

ABB BALDOR RELIANCE III

Customer information packet

CEDM3704T

3HP, 1160RPM, 3PH, 60HZ, 213TC, 3738M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	213TC
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	3.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CCSA US CSA EEV NEMA PREMIUM NEMA_PREMIUM 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
Constant Torque Speed Range	6
Current @ Voltage	9.600 A @ 208.0 V 9.200 A @ 230.0 V 4.600 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated

Part Detail

Revision	G
Type	AC
Mech. spec.	37N854
Base	
Status	PRD/A
Elec. spec.	37WGS519
Layout	37LYN854
Eff. date	06-24-2021
CD Diagram	CD0005
Poles	06
Leads	9#14
Proprietary	False
Created date	04-14-2016

Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	4.6 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	L
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	1800 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3738M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	19.76 IN
Power Factor	68
Product Family	Dirty Duty Plus
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	1160 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

NP3504											
CAT NO	CEDM3704T										
SPEC.	37N854S519G1						ENCL	TEFC			
FRAME	213TC	HP	3								
VOLTS	230/460										
FLA	9.2/4.6				I.P.	56					
RPM	1160	RPM MAX				1800					
HZ	60	PH	3	CLASS		F					
SER.F.	1.15	DES	B	CC	010A						
NEMA-NOM-EFF	89.5										
RATING	40C AMB-CONT										
DE BRG	6307	ODE BRG				6206					
GREASE	POLYREX EM										
C HP FR	60	C HP TO		90							
CT HZ FROM	6	CT HZ TO			60	VT HZ FROM		6	VT HZ TO		60
SER.NO	50C AT 1.0 SF										

AC Induction Motor Performance Data

Record # 55776

Typical performance - not guaranteed values

Winding: 37WGS519-R033			Type: 3738M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		3	Full Load Torque		13.4 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		9.2/4.6	Breakdown Torque		50.4 LB-FT		
R.P.M.		1160	Pull-up Torque		31.8 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		33.9 LB-FT	
NEMA Design Code		B	KVA Code	L	Starting Current		34 A
Service Factor (S.F.)		1.15	No-load Current		2.56 A		
NEMA Nom. Eff.		89.5	Power Factor	68	Line-line Res. @ 25°C		2.67 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		38°C
S.F. Amps					Temp. Rise @ S.F. Load		45°C
					Locked-rotor Power Factor		22.9
					Rotor inertia		0.945 LB-FT ²

Load Characteristics 460 V, 60 Hz, 3 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	30	50	62	69	73	75	70
Efficiency	82.1	88.6	89.5	89.8	89.1	87.6	89.1
Speed	1193	1186	1178	1170	1160	1149	1166
Line amperes	2.74	3.19	3.82	4.53	5.44	6.41	5.14

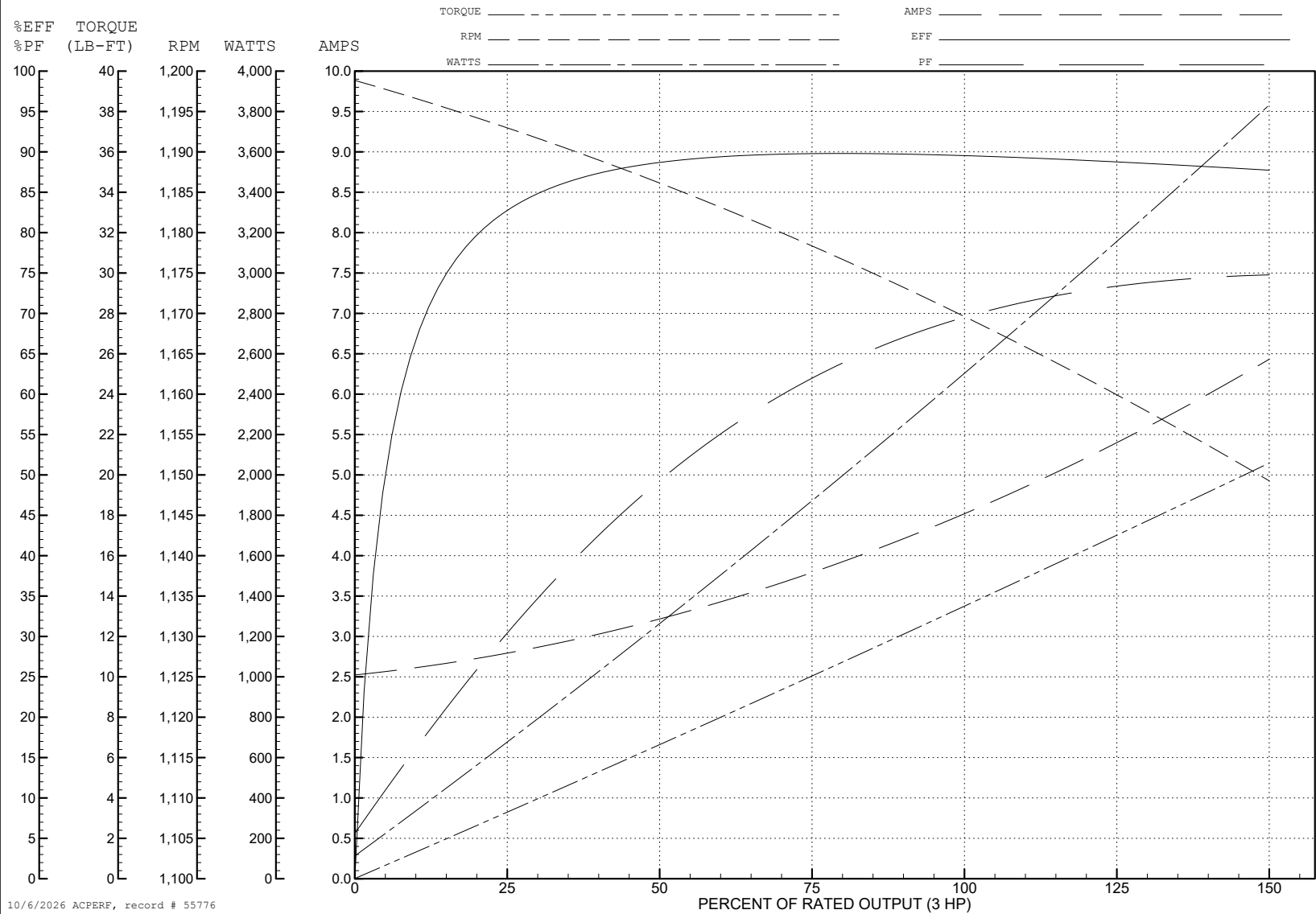
ABB Motors and Mechanical Inc.

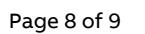
WINDING # 37WGS519

Typical performance - not guaranteed values.

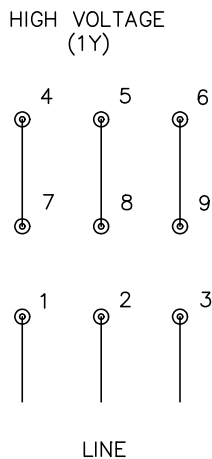
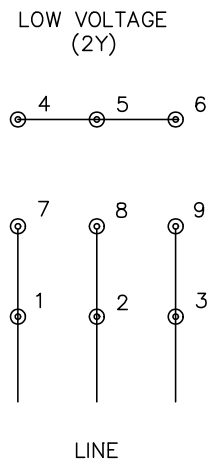
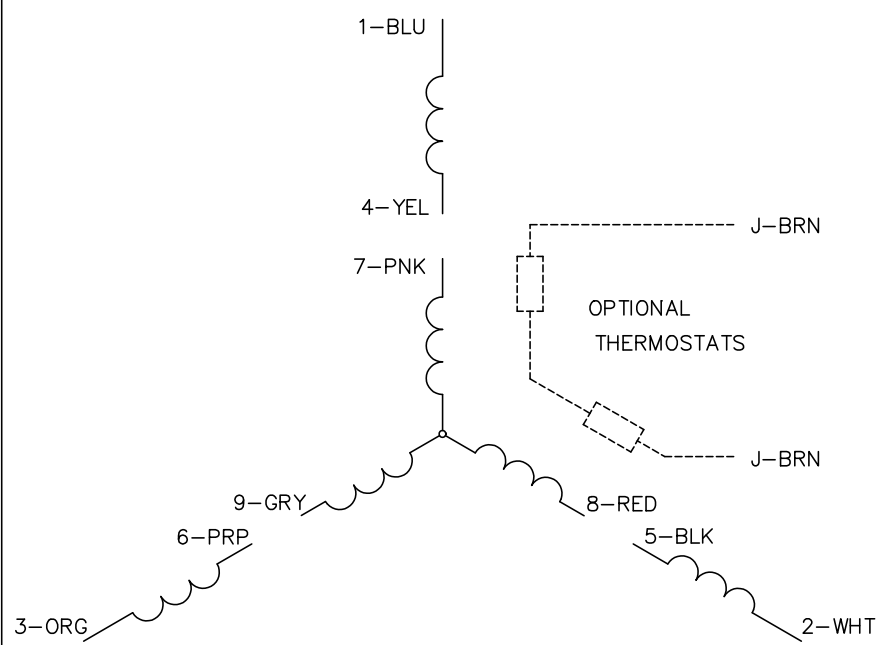
3 HP 3 PH 60 HZ 1160 RPM 460 V 3738M

TORQUES (LB-FT): PO=50.4 PU=31.8 LR=33.9 LRA=34





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- 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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
900000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005