ABB BALDOR RELIANCE

Customer information packet

ECS101M0H3EC4

3HP, 1800RPM, 3PH, 60HZ, 182TC, 3624B, TEFC, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	182TC
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	3.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	UL
	WEEE
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	6
Current @ Voltage	3.700 A @ 460.0 V
	7.300 A @ 230.0 V
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	92.8 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	3.7 a
Insulation Class	F
Inverter Code	Inverter Duty

Part Detail

Revision	L
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	36WGA0019
Layout	36LYT291
Eff. date	06-16-2025
CD Diagram	CD0005A25
Poles	04
Leads	9#14
Proprietary	False
Created date	09-28-2020

IP Rating	NONE
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3624B
Mounting Arrangement	F1
Number of Poles	4
Overall Length	16.54 IN
Power Factor	97
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.50
Shaft Diameter	1.125 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Speed	1800 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

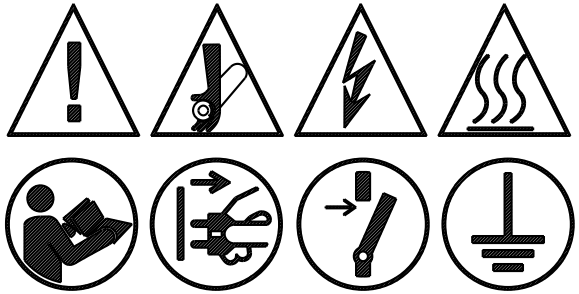
BALDOR·RELIANCE

EC-Titanium™

CAT. NO.	ECS101M0H3EC4							
SPEC.	36-0001740				YR	***		
FRAME	182TC		ENCL.	TEFC	IP	54		
HP	3	RATING	40C AMB-CONT					
NOM. EFF.	92.8	PF	97	SF	1.5			
VOLTS	230/460		FLA	7.3/3.7				
RPM	1800	RPM MAX	4000					
HZ	60	PH.	3	CLASS	F			
BEMF (V)	106/212		Rs (Ω)	0.91/3.65				
Ld (mH)	14.4/57.7		Lq (mH)	54.4/217.7				
INV TYP	VPWM	CHP	60 TO 133 HZ					
	CT	6 TO 60 HZ	VT	1 TO 133 HZ				
MATCHED INV	ACS380-04XX-07A8-1/04A0-4							
BEARING	DE	6206	ODE	6205				
SERIAL#	***							

ELECTRIC MOTOR FOR INDUSTRIAL USE

FERRITE ASSISTED
SYNCHRONOUS RELUCTANCE MOTOR
FOR INVERTER USE ONLY



PERMANENT MAGNET MOTOR. WHEN SHAFT IS ROTATED, VOLTAGE WILL BE GENERATED AT THE MOTOR TERMINALS.
MOTEUR Á AIMANT PERMANENT. LORSQUE L'ARBRE TOURNE, UNE TENSION SERA GÉNÉRÉE AUX BORNES DU MOTEUR.

BALDOR-RELIANCE
SHAFT GROUNDING BRUSH INSTALLED

c UL us LISTED
E46145

ABB MOTORS AND MECHANICAL INC.
5711 R.S. BOREHAM JR. ST., FORT SMITH, AR. MFG IN U.S.A.

Volts	460	Max RPM	3000	Conn Diag.	CD0006B03	Leads	3
Amps	3.7	Max Amps		Cs Diagram	CS1126	BEMF	172
HP	3	VFD#	ECI4A4P1			LD	51
RPM	1800	S.F.	1.00			LQ	177
Phase/Hz	3/60	Rating	40C AMB CONT			Rs	3.8460 Meas. L-L

60034-2-3 Motor Performance at Standardized Operating Points

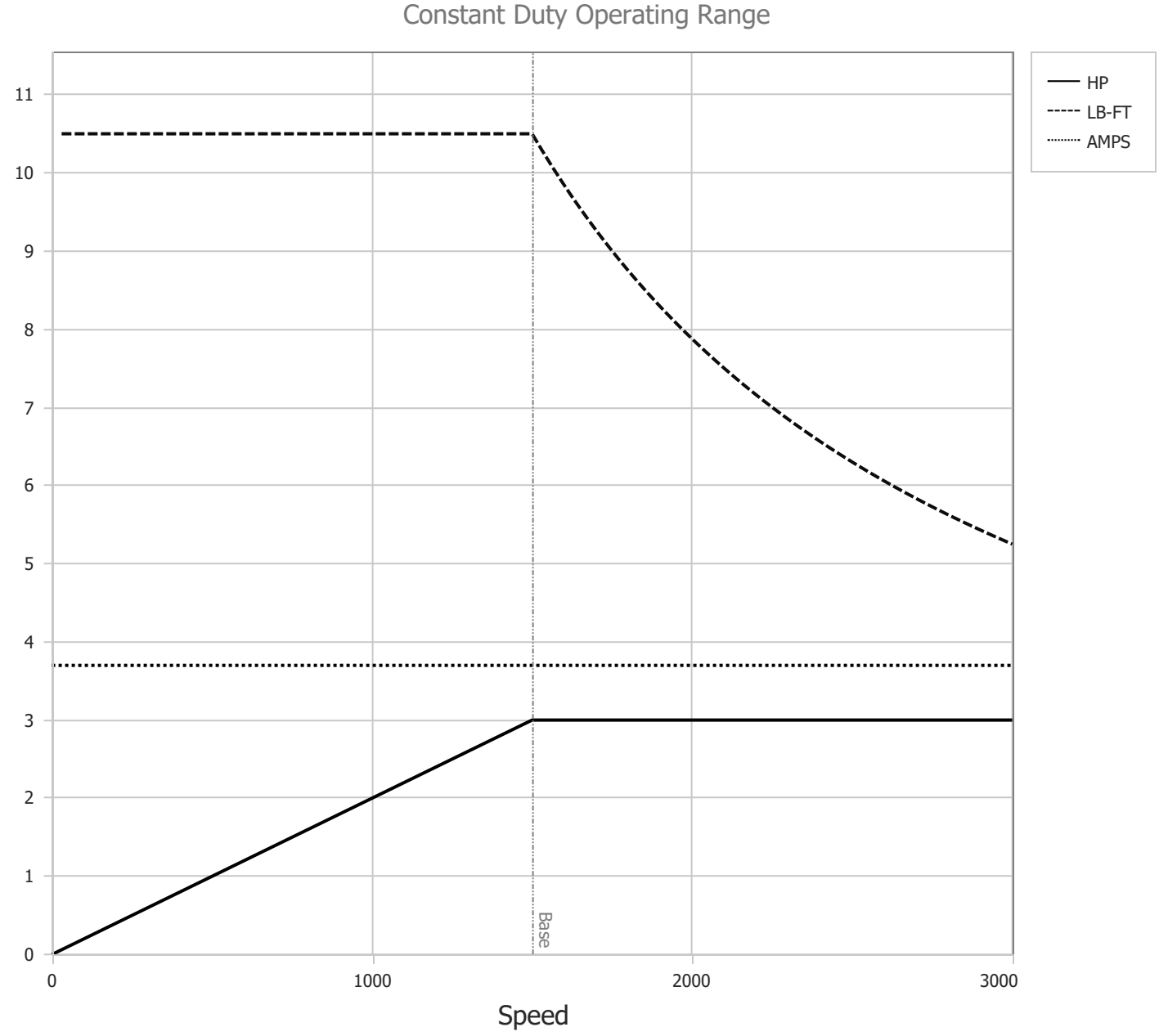
	RPM	% Speed	LB-FT	% Torque	HP	Efficiency	Loss (% FL)	Watts Loss (W)
P1	1627	90%	8.8	100%	2.7	91.3	8.59%	194
P2	904	50%	8.8	100%	1.5	89.3	6.00%	136
P3	452	25%	8.8	100%	0.8	83.4	4.94%	112
P4	1628	90%	4.4	50%	1.4	91.8	3.99%	90
P5	904	50%	4.4	50%	0.8	89.9	2.80%	63
P6	904	50%	2.2	25%	0.4	87.9	1.70%	39
P7	452	25%	2.2	25%	0.2	83.7	1.21%	27

61800-9-2 PDS Performance at Reference Operating Points

	RPM	% Speed	LB-FT	% Torque	HP	System Efficiency	Loss (% FL)	Watts Loss (W)
P1	1804	100%	8.8	100%	3.0	89.8	11.23%	254
P2	904	50%	8.8	100%	1.5	84.8	8.87%	201
P3	301	17%	8.8	100%	0.5	69.2	7.37%	167
P4	1809	100%	4.4	50%	1.5	88.5	6.44%	146
P5	904	50%	4.4	50%	0.8	84.1	4.70%	106
P6	301	17%	4.4	50%	0.3	68.2	3.86%	87
P7	904	50%	2.2	25%	0.4	80.2	3.06%	69
P8	301	17%	2.2	25%	0.1	62.6	2.46%	56

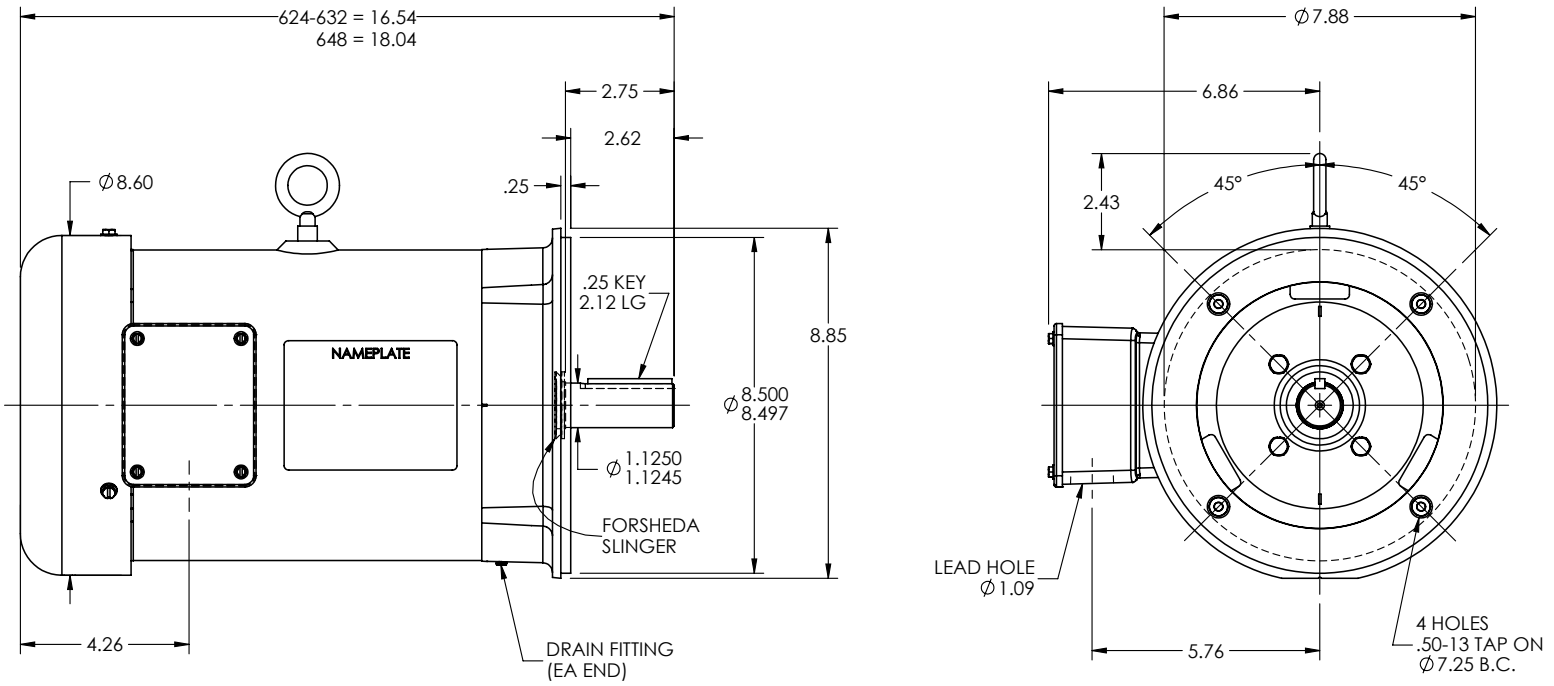
Points not taken in certified order.

Volts	460	Max RPM	3000	Conn Diag.	CD0006B03	Leads	3
Amps	3.7	Max Amps		Cs Diagram	CS1126	BEMF	172
HP	3	VFD #	ECI4A4P1			LD	51
RPM	1800	S.F.	1.00			LQ	177
Phase/Hz	3/60	Rating	40C AMB CONT			Rs	3.8460 Meas L-L



BALDOR • RELIANCE	DR By: R & D CK By: USBIBAK APP By: USJAROB1 Date: 01/09/2025	**AC MOTOR PERFORMANCE CURVES**	**36WGA0025** 36-0000-3655 *Test - 111781*

36LYT291



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

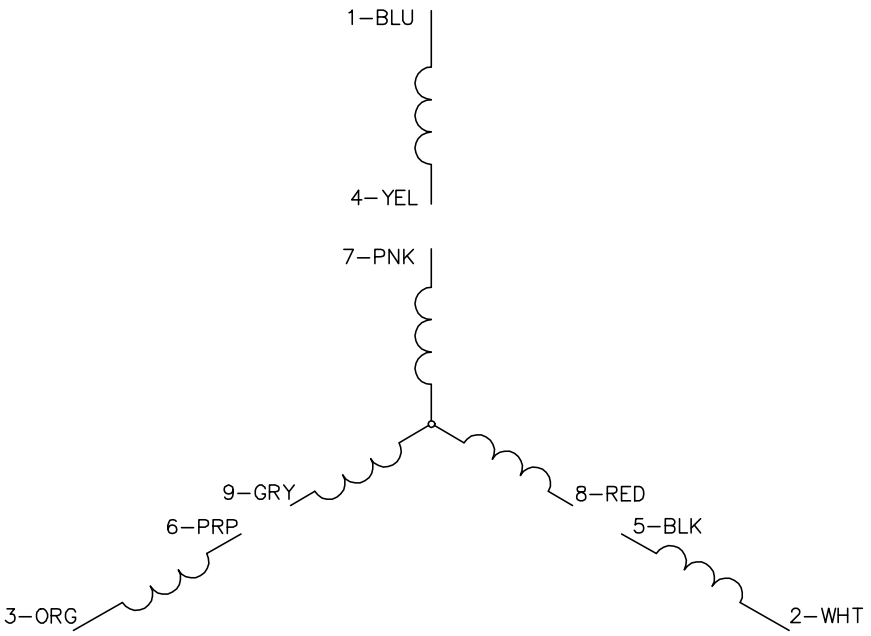
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BY: ENJEFD0	Material: -		

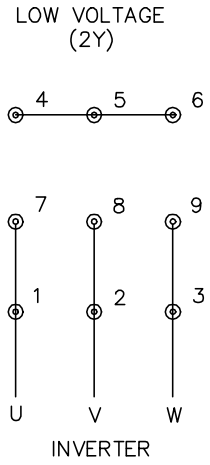
BALDOR

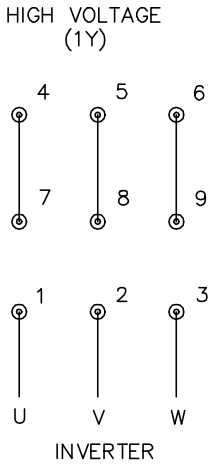
VER 182-4TC TEFC B EYEBOLT INT SH GND ECS

36LYT291

CD0005A25







NOTES:

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

CD0005A25

REV. DESC: NEW		
REV. LTR: –	VERSION: 00	TDR: 000001135746
FILE: \AAA\00253\082	REVISED: 01:10:57 03/30/2020	BY: ENMARSO
MTL: –		

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, ECS

SH 1 of 1