

ABB BALDOR RELIANCE III

Customer information packet

CESSWDM3709T

7.5HP, 3500RPM, 3PH, 60HZ, 213TC, 3734M, 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	3600 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	16.600 A @ 230.0 V 17.900 A @ 208.0 V 8.300 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	AF
Type	AC
Mech. spec.	37J639
Base	
Status	PRD/A
Elec. spec.	37WGT384
Layout	37LYJ639
Eff. date	12-18-2024
CD Diagram	CD0005
Poles	02
Leads	9#14
Proprietary	False
Created date	07-19-2006

High Voltage Full Load Amps	8.3 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	K
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3734M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	19.03 IN
Power Factor	93
Product Family	Wash Down All Stainless Steel
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.375 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3500 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

Nameplate

NP1953C01											
CAT.NO.	CESSWDM3709T										
SPEC.	37J639T384G1										
HP	7.5										
VOLTS	230/460										
AMP	16.6/8.3										
RPM	3500										
FRAME	213TC				HZ		60		PH		3
SER.F.	1.15		CODE		K	DES		A	CLASS		F
NEMA-NOM-EFF	91			PF		93					
RATING	40C AMB-CONT										
CC	010A			USABLE AT 208V						N/A	
DE	6307			ODE		6206					
ENCL	TEFC		SN								
	4:1CT 20:1VT										

AC Induction Motor Performance Data

Record # 11724

Typical performance - not guaranteed values

Winding: 37WGT384-R001			Type: 3734M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		7.5	Full Load Torque		11.5 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		16.6/8.3	Breakdown Torque		66.3 LB-FT	
R.P.M.		3500	Pull-up Torque		25.8 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque		36.7 LB-FT	
NEMA Design Code		A	KVA Code		K	
Service Factor (S.F.)		1.15	Starting Current		86.2 A	
NEMA Nom. Eff.		91	Power Factor		93	
Rating - Duty		40C AMB-CONT	Line-line Res. @ 25°C		0.913 Ω	
S.F. Amps			Temp. Rise @ Rated Load		47°C	
			Temp. Rise @ S.F. Load		56°C	
			Locked-rotor Power Factor		32.4	
			Rotor inertia		0.311 LB-FT2	

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	62	85	89	94	95	100	95
Efficiency	84.7	90.9	92.1	92	91.4	90.7	91.6
Speed	3584	3564	3541	3520	3498	3481	3507
Line amperes	3.54	4.72	6.63	8.32	10.3	11.8	9.5

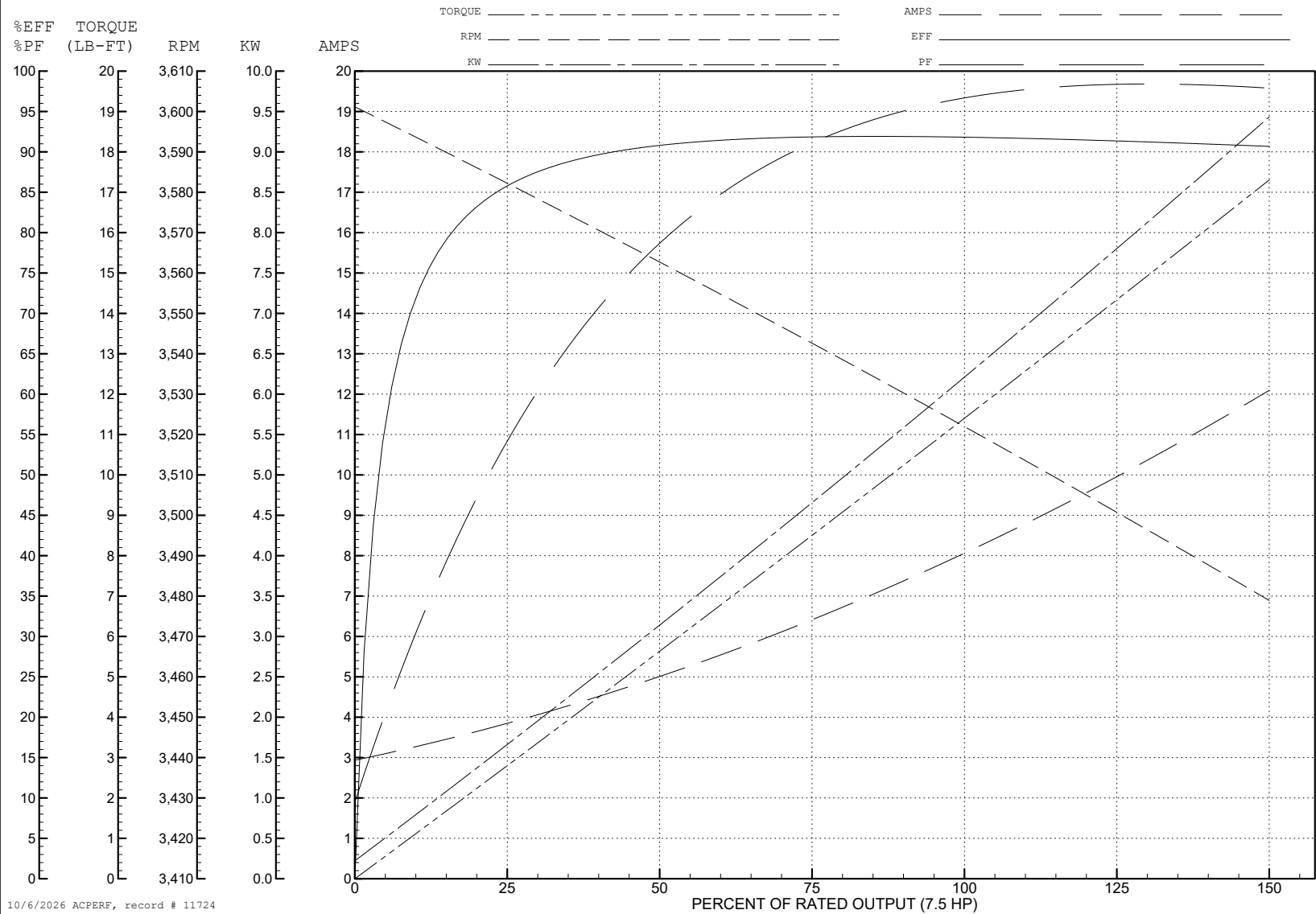
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WINDING # 37WGT384

Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 3500 RPM 460 V 3734M

TORQUES (LB-FT): PO=66.3 PU=25.8 LR=36.7 LRA=86.2



AC Induction Motor Performance Data

Record # 35780

Typical performance - not guaranteed values

Winding: 37WGT384-R006			Type: 3734M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		7.5	Full Load Torque		11.5 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		16.6/8.3	Breakdown Torque		66.3 LB-FT		
R.P.M.		3500	Pull-up Torque		25.8 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque		36.7 LB-FT		
NEMA Design Code		A	KVA Code	K	Starting Current		86.2 A
Service Factor (S.F.)		1.15	No-load Current		3.25 A		
NEMA Nom. Eff.		91	Power Factor	93	Line-line Res. @ 25°C		0.913 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		47°C
S.F. Amps					Temp. Rise @ S.F. Load		56°C
					Locked-rotor Power Factor		32.4
					Rotor inertia		0.311 LB-FT2

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	62	85	89	94	95	100	95
Efficiency	84.7	90.9	92.1	92	91.4	90.7	91.6
Speed	3584	3564	3541	3520	3498	3481	3508
Line amperes	3.54	4.72	6.63	8.32	10.3	11.8	9.5

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WINDING # 37WGT384

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7.5 HP 3 PH 60 HZ 3500 RPM 460 V 3734M

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