

ABB BALDOR RELIANCE III

Customer information packet

VM3558T-57

2HP, 1445RPM, 3PH, 50HZ, 145TC, 3530M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	145TC
Frame Material	Steel
Frequency	50.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	2.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1500 RPM @ 50 HZ
Voltage @ Frequency	230.0 V @ 50 HZ 400.0 V @ 50 HZ
Agency Approvals	CSA CE UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	3.400 A @ 400.0 V 5.900 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	82.8 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	N
Type	AC
Mech. spec.	35AA003
Base	
Status	NLA/A
Elec. spec.	35WGN310
Layout	35LYAA003
Eff. date	10-28-2016
CD Diagram	CD0022
Poles	04
Leads	6#18
Proprietary	False
Created date	09-19-2011

High Voltage Full Load Amps	3.4 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	H
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	6 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3530M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	14.17 IN
Power Factor	78
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1445 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

NP2717L									
CAT NO	VM3558T-57								
SPEC.	35AA003N310H1								
HP	2					PH	3		
VOLTS	230/400								
AMP	5.9/3.4								
FRAME	145TC		HZ	50		I.P.	54		
SER.F.	1.15	CODE	H	DES	B	CL	F		
NEMA-NOM-EFF	82.8					% (100%)			
PF	78								
RATING	40C AMB-CONT				CC				
DE BRG	6205		ODE	6203					
ENCL	TEFC	SN							
BLANK	IE2-82.9(75%)80.5(50%)								

AC Induction Motor Performance Data

Record # 35233

Typical performance - not guaranteed values

Winding: 35WGN310-R001			Type: 3530M		Enclosure: TEFC		
Nameplate Data			400 V, 50 Hz: High Voltage Connection				
Rated Output (HP)		2	Full Load Torque		7.3 LB-FT		
Volts		230/400	Start Configuration		direct on line		
Full Load Amps		5.9/3.4	Breakdown Torque		25.3 LB-FT		
R.P.M.		1445	Pull-up Torque		14.1 LB-FT		
Hz	50 Phase	3	Locked-rotor Torque		19.1 LB-FT		
NEMA Design Code		B	KVA Code	H	Starting Current		18.3 A
Service Factor (S.F.)		1.15	No-load Current		2.05 A		
NEMA Nom. Eff.		82.8	Power Factor	78	Line-line Res. @ 25°C		7.32 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		76°C
S.F. Amps					Temp. Rise @ S.F. Load		91°C
					Locked-rotor Power Factor		56
					Rotor inertia		0.177 LB-FT2

Load Characteristics 400 V, 50 Hz, 2 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	36	56	69	78	83	85	81
Efficiency	72.1	80.5	82.9	83.3	82.1	79.9	82.6
Speed	1488	1476	1464	1448	1432	1410	1438
Line amperes	2.12	2.4	2.79	3.35	3.95	4.76	3.71

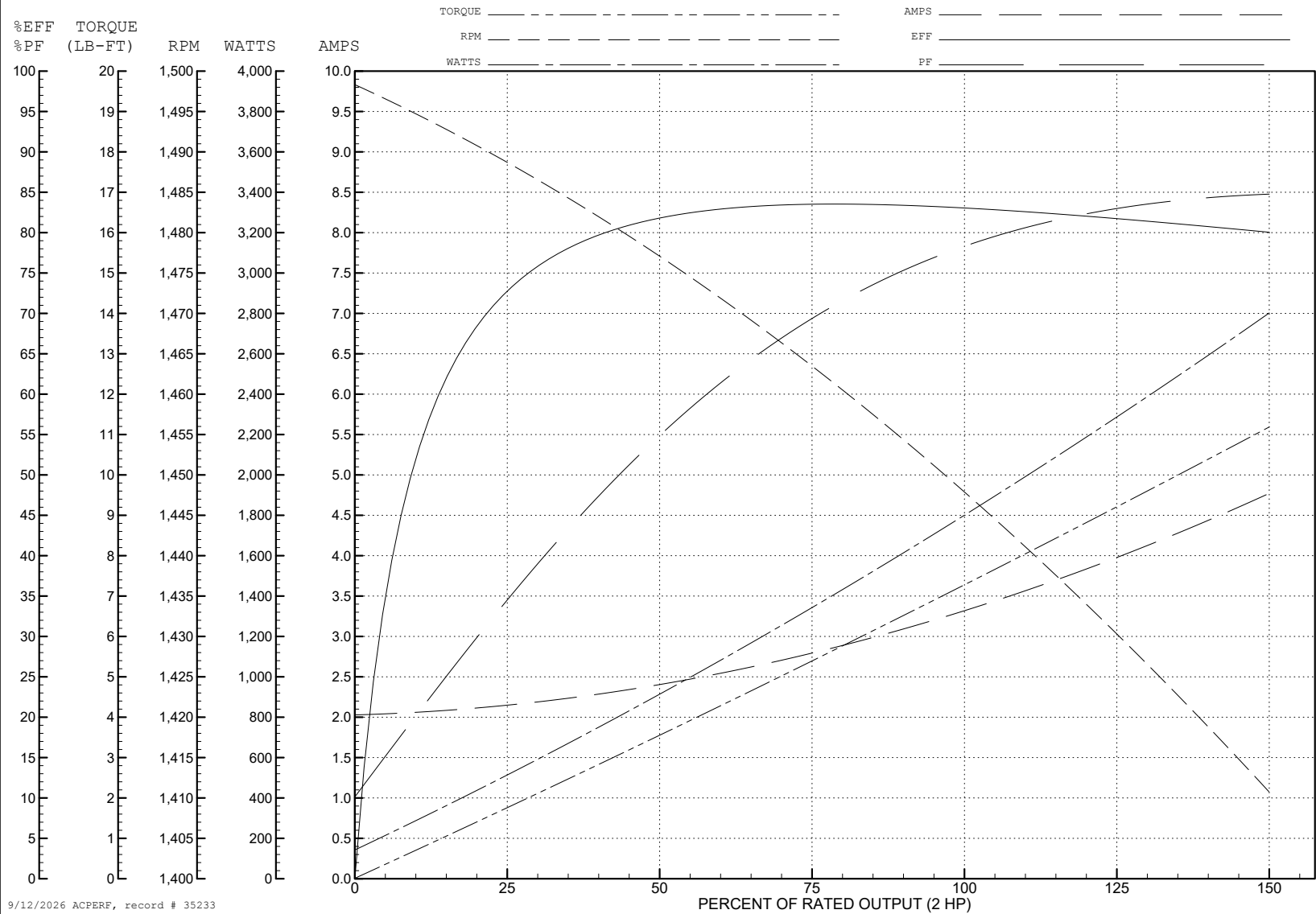
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WINDING # 35WGN310

Typical performance - not guaranteed values.

2 HP 3 PH 50 HZ 1445 RPM 400 V 3530M

TORQUES (LB-FT) : PO=25.3 PU=14.1 LR=19.1 LRA=18.3



AC Induction Motor Performance Data

Record # 64314

Typical performance - not guaranteed values

Winding: 35WGN310-R001			Type: 3530M		Enclosure: TEFC		
Nameplate Data			230 V, 50 Hz: Low Voltage Connection				
Rated Output (HP)		2	Full Load Torque		7.3 LB-FT		
Volts		230/400	Start Configuration		direct on line		
Full Load Amps		5.9/3.4	Breakdown Torque		25.08 LB-FT		
R.P.M.		1445	Pull-up Torque		13.97 LB-FT		
Hz	50	Phase	3	Locked-rotor Torque		18.92 LB-FT	
NEMA Design Code		B	KVA Code	H	Starting Current		31.54 A
Service Factor (S.F.)		1.15	No-load Current		3.52 A		
NEMA Nom. Eff.		82.8	Power Factor	78	Line-line Res. @ 25°C		2.31 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		76°C
S.F. Amps					Temp. Rise @ S.F. Load		91°C
					Locked-rotor Power Factor		55.6
					Rotor inertia		0.177 LB-FT2

Load Characteristics 230 V, 50 Hz, 2 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	36	56	69	78	83	85	81
Efficiency	72.2	81.5	83.6	83.2	82	79.8	82.5
Speed	1488	1476	1464	1448	1432	1409	1438
Line amperes	3.65	4.14	4.82	5.81	6.86	8.27	6.44

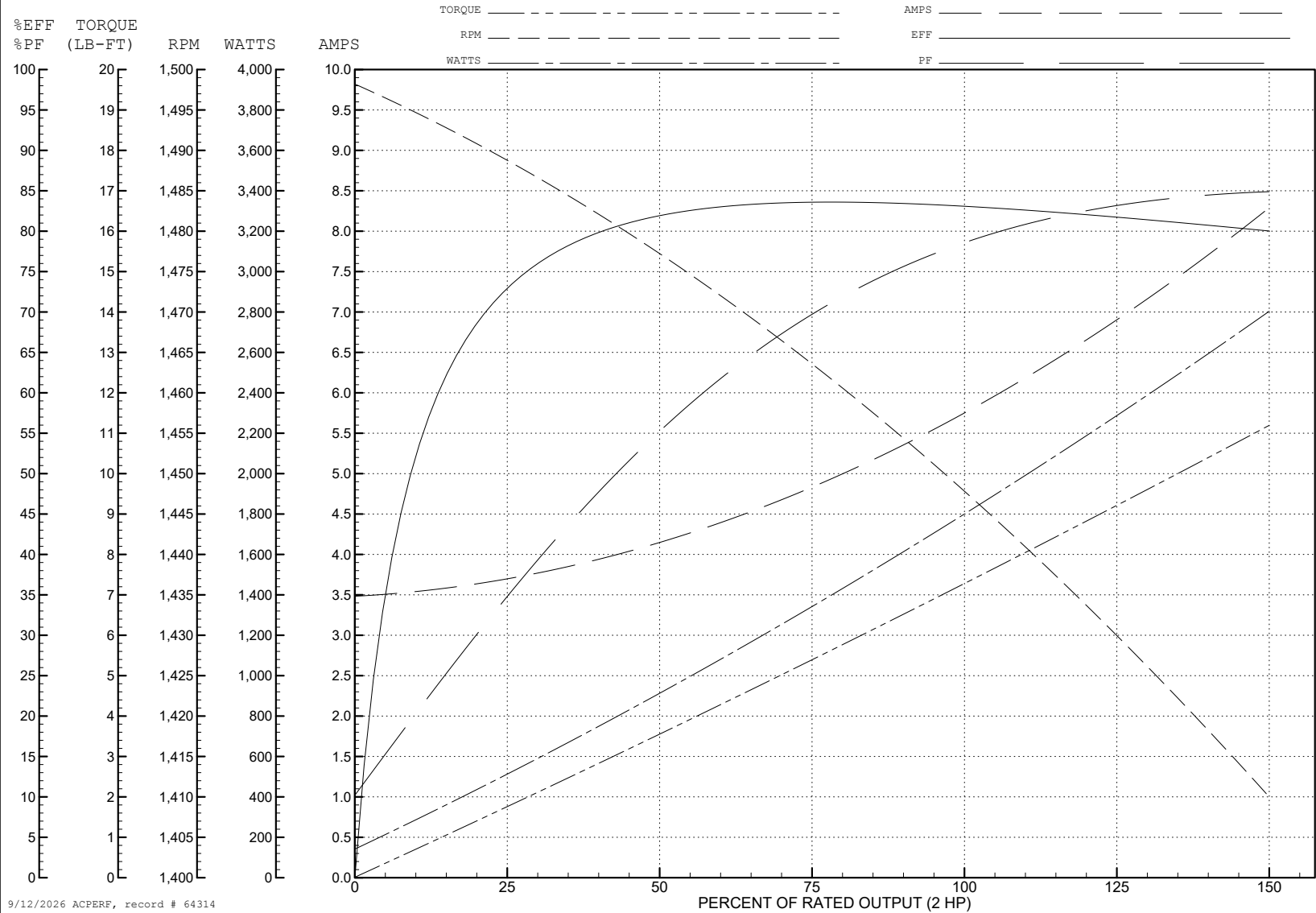
ABB Motors and Mechanical Inc.

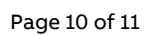
WINDING # 35WGN310

Typical performance - not guaranteed values.

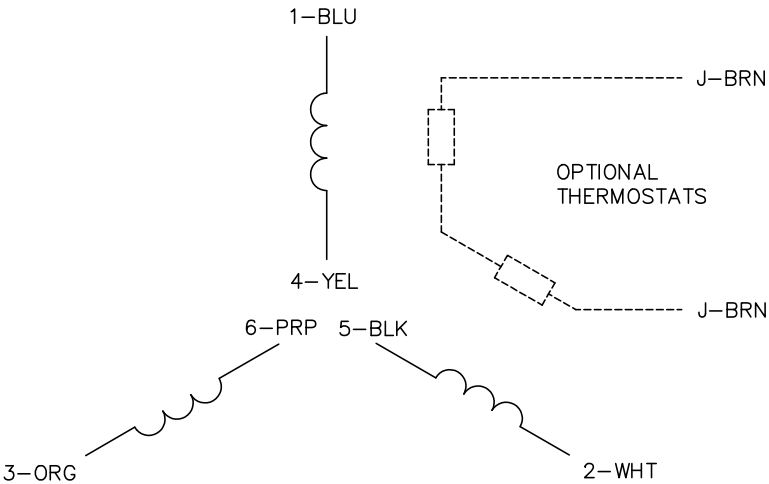
2 HP 3 PH 50 HZ 1445 RPM 230 V 3530M

TORQUES (LB-FT) : PO=25.08 PU=13.97 LR=18.92 LRA=31.54

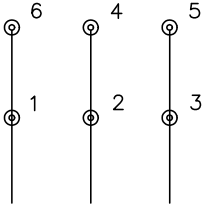




CD0022

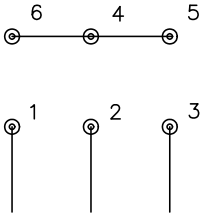


LOW VOLTAGE
(1D)



LINE

HIGH VOLTAGE
(1Y)



LINE

- 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: F

BY: JLP

REVISED: 01/21/99 3:54

TDR: 0171435

CD0022

FILE: AAA00005144

MDL: -

MTL: -

BALDOR ELECTRIC Co.

3PH, DV, 6 LEADS, DELTA/WYE CONNECTION

CD0022