ABB BALDOR RELIANCE

Customer information packet

HBEM3770T

38M 4P TEFC HOR 213T
Class - None
Division - Not Applicable

Copyright © All product information within this document is subject to ABB Motors and Mechanical Inc. copyright © protection, unless otherwise noted.
10/9/2026 11:56:00 PM

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	460.0 V @ 60 HZ
	230.0 V @ 60 HZ
Agency Approvals	CURUSEEV
	NEMA PREMIUM
	WEEE
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	20.000 A @ 208.0 V
	9.500 A @ 460.0 V
	19.000 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Electrically Isolated Bearings
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	G
Type	AC
Mech. spec.	07D743
Base	
Status	PRD/A
Elec. spec.	07WGT510
Layout	07LYD743
Eff. date	02-03-2026
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	01-05-2022

High Voltage Full Load Amps	9.5 a
Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	9 @ 14 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	Sealed Bearing
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 Ground Indicator	No 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

NP4312A01A01L

CAT #	HBEM3770T	**SER**		**CC**	010A	**WGT**		**LBS**	
SPEC	07D743T510G1	**RATING**	40C AMB-CONT						
HZ	**VOLTS**	**AMPS**	**RPM**	**HP**	**SF**	**NEMA NOM. EFF**			
60	230/460	19/9.5	1770	7.5	1.15	91.7			
PH 3	**CL** H	**CODE** J	**DES** A	**ENCL** TEFC	**IP** 54	**PF** 81	**%**		
DE BRG	6307	**ODE BRG**	6206	**FRAME**	213T				
INV TYPE:	**VPWM**	**SL HZ** 1	**CHP** 60	**TO** 90	1.5:1				
WK2 0.934	**LB FT2**	**MAX RPM** 2700	**CT** 6	**TO** 60	10:1				
8.2/4.1		**VT** 3	**TO** 60	20:1					
SFA 21.4/10.7									
YR									

AC Induction Motor Performance Data
Record # 92020
Typical performance - not guaranteed values

Winding: 07WGT510-R012	**Type:** 0738M	**Enclosure:** TEFC

Nameplate Data			
Rated Output (HP)			7.5
Volts			230/460
Full Load Amps			19/9.5
R.P.M.			1770
Hz	60	**Phase**	3
NEMA Design Code	A	**KVA Code**	J
Service Factor (S.F.)			1.15
NEMA Nom. Eff.	91.7	**Power Factor**	81
Rating - Duty			40C AMB-CONT
S.F. Amps			

460 V, 60 Hz: High Voltage Connection	
Full Load Torque	22.3 LB-FT
Start Configuration	direct on line
Breakdown Torque	69.1 LB-FT
Pull-up Torque	28.7 LB-FT
Locked-rotor Torque	39.1 LB-FT
Starting Current	67.4 A
No-load Current	4.07 A
Line-line Res. @ 25ºC	1.48 Ω
Temp. Rise @ Rated Load	48°C
Temp. Rise @ S.F. Load	59°C
Locked-rotor Power Factor	37.1
Rotor inertia	0.934 lb-ft²

Load Characteristics 460 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	86.7	91	92.2	91.8	90.3	89.4	90.9
Speed	1792	1785	1777	1769	1759	1749	1763
Line amperes	4.61	5.85	7.48	9.43	11.6	13.9	10.7

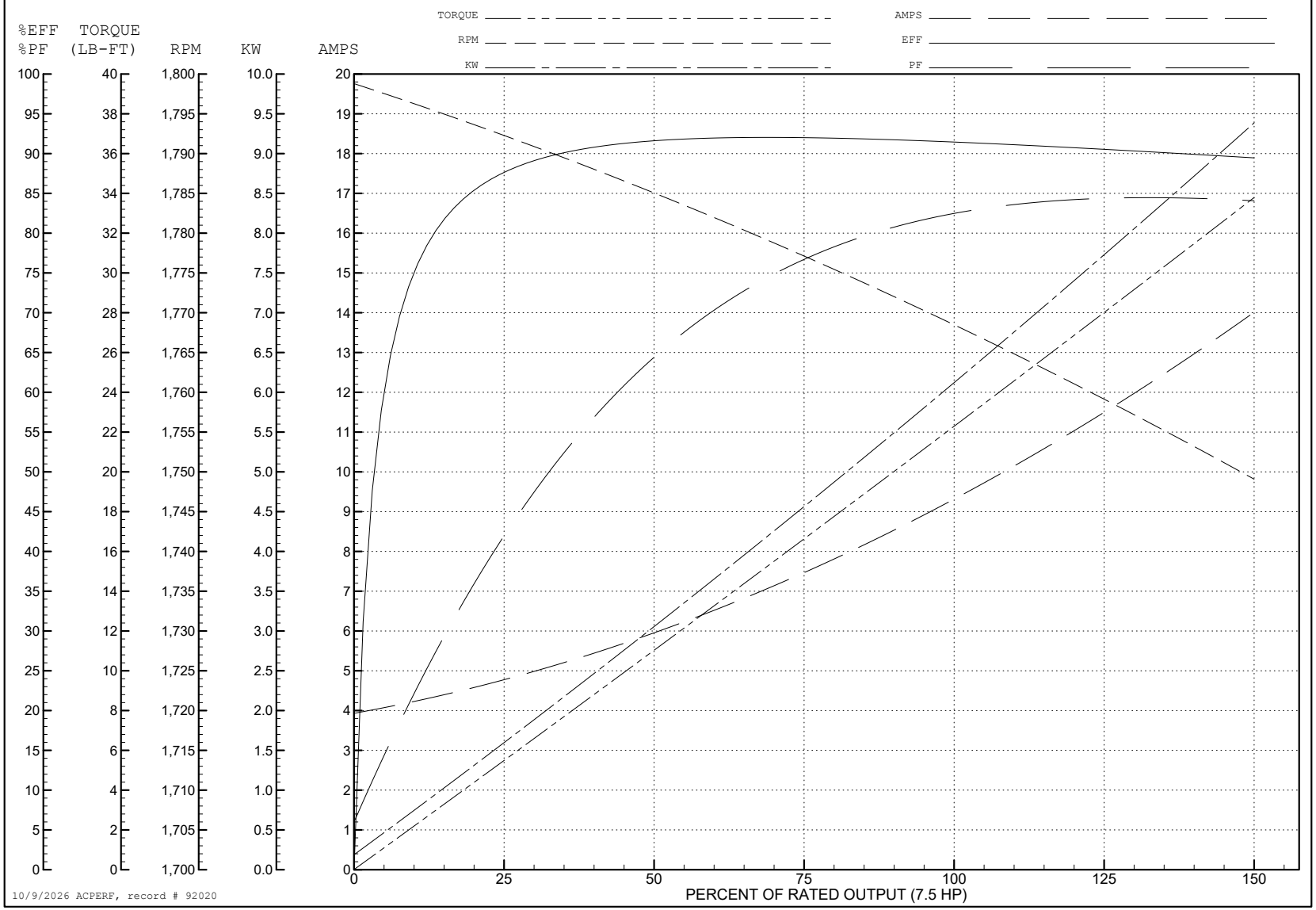
ABB Motors and Mechanical Inc.

WINDING # 07WGT510

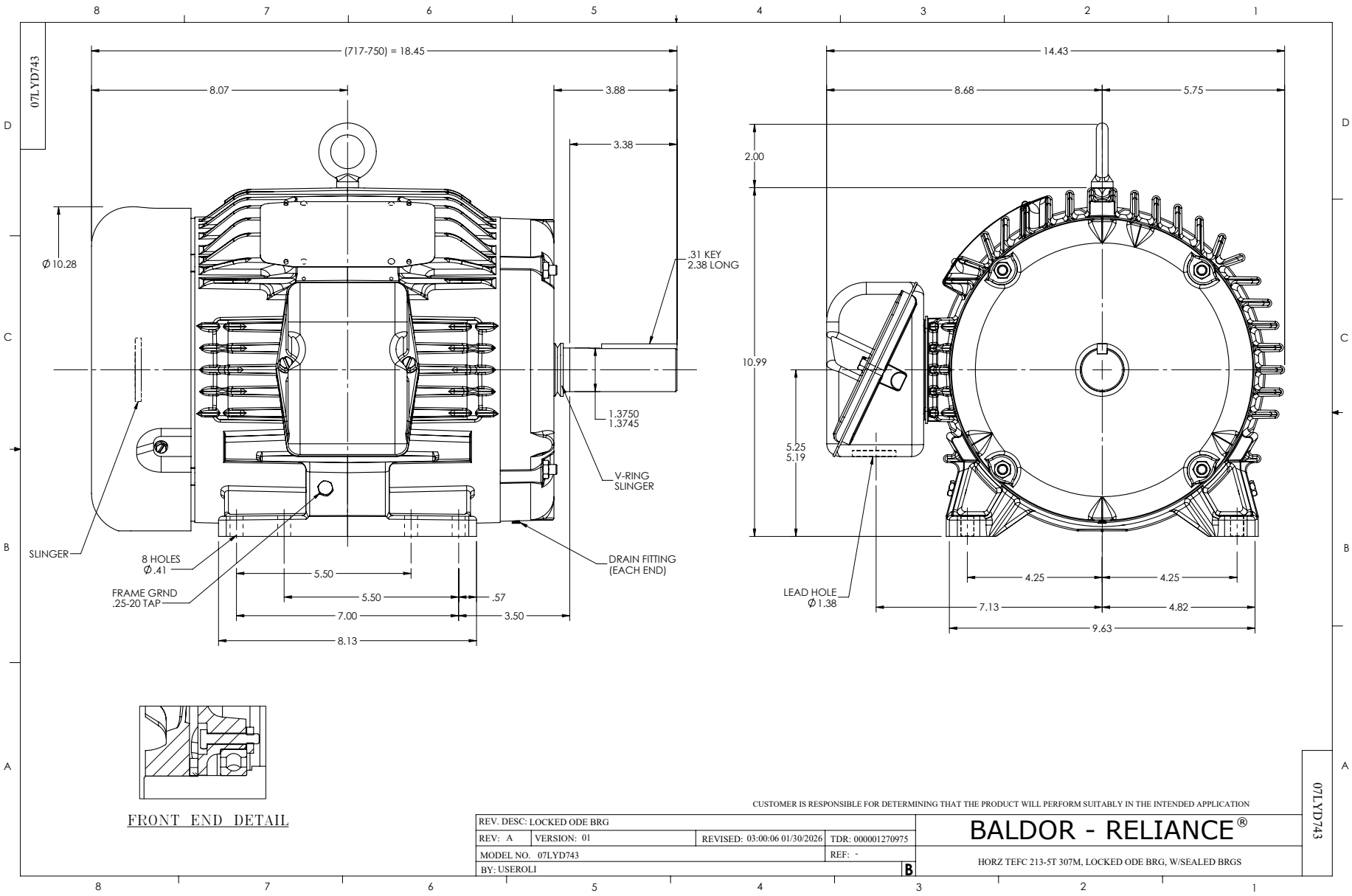
7.5 HP 3 PH 60 HZ 1770 RPM 460 V 0738M

Typical performance - not guaranteed values.

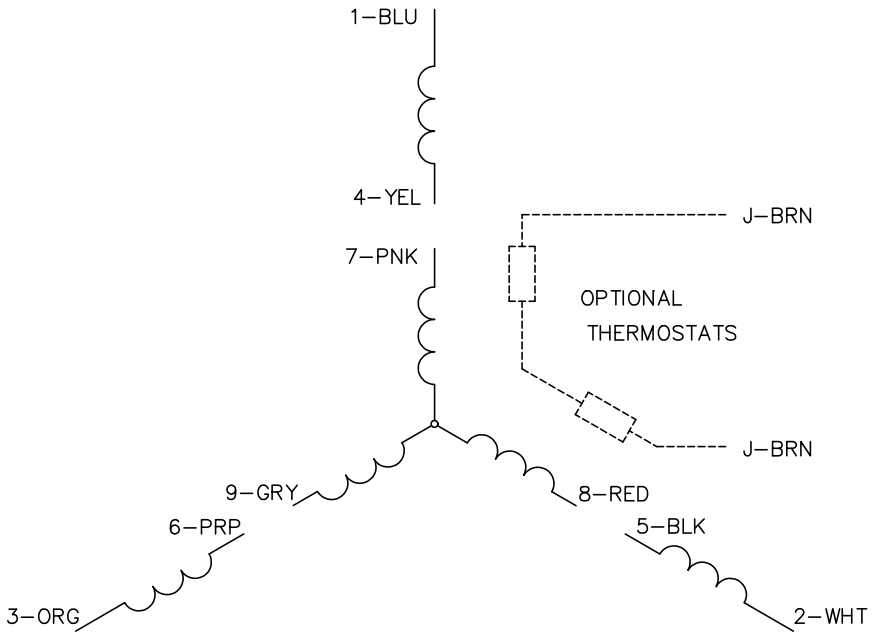
TORQUES(LB-FT): PO=69.1 PU=28.7 LR=39.1 LRA=67.4

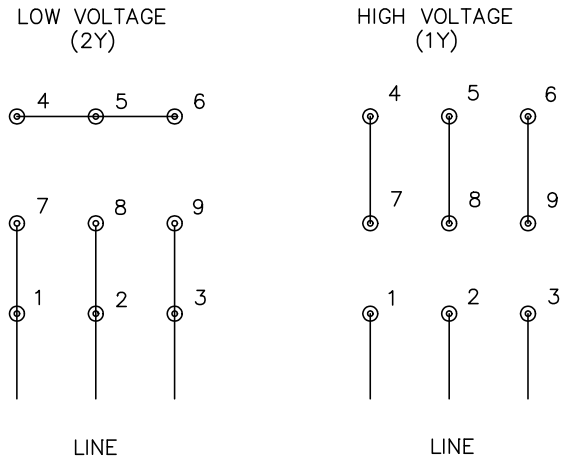


10/9/2026 ACPERF, record # 92020


07LYD743
(717-750) = 18.45
8.07
3.88
3.38
Ø 10.28
.31 KEY
2.38 LONG
1.3750
1.3745
V-RING
SLINGER
SLINGER
8 HOLES
Ø .41
FRAME GRND
.25-20 TAP
5.50
5.50
.57
7.00
3.50
8.13
DRAIN FITTING
(EACH END)
14.43
8.68
5.75
2.00
10.99
5.25
5.19
LEAD HOLE
Ø 1.38
4.25
4.25
7.13
4.82
9.63
FRONT END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOCKED ODE BRG
REV: A
VERSION: 01
REVISED: 03:00:06 01/30/2026
TDR: 000001270975
MODEL NO. 07LYD743
REF: -
BY: USEROLI
B
BALDOR - RELIANCE®
HORZ TEFC 213-5T 307M, LOCKED ODE BRG, W/SEALED BRGS
07LYD743

CD0005





NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS