

ABB BALDOR RELIANCE III

Customer information packet

EM3770T-8G

7.5HP, 1770RPM, 3PH, 60HZ, 213T, 0738M, TEFC, F

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	213T
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	7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	200.0 V @ 60 HZ
Agency Approvals	CSA CSA EEV UR
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	21.200 A @ 208.0 V 21.400 A @ 200.0 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	21.4 a

Part Detail

Revision	N
Type	AC
Mech. spec.	07L783
Base	
Status	PRD/A
Elec. spec.	07WGX497
Layout	07LYL783
Eff. date	05-02-2025
CD Diagram	CD0006
Poles	04
Leads	3#12
Proprietary	False
Created date	09-11-2013

Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0738M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	18.45 IN
Power Factor	81
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
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	Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1770 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

NP3441L									
CAT.NO.	EM3770T-8G								
SPEC.	07L783X497G1								
HP	7.5								
VOLTS	200								
AMP	21.4								
RPM	1770								
FRAME	213T		HZ	60			PH	3	
SER.F.	1.15	CODE	J	DES	A	CL	H		
NEMA-NOM-EFF	91.7	PF	81						
RATING	40C AMB-CONT								
CC	010A								
DE	6307		ODE	6206					
ENCL	TEFC	SN							
VPWM INVERTER READY									
CT6-60H(10:1)VT3-60H(20:1									

Parts List

Part number	Description	Quantity
SA269064	SA 07L783X497G1	1.000 ea
RA255718	RA 07L783X497G1	1.000 ea
HW3201A05	3/8-16 EYEBOLT	1.000 ea
09CB3002SP	CB W/1.38 LEAD HOLE FOR 37, 39, 307 & 30	1.000 ea
09GS1000	GASKET-CONDUIT BOX, 1/16 THICK LEXIDE	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 ea
59XW2520G07	.25-20X.44,HEX SER WSHR,TAPTITE 2,GREEN	1.000 ea
37EP1100A01	FR ENDPLATE MACH	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 ea
37EP1101A09	SPL PULLEY EP ENCL 37 307 BRG.	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
10XN2520A26	1/4-20X 1 5/8 HEX HD	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 ea
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 ea
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 ea
07FH4007SP	PRIMED	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
09CB3501SP	CONDUIT BOX LID FOR 09CB3001 & 09CB3002	1.000 ea
09GS1013SP	GS FOR 09CB3501, 12CB1500 & 12CB1503 LID	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 ea
HW2501F21	KEY, 5/16 SQ X 2.375	1.000 ea
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LB1459	AEGIS SGR LABEL "AEGISLBL-100"	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
37FN3002A01SP	EXFN, PLASTIC, 9.00 OD, 1.155 ID	1.000 ea
HA3104A32	THRUBOLT- 5/16-18 X12.750	4.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.036 ga
LC0006	CONNECTION LABEL	1.000 ea

NP3441L	ALUM SUPER-E VPWM INVERTER READY UL EEV	1.000 ea
07PA1011	PKG GRP, 07 CAST IRON PK1181	1.000 ea
10XL3807A28	3/8-7 X 1 3/4" LAG SCREW	2.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea

AC Induction Motor Performance Data

Record # 50351

Typical performance - not guaranteed values

Winding: 07WGX497-R007			Type: 0738M		Enclosure: TEFC		
Nameplate Data				200 V, 60 Hz: Single Voltage Motor			
Rated Output (HP)		7.5		Full Load Torque		22.1 LB-FT	
Volts		200		Start Configuration		direct on line	
Full Load Amps		21.4		Breakdown Torque		66.9 LB-FT	
R.P.M.		1770		Pull-up Torque		30.7 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		40.4 LB-FT	
NEMA Design Code		A	KVA Code	J		Starting Current	154 A
Service Factor (S.F.)		1.15		No-load Current		9.21 A	
NEMA Nom. Eff.		91.7	Power Factor	81	Line-line Res. @ 25°C		0.29 Ω
Rating - Duty		40C		AMB-CONT		Temp. Rise @ Rated Load	42°C
S.F. Amps						Temp. Rise @ S.F. Load	51°C
						Locked-rotor Power Factor	37.6
						Rotor inertia	0.934 LB-FT2

Load Characteristics 200 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	44	66	76	81	84	85	83
Efficiency	87.7	91.4	92	91.7	90.7	89.6	91.1
Speed	1793	1785	1777	1769	1758	1748	1762
Line amperes	10.5	13.4	17.1	21.5	26.5	31.9	24.4

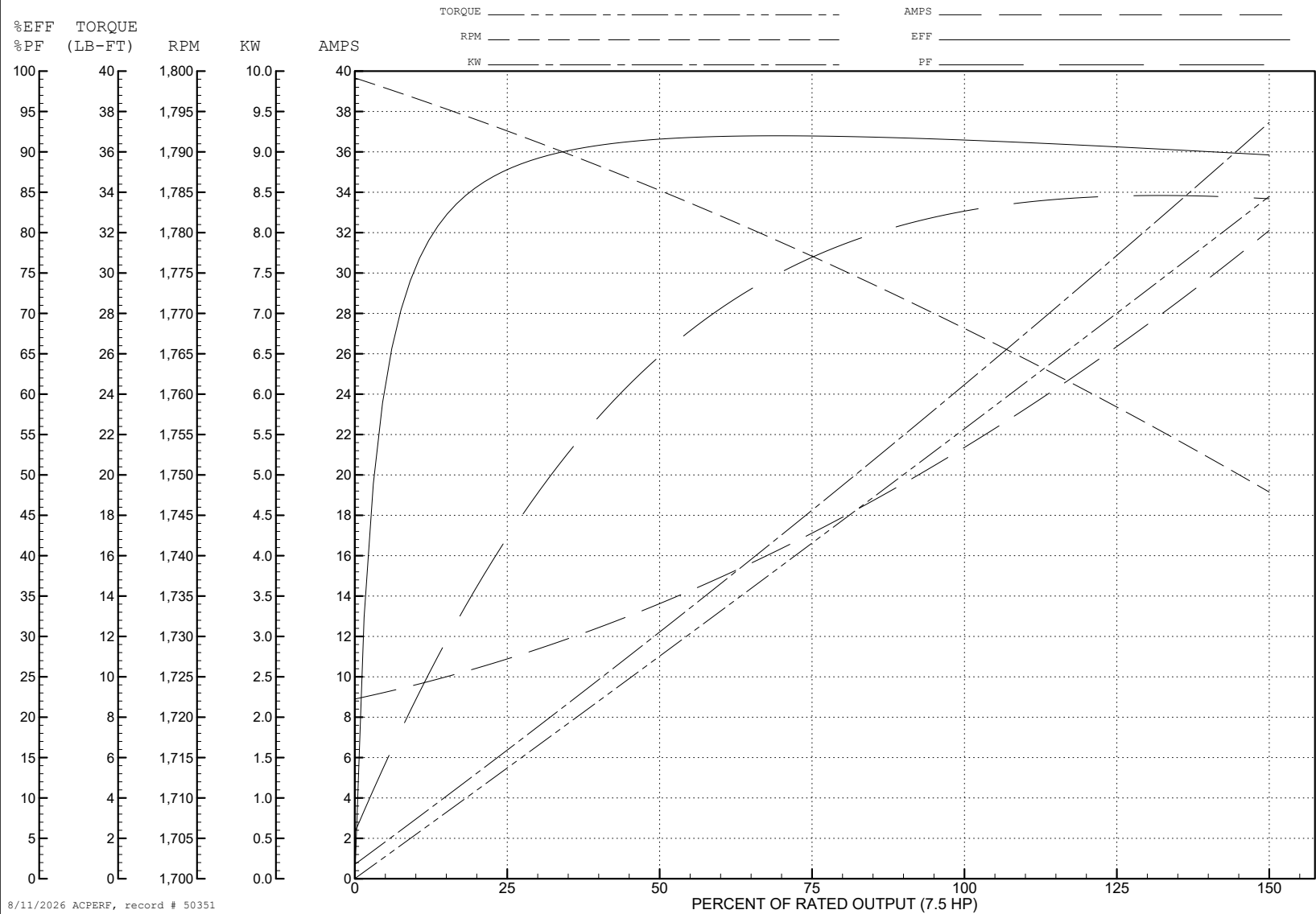
ABB Motors and Mechanical Inc.

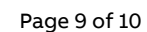
WINDING # 07WGX497

Typical performance - not guaranteed values.

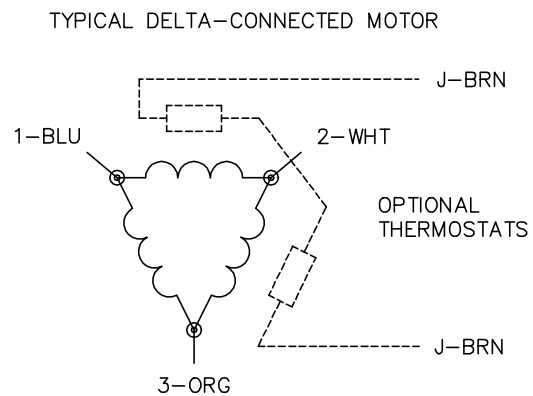
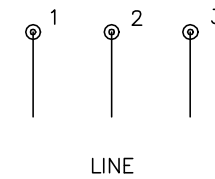
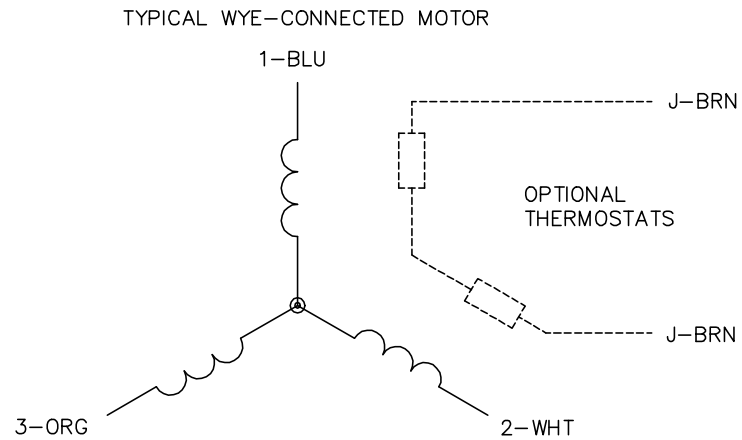
7.5 HP 3 PH 60 HZ 1770 RPM 200 V 0738M

TORQUES (LB-FT): PO=66.9 PU=30.7 LR=40.4 LRA=154





CD0006


NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007

REV. LTR: E

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\141

REVISED: 10:24:49 02/19/2019

BY: ENBRIRO

MTL: —


BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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