

ABB BALDOR RELIANCE III

Customer information packet

CEDM3545

1HP, 3450RPM, 3PH, 60HZ, 56C, 3516M, TEFC, F1, N

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	56C
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	1.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 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	2.800 A @ 230.0 V 2.800 A @ 208.0 V 1.400 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	84.0 %
Electrically Isolated Bearing	Not Electrically Isolated

Part Detail

Revision	L
Type	AC
Mech. spec.	35E4315
Base	
Status	PRD/A
Elec. spec.	35WGS921
Layout	35LYE4315
Eff. date	01-06-2022
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	05-10-2016

Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.4 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3516M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	12.23 IN
Power Factor	82
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	1.25
Shaft Diameter	0.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3450 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	CEDM3545										
SPEC.	35E4315S921G1							ENCL	TEFC		
FRAME	56C	HP	1								
VOLTS	230/460SFA 3.4/1.7										
FLA	2.8/1.4					I.P.	56				
RPM	3450	RPM MAX					5400				
HZ	60	PH	3	CLASS				F			
SER.F.	1.25	DES	B	CC		010A					
NEMA-NOM-EFF	84										
RATING	40C AMB-CONT										
DE BRG	6205	ODE BRG					6203				
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 1.0SF										

AC Induction Motor Performance Data

Record # 55728

Typical performance - not guaranteed values

Winding: 35WGS921-R065			Type: 3516M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		1	Full Load Torque		1.5 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		2.8/1.4	Breakdown Torque		6.5 LB-FT		
R.P.M.		3450	Pull-up Torque		4.8 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		5.7 LB-FT	
NEMA Design Code		B	KVA Code	L	Starting Current		12.1 A
Service Factor (S.F.)		1.25	No-load Current		0.68 A		
NEMA Nom. Eff.		84	Power Factor	82	Line-line Res. @ 25°C		15.1 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		33°C
S.F. Amps		3.4/1.7	Temp. Rise @ S.F. Load		41°C		
			Locked-rotor Power Factor		56		
			Rotor inertia		0.0443 LB-FT2		

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	44	65	77	84	87	89	87
Efficiency	70.5	80.5	83.6	84.6	84.4	83.7	84.4
Speed	3567	3539	3510	3479	3446	3410	3446
Line amperes	0.75	0.9	1.09	1.33	1.56	1.88	1.56

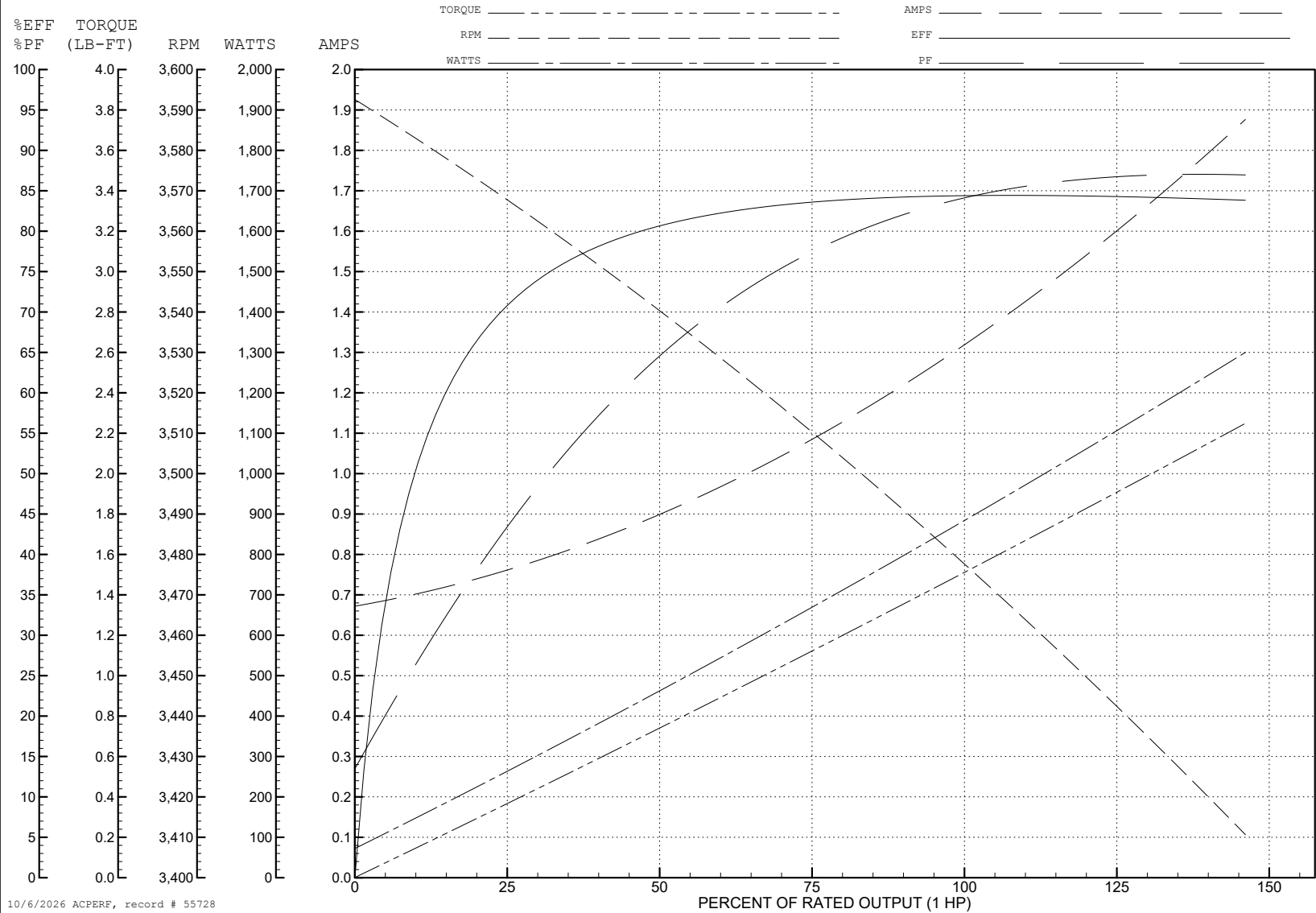
ABB Motors and Mechanical Inc.

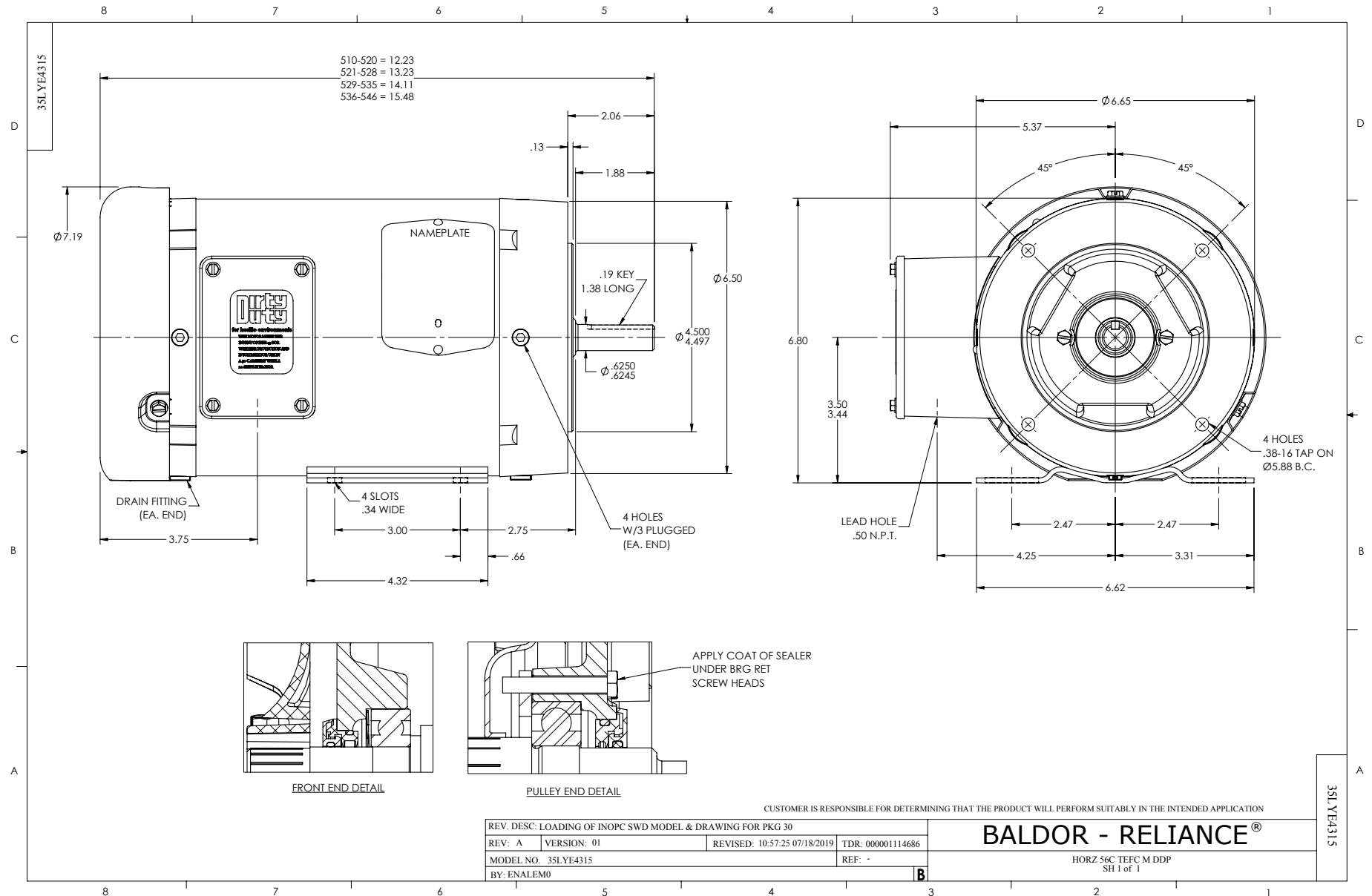
WINDING # 35WGS921

Typical performance - not guaranteed values.

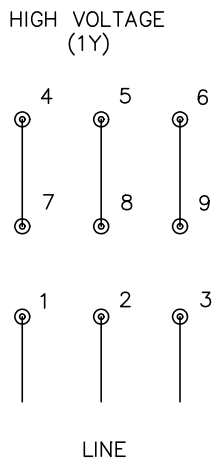
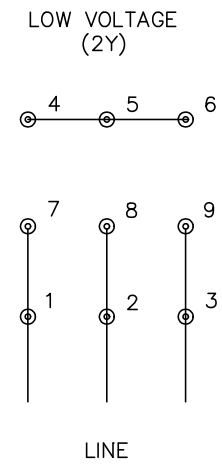
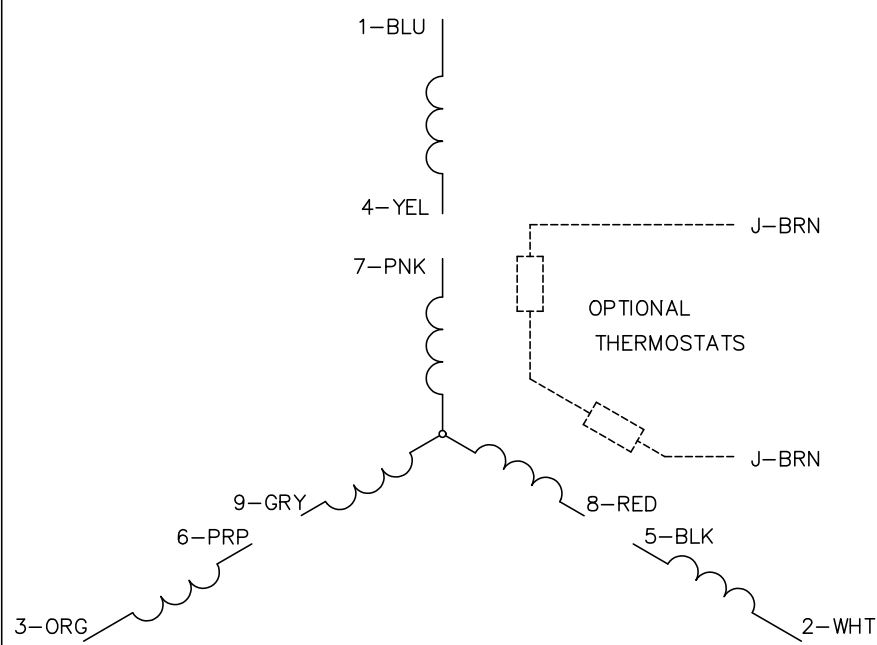
1 HP 3 PH 60 HZ 3450 RPM 460 V 3516M

TORQUES (LB-FT): PO=6.5 PU=4.8 LR=5.7 LRA=12.1





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.

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