

ABB BALDOR RELIANCE III

Customer information packet

ZDVSCP3665T

5HP, 1750RPM, 3PH, 60HZ, 184TC, 0641M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	184TC
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	5.000 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	UR CSA
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	13.200 A @ 230.0 V 6.600 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	RESOLVER
Front Face Code	Encoder/Feedback Device
Front Shaft Indicator	No Key Or Flat
Heater Indicator	No Heater
High Voltage Full Load Amps	6.6 a

Part Detail

Revision	R
Type	AC
Mech. spec.	06H932
Base	
Status	PRD/A
Elec. spec.	06WGX182
Layout	06LYH932
Eff. date	06-18-2026
CD Diagram	CD0005
Poles	04
Leads	9#16
Proprietary	False
Created date	09-04-2012

Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	4000 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0642M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	20.23 IN
Power Factor	79
Product Family	Chemical Processing (Not DC)
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.00
Shaft Diameter	1.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1750 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None

Winding Thermal 2

None

Nameplate

NP3949				
CAT.NO.	ZDVSCP3665T			
SPEC.	06H932X182Z1			
FRAME	184TC	H.P.		5 TE
VOLTS	230/460			
MAG. CUR.	6.4/3.2		F.L. AMPS 13.2/6.6	
R.P.M.	1750	R.P.M. MAX		4000
HZ.	60	PH.	3	CLASS F
SER.F.	1.00	SL HZ		1.7
NEMA NOM. EFF.	89.5	WK2	0.39	
RATING	40C AMB-CONT			
DE	6206	ODE	6206	
CC	010A	SN		
	1.5:1 CHP PWM			
	1000:1 CT/VT			

REL S.O.	ZDVSCP3665T	VOLTS	460	ENCLOSURE	TEFC	WYE CONN EQ CKT OHMS PER PHASE			
FRAME	184TC	AMPS	6.6	MAX SAFE RPM	4000	(AT BASE RATING, 25°C)			
HP	5	DUTY	CONT	In (AMPS)	3.2	R1	1.3080	X1	3.6930
BASE SPEED	1750	S.F.	1.0	P.F. @NL/FL	6/79	R2	1.0000	X2	3.2200
PHASE/HZ	3/60	AMB°C/INSUL	40/F	WK ² (lb-ft ²)	0.382			XM	81.0550

Rated Full Load Data

	RPM	HP	Torque	Volts	Freq-Hz	Amps
Base Speed	1749	5.0	15.00	460	60	6.63
Max Speed	2622	5.0	10.10	460	90	6.00
Min Speed	0	0.0	15.15	36.44	1.70	6.63

Load Performance at Base Speed

	RPM	HP	Torque	Volts	Freq-Hz	Amps
No Load	1799	0.0	0.00	460	60	3.20
1/4	1788	1.3	3.75	460	60	3.48
1/2	1775	2.5	7.52	460	60	4.26
3/4	1763	3.8	11.20	460	60	5.34
Full Load	1749	5.0	15.00	460	60	6.63
O/L	1679	11.0	34.50	460	60	14.50

Blower Data

Volts	Ph/Hz	FL Amps	LR Amps	Frame	CFM

Remarks: Calculated Data
Vector PWM Inverter Duty



DR BY Micheal Williamson
CK BY Micheal Williamson
APP BY Micheal Williamson
DATE 5/14/2013

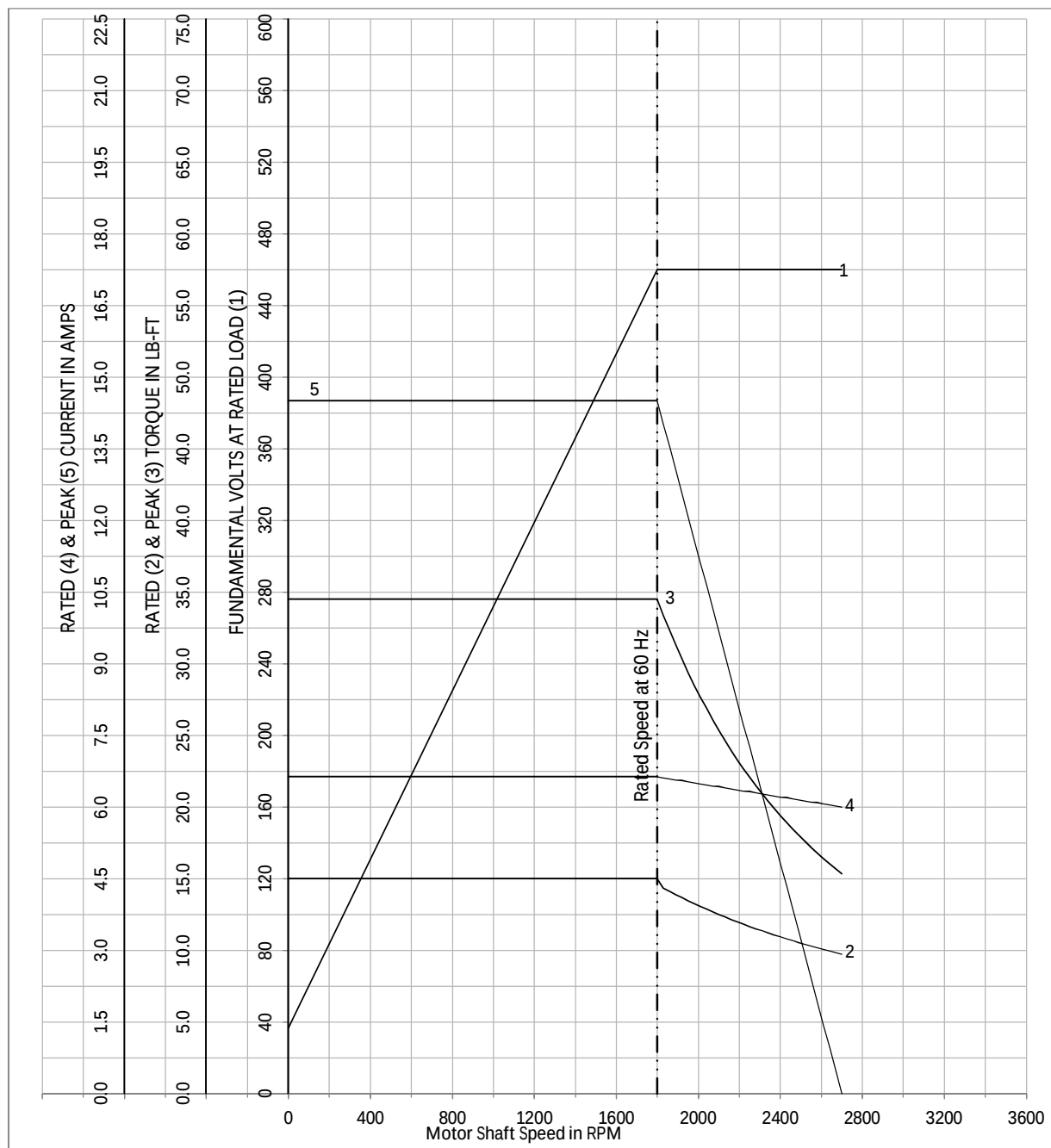
A-C MOTOR
PERFORMANCE CURVES

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Vector PWM Inverter Duty
Variable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only

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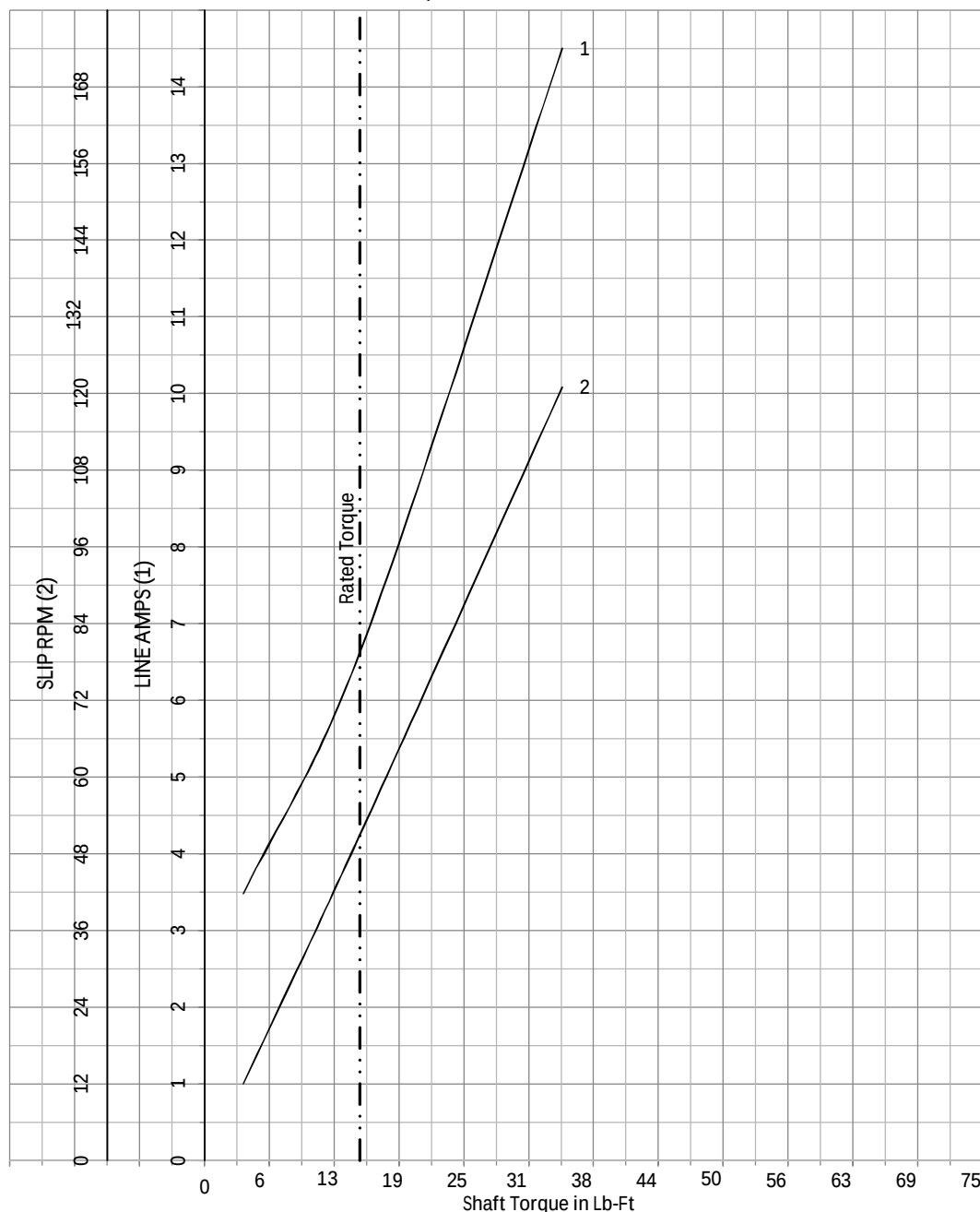
A-C MOTOR PERFORMANCE
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SH 1 of 2
ISSUE DATE 5/14/2013

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A-C MOTOR
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