/PG-	1.000 ea
WD4100A17	PLUG STIMPSON D4036	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
34EP1503A02	PU ENDPLATE, MACH	1.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 ea
BP5201A11SP	BRUSH HOLDER ASSY W/BP4511A01, BP3000A01	1.000 ea
80XN1032J03	10-32 X 3/16 SET SCREW, HEX SOC, CUP PT	2.000 ea
34FN3002A01SP	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 ea
34FH5002A01SP	FAN COVER ASSY W/SHAFT COVER	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
WD4102A01	SR-6L-1 HEYCO STRN RELIEF OR 23MPO6L10 M	1.000 ea
34CB4504SP	CONDUIT BOX LID, STAMPED	1.000 ea
34GS1011SP	GASKET, CONDUIT BOX LID	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	2.000 ea
HW2504D06	KEY 5 MM X .750	1.000 ea
HA7000A10	KEY RETAINER 0.563 DIA SHAFTS	1.000 ea
MJ5004A05	#242-21 LOCTITE GENERAL PURPOSE MED. STR	0.001 ea
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.014 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
HA3100A46	THRUBOLT 10-32 X 6.125	4.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
PK3083	STYROFOAM PACKING CRADLE	2.000 ea
PK3088	MICROFOAM, 8"X"8 PERF. SHEETS	2.000 ea
LC0194	CONNECTION LABEL	1.000 ea
NP1049L	NP STD LASER ENGRAVED IEC DC MOTORS, UL	1.000 ea

MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
34PA1010	PKG GRP, BLANK PK1008	1.000 ea

Accessories

Part number	Description	Multiplier
TK3400	TACHO MOUNTING KIT FOR TK3400	A8
TK3400-HPU	HPU10 MOUNTING KIT 34P/35P TEFC	

DC Motor Performance Data

Record # 2640

Typical performance - not guaranteed values

Winding: 34WGZ132-R001		Type: 3416P	Enclosure: TEFC
Nameplate Data		General Characteristics	
Rated Output (HP)	0.5	Armature Resistance @ 25°C	2.069 Ω
R.P.M.	3000		
Armature Volts	180	Voltage Constant	58.56 v/krpm
Armature Amps	2.5		
Field Volts			
Field Amps		Armature Inertia	6.2432 LI ²
Rating - Duty	40C AMB-CONT		
Form Factor	1.5		

Load Characteristics at 180 Armature Volts

Load Point	1	2	3	4	5	6
Armature Amps	0.3	1.6	2.2	2.9	3.5	4.2
R.P.M.	3262	3177	3144	3099	3064	3016
Torque (LB-FT)	0	0.516	0.752	1.01	1.246	1.504

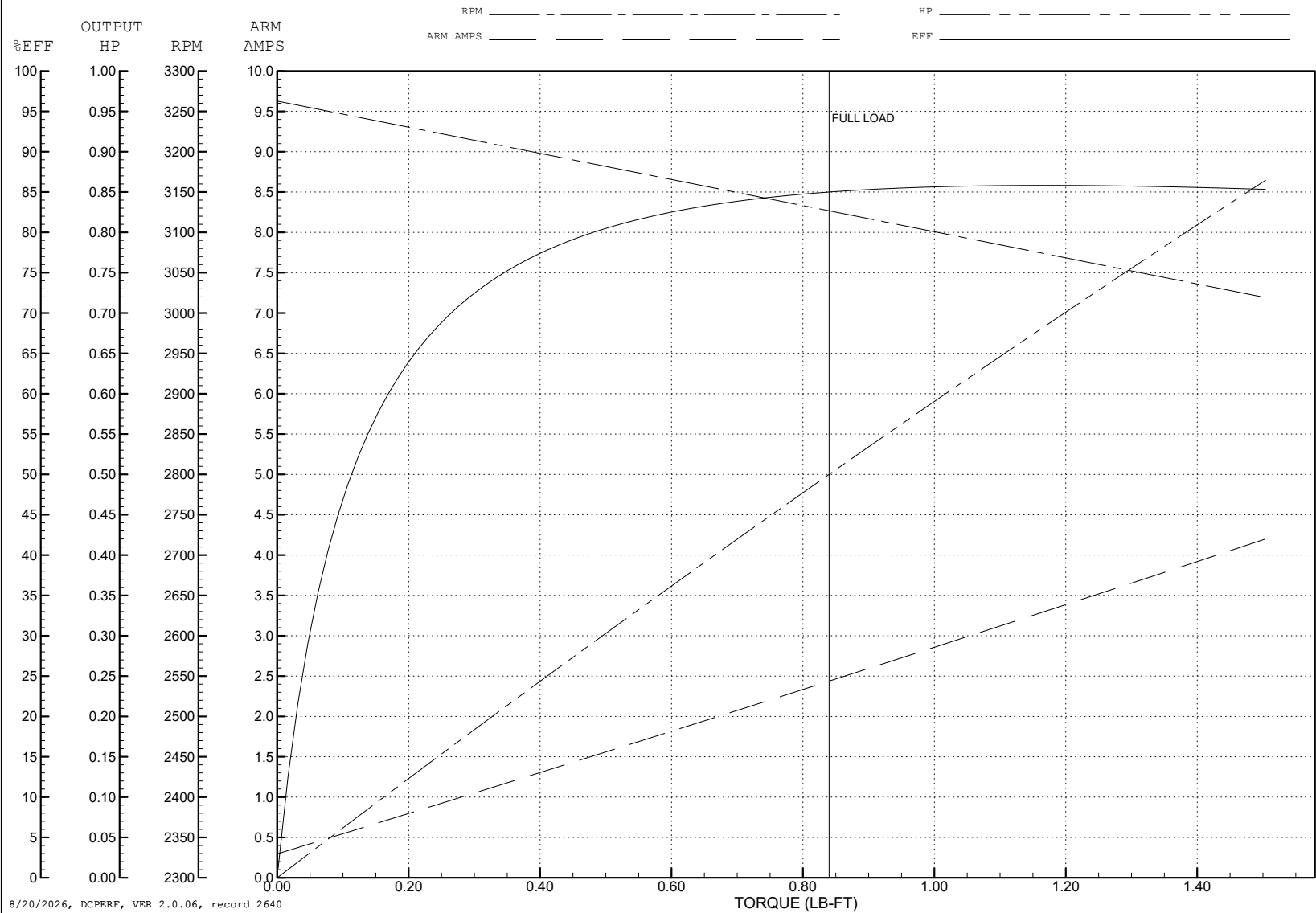
ABB Motors and Mechanical Inc.

WINDING # 34WGZ132

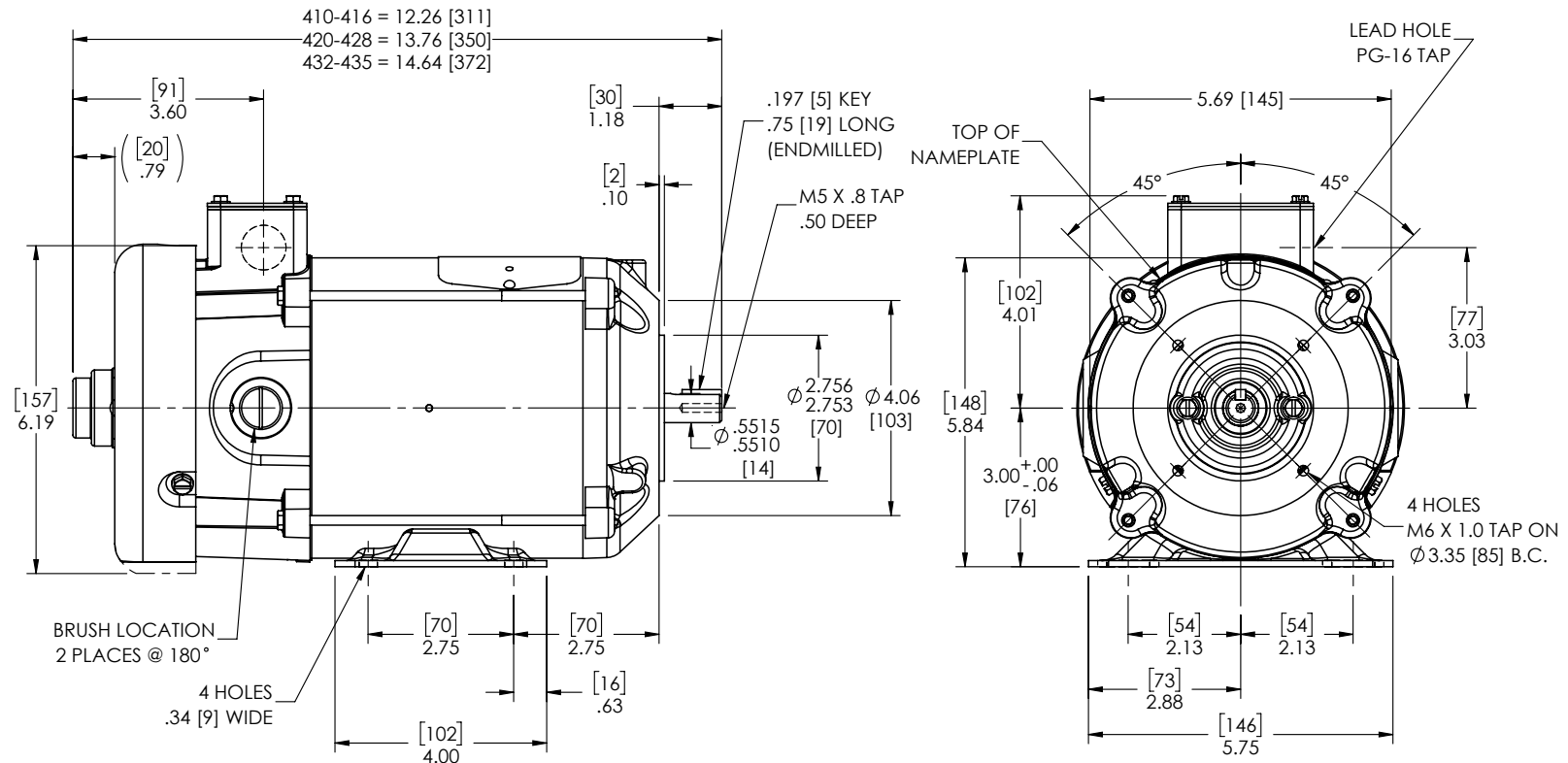
Typical performance - not guaranteed values.

0.5 HP DC 3000 RPM 180 V 3416P

ENCL: TEFC DUTY: CONT CL: F



34LY6242



CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION

REV. DESC: LOAD TO SOLIDWORKS - REV N

REV: P VERSION: 02 REVISED: 11:41:34 12/22/2022 TDR: 000001201165

34LY6242

MODEL NO. 34LY6242

BY: ENFRAJ0

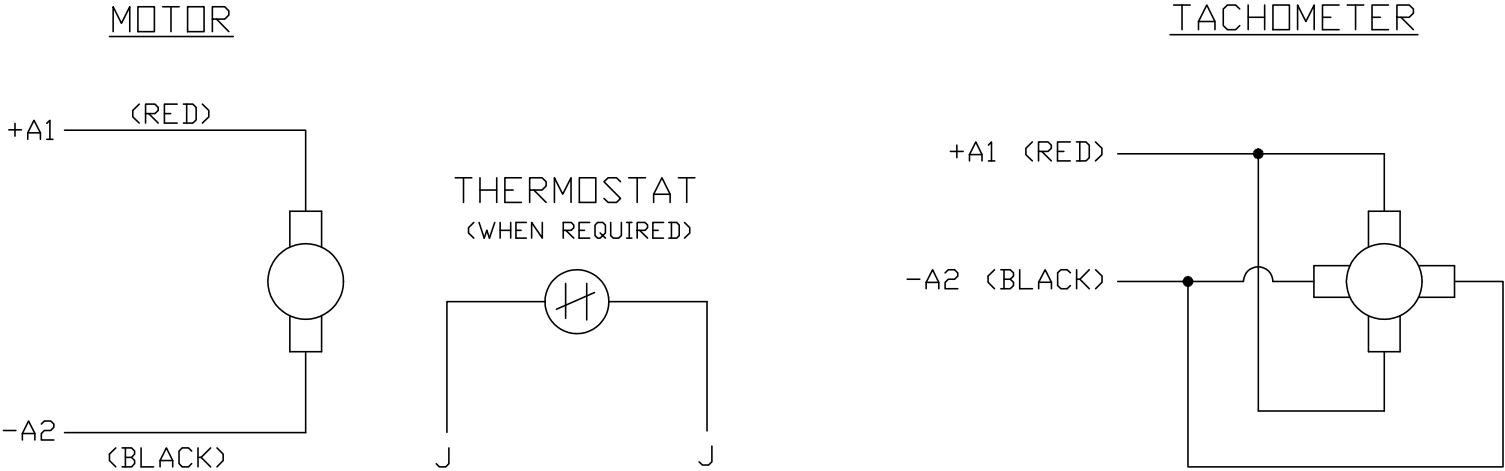
REF: -

BALDOR - RELIANCE®

STD HORZ MODEL 34 PM TEFC IEC D71C-B14 2 POLE W/M.F.T.K.

34LY6242

CD0194



NOTES:

1. CCW ROTATION AS SHOWN FACING COMMUTATOR END. TO REVERSE MOTOR ROTATION OR TACHOMETER OUTPUT POLARITY INTERCHANGE LEADS A1(RED) & A2(BLACK)
2. LEAD COLORS FOR REFERENCE ONLY & NOT SPECIFIED BY THIS DRAWING. LEAD COLORS SPECIFIED BY LAYOUT DRAWING & BILL OF MATERIAL ONLY.

MATL: -			
REV:	E	ADDED NOTE "LEAD COLORS FOR REFERENCE ONLY &..."	
CD0194		SCALE: -	BY: CK
		FILE: AAA00004503	TDR: 0078737

BALDOR ELECTRIC Co.

CD TYPE P DC PERMANENT MAGNET MOTORS AND TACHOMETERS

CD0194