

ABB BALDOR RELIANCE III

Customer information packet

IDCSWDM3710T

7.5HP, 1770RPM, 3PH, 60HZ, 213TC, 3740M, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	213TC
Frame Material	Stainless Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	7.500 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	19.000 A @ 230.0 V 9.500 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	9.5 a

Part Detail

Revision	AB
Type	AC
Mech. spec.	37H885
Base	
Status	PRD/A
Elec. spec.	37WGT864
Layout	37LYH885
Eff. date	08-15-2022
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	10-25-2006

Insulation Class	H
Inverter Code	Inverter Duty
KVA Code	J
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 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3740M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	19.81 IN
Power Factor	81
Product Family	Wash Down Paint Free
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.00
Shaft Diameter	1.375 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1770 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

NP1608L									
CAT NO	IDCSWDM3710T								
SPEC.	37H885T864G1								
FRAME	213TC		HP		7.5	TE			
VOLTS	230/460								
MAG CUR	8.8/4.4			FLA		19/9.5			
RPM	1770			RPM MAX		6000			
HZ	60		PH	3		CLASS		H	
SER.F.	1.00		DES	A		SL HZ		1	
NEMA-NOM-EFF	91.7		WK2	0.98					
BLWR V		PH		HZ		A			
RATING	40C AMB-CONT								
DE BRG	6307		ODE BRG		6206				
CC	010A	SN							



AC Induction Motor Performance Data
 Record # 37140
 Typical performance - not guaranteed values

Winding: 37WGT864	Type: 3739M	Enclosure: TEFC
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Nameplate Data				General Characteristics at 460 V, 60 Hz: High Volt Connection	
Rated Output (HP)	7.5			Full Load Torque	22.3 LB-FT
Volts	230/460			Start Configuration	DOL
Full Load Amps	19/9.5			Break Down Torque	71.3 LB-FT
R.P.M.	1770			Pull-Up Torque	38.7 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	46.5 LB-FT
NEMA Design Code	A	KVA Code	J	Starting Current	73 Amps
Service Factor	1			No-load Current	4.3 Amps
NEMA Nom. Eff.	91.7	P.F.	81	Line-line Res. @ 25°C.	1.34 Ohms
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	69°C
S.F. Amps				Temp. Rise @ S.F. Load	

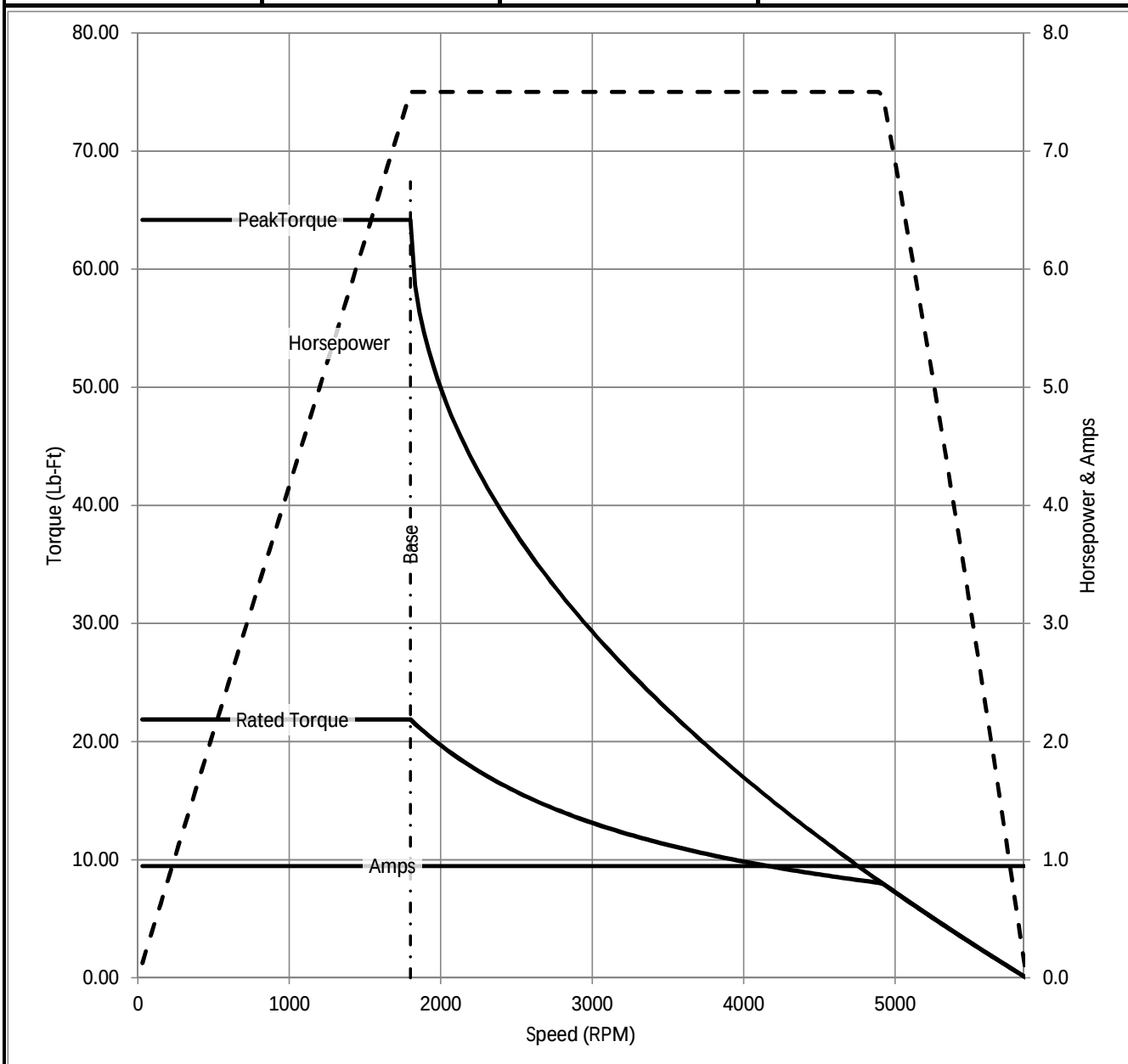
Load Characteristics at 460 Volts, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	42	65	75	81	83	85	
Efficiency	86.9	91.1	92.1	91.7	90.8	89.7	
Speed	1793	1786	1778	1770	1760	1750	
Line Amperes	4.8	5.95	7.62	9.47	11.6	13.9	

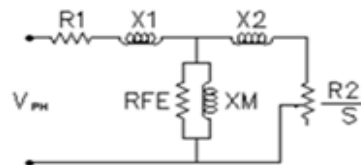
Baldor Electric Company Fort Smith, Arkansas



Catalog	IDCSWDM3710T	NP VOLTS	230/460	ENCLOSURE	TEFC	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
FRAME	213TC	NP AMPS	19/9.5	Base Volts	460	R1	0.633	X1	2.477
HP	7.5 HP	DUTY	Cont	Base AMPS	9.47	R2	0.402	X2	1.907
BASE SPEED	1800	MAX SAFE RPM	6000	Slip Hz	1.00			XM	57.989
PHASE/HZ	3/60	AMB ⁰ C/INSUL	40/H	WK ² (lb-ft ²)	0.959				



Remarks: Calculated Data


BALDOR
A MEMBER OF THE ABB GROUP

DR BY ENR
CK BY
APP BY ENR
DATE 3/6/2013

A-C MOTOR
PERFORMANCE CURVES

37H885T864G1

ISSUE DATE 3/6/2013

