

ABB BALDOR RELIANCE III

Customer information packet

EM3774T

10HP, 1765RPM, 3PH, 60HZ, 215T, 0748M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	215T
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	10.000 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	CURUSEEV NEMA PREMIUM
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	12.300 A @ 460.0 V 24.600 A @ 230.0 V 27.000 A @ 208.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	12.3 a

Part Detail

Revision	K
Type	AC
Mech. spec.	07H002
Base	
Status	PRD/A
Elec. spec.	07WGT511
Layout	07LYH002
Eff. date	04-29-2024
CD Diagram	CD0005
Poles	04
Leads	9#14 Y
Proprietary	False
Created date	11-11-2020

Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0748M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	18.45 IN
Power Factor	83
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1765 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

NP3441LUA									
CAT.NO.	EM3774T								
SPEC	07H002T511G1								
HP	10								
VOLTS	230/460								
AMPS	24.6/12.3								
RPM	1765								
FRAME	215T		HZ	60			PH	3	
SF	1.15		CODE	H	DES	B	CLASS	F	
NEMA NOM. EFF	91.7		PF	83					
RATING	40C AMB-CONT								
CC	010A								
ENCL	TEFC		SER						
DE	6307		ODE	6206					
VPWM INVERTER READY			SFA 28.2/14.1						
CT6-60H(10:1)VT3-60H(20:1									
	50HZ 10HP 190/380V 29.8/14.9A							SF1.0	

Accessories

Part number	Description	Multiplier
37-1304	C FACE KIT	A8

AC Induction Motor Performance Data

Record # 85502

Preliminary Data Sheet

Winding: 07WGT511-R001			Type: 0748M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		10	Full Load Torque		29.8 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		24.6/12.3	Breakdown Torque		84.1 LB-FT		
R.P.M.		1765	Pull-up Torque		39.8 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		50.9 LB-FT	
NEMA Design Code		B	KVA Code	H	Starting Current		85.9 A
Service Factor (S.F.)		1.15	No-load Current		4.67 A		
NEMA Nom. Eff.		91.7	Power Factor	83	Line-line Res. @ 25°C		1.11 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		70°C
S.F. Amps		28.3/14.15	Temp. Rise @ S.F. Load		93°C		
			Locked-rotor Power Factor		40.4		
			Rotor inertia		1.18 lb-ft²		

Load Characteristics 460 V, 60 Hz, 10 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	48	70	79	83	85	85	84
Efficiency	89.8	92.6	92.6	91.7	90.4	88.8	90.7
Speed	1791	1783	1774	1763	1752	1739	1753
Line amperes	5.44	7.24	9.6	12.3	15.3	18.6	14.1

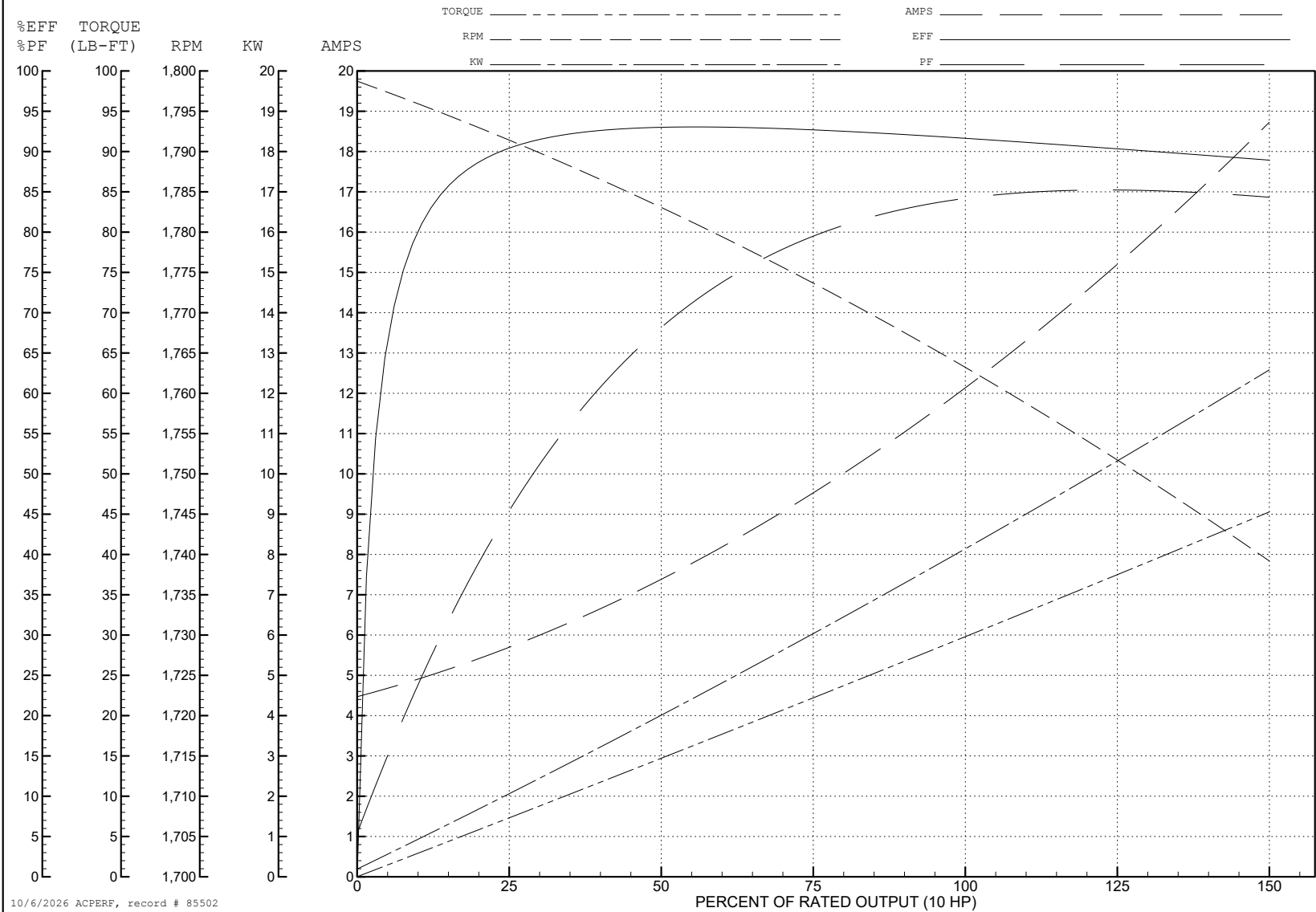
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WINDING # 07WGT511

Typical performance - not guaranteed values.

10 HP 3 PH 60 HZ 1765 RPM 460 V 0748M

TORQUES (LB-FT) : PO=84.1 PU=39.8 LR=50.9 LRA=85.9



AC Induction Motor Performance Data

Record # 88389

Typical performance - not guaranteed values

Winding: 07WGT511-R001				Type: 0748M		Enclosure: TEFC	
Nameplate Data				400 V, 50 Hz: High Voltage Connection			
Rated Output (HP)		10		Full Load Torque		35.99 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		24.6/12.3		Breakdown Torque		89.52 LB-FT	
R.P.M.		1765		Pull-up Torque		46.23 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		59.13 LB-FT	
NEMA Design Code		B	KVA Code	Starting Current		88.53 A	
Service Factor (S.F.)		1.15		No-load Current		5.03 A	
NEMA Nom. Eff.		91.7	Power Factor	83		Line-line Res. @ 25°C	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		91°C	
S.F. Amps				Temp. Rise @ S.F. Load		117°C	
				Locked-rotor Power Factor		35.2	
				Rotor inertia		1.18 lb-ft²	

Load Characteristics 400 V, 50 Hz, 10 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	50	71	80	84	85	85	85
Efficiency	90	92.4	91.9	90.4	88.9	86.5	89.5
Speed	1491	1482	1472	1460	1448	1433	1453
Line amperes	5.96	8.13	10.95	14.22	17.88	21.98	16.4

ABB Motors and Mechanical Inc.

WINDING # 07WGT511

Typical performance - not guaranteed values.

10 HP 3 PH 50 HZ 1765 RPM 400 V 0748M

TORQUES (LB-FT) : PO=89.52 PU=46.23 LR=59.13 LRA=88.53

