

ABB BALDOR RELIANCE III

Customer information packet

IDNM3665T

5HP, 1760RPM, 3PH, 60HZ, 184TC, 0640M, TENV, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TENV
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	NO FEEDBACK
Front Face Code	Encoder/Feedback Device
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	6.6 a

Part Detail

Revision	Z
Type	AC
Mech. spec.	06F551
Base	
Status	PRD/A
Elec. spec.	06WGW531
Layout	06LYF551
Eff. date	06-05-2026
CD Diagram	CD0005
Poles	04
Leads	9#16
Proprietary	False
Created date	01-01-0001

Insulation Class	H
Inverter Code	Inverter Duty
KVA Code	L
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	6000 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0640M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	17.21 IN
Power Factor	80
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
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	No Slinger
Speed	1760 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

NP4009L									
CAT.NO.	IDNM3665T								
SPEC.	06F551W531G1								
FRAME	184TC		H.P.	5 TE					
VOLTS	230/460								
MAG. CUR.	7.2/3.6			F.L. AMPS			13.2/6.6		
R.P.M.	1760		R.P.M. MAX			6000			
HZ.	60		PH.	3	CLASS		H		
SER.F.	1.00		DES.	B	SL HZ		1.6		
NEMA NOM. EFF.	89.5		WK2	0.37					
BLOWER		V		PH		HZ		AMPS	
RATING	40C AMB-CONT								
DE	6206		ODE	6205					
CC	010A	SN							
	1000:1 CT/VT								



AC Induction Motor Performance Data
 Record # 515
 Typical performance - not guaranteed values

Winding: 06WGW531	Type: 0640M	Enclosure: TENV
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Nameplate Data				General Characteristics at 460 V, 60 Hz: High Volt Connection	
Rated Output (HP)	5			Full Load Torque	15 LB-FT
Volts	230/460			Start Configuration	DOL
Full Load Amps	13.2/6.6			Break Down Torque	60 LB-FT
R.P.M.	1760			Pull-Up Torque	36 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	43 LB-FT
NEMA Design Code	B	KVA Code	L	Starting Current	58 Amps
Service Factor	1			No-load Current	3.6 Amps
NEMA Nom. Eff.	89.5	P.F.	80	Line-line Res. @ 25°C.	2.11 Ohms
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	98°C
S.F. Amps				Temp. Rise @ S.F. Load	

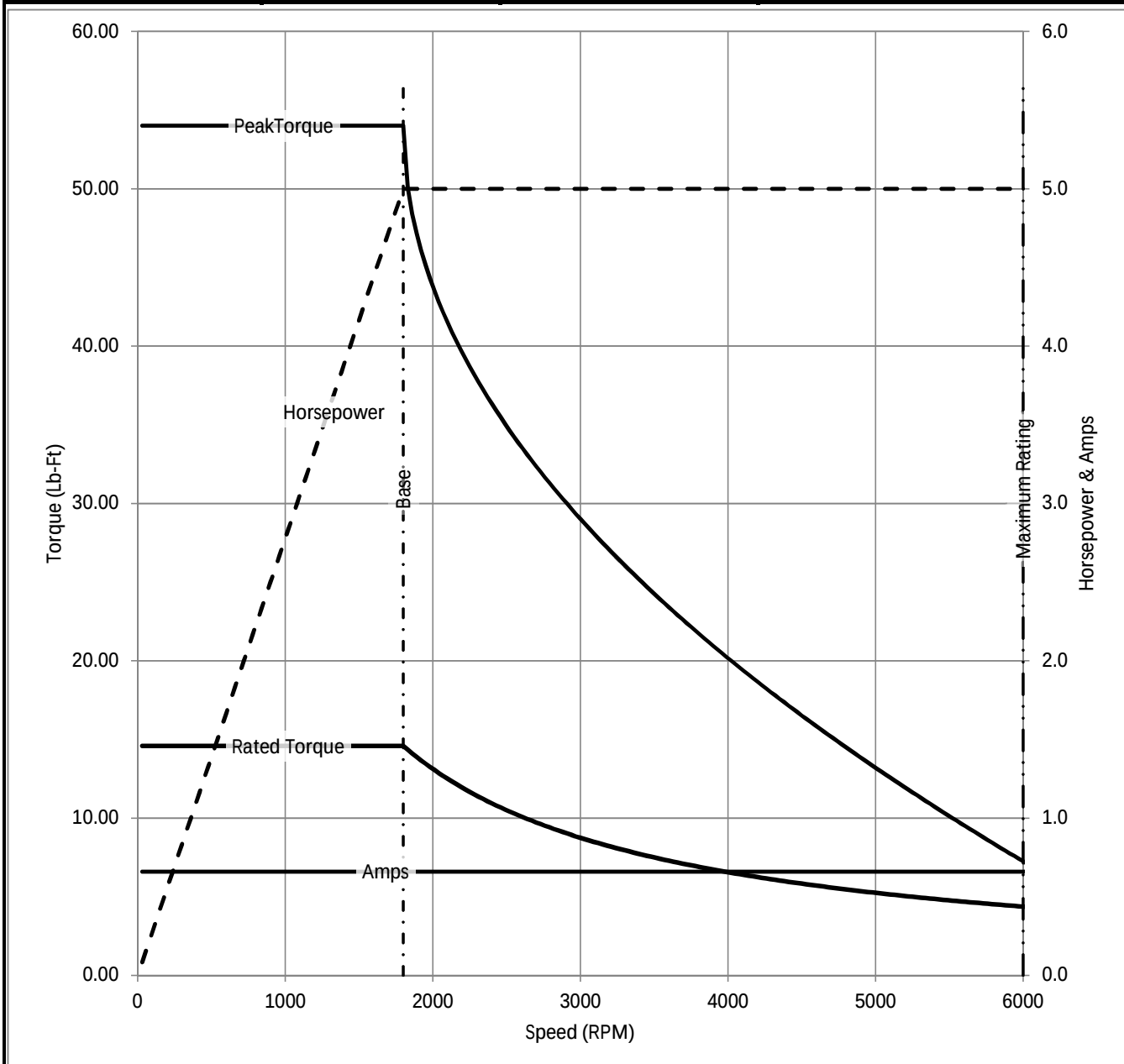
Load Characteristics at 460 Volts, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	37	58	72	79	83	86	
Efficiency	84.5	89.4	90.3	90	89	87.6	
Speed	1788	1777	1764	1751	1737	1721	
Line Amperes	3.8	4.5	5.5	6.6	7.9	9.3	

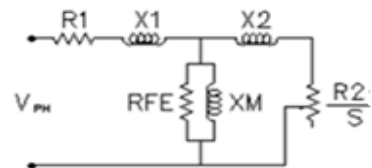
Baldor Electric Company Fort Smith, Arkansas



Catalog	IDNM3665T	NP VOLTS	230/460	ENCLOSURE	TENV	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
FRAME	184TC	NP AMPS	13.2/6.6	Base Volts	460	R1	1.030	X1	2.430
HP	5 HP	DUTY	Cont	Base AMPS	6.6	R2	0.858	X2	1.895
BASE SPEED	1800	MAX SAFE RPM	6000	Slip Hz	1.63			XM	65.659
PHASE/HZ	3/60	AMB ⁰ C/INSUL	40/H	WK ² (lb-ft ²)	0.372				



Remarks: Calculated Data


BALDOR
A MEMBER OF THE ABB GROUP

DR BY ENR
CK BY
APP BY ENR
DATE 2/26/2013

A-C MOTOR
PERFORMANCE CURVES

06F551W531G1

ISSUE DATE 2/26/2013

