

ABB BALDOR RELIANCE III

Customer information packet

FDEM3615T

5HP, 1755RPM, 3PH, 60HZ, 184T, 3642M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	184T
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	5.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA CSA EEV 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
Current @ Voltage	6.700 A @ 460.0 V 14.000 A @ 208.0 V 13.400 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None

Part Detail

Revision	B
Type	AC
Mech. spec.	36Q173
Base	
Status	PRD/A
Elec. spec.	36WGQ032
Layout	36LYQ173
Eff. date	11-27-2024
CD Diagram	CD0005
Poles	04
Leads	9#16
Proprietary	False
Created date	12-03-2020

Heater Indicator	No Heater
High Voltage Full Load Amps	6.7 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3642M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	18.05 IN
Power Factor	78
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.125 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1755 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

NP3126L									
CAT.NO.	FDEM3615T								
SPEC.	36Q173Q032G1								
HP	5								
VOLTS	230/460								
AMP	13.4/6.7								
RPM	1755								
FRAME	184T		HZ	60			PH	3	
SER.F.	1.15	CODE	J	DES	B	CL	F		
NEMA-NOM-EFF	89.5	PF	78						
RATING	40C AMB-CONT								
CC	010A								
DE	6206		ODE	6205					
ENCL	TEFC	SN							

Parts List

Part number	Description	Quantity
SA388442	SA 36Q173Q032G1	1.000 ea
RA378803	RA 36Q173Q032G1	1.000 ea
36FN3000C01SP	EXFN, PLASTIC, 5.25 OD, .912 ID	1.000 ea
36CB3004	36 CB CASTING W/1.09 DIA LEAD HOLE @ 6:0	1.000 ea
36GS1000SP	GASKET-CONDUIT BOX, .06 THICK #SV-330 LE	1.000 ea
51XB1016A08	10-16X 1/2HXWSSLD SERTYB	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
36EP3104A02	FREP MACH W/O GRSSR, RAISED FH PADS	1.000 ea
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 ea
36EP3100A45	SPL PU ENDPLATE FOR SEAL, NO GREASER	1.000 ea
HW4600H12	SEAL 1.156 X 1.874 X 0.250 SINGLE LIP DB	1.000 ea
HW4600B36SP	V-RING SLINGER 1.188 X 1.380 X .24 VITON	1.000 ea
XY2520A12	1/4-20 HEX NUT, DIRECTIONAL SERRATIONS	4.000 ea
36FH4009A101	IEC FH NO GREASER, W/PRIMER	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
36CB4516	750LIPPED CB LID - GALVANNEAL	1.000 ea
37GS1001SP	GASKET, CONDUIT BOX LID, .06 THICK LEXID	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
HW2501E16	KEY, 1/4 SQ X 1.750	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
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 qt
HW3200A01	3/8-16X3/4 EYEBOLT WELDED F/S	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1025C02	WILKOFASST SG, 787.105, TAN	0.022 ga
HA3101A28	THRUBOLT 1/4-20 X 12.500 OHIO ROD	4.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
NP3126L	ALUM FARM DUTY SUPER-E UL CSA-EEV PREM	1.000 ea
GOPA1000	PKG GRP, PRINT PK1026A06	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea

PE-0000002	ZRTG PE ASSEMBLY	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea

AC Induction Motor Performance Data

Record # 89917

Typical performance - not guaranteed values

Winding: 36WGQ032-R001			Type: 3642M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		5	Full Load Torque		15 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		13.4/6.7	Breakdown Torque		53.1 LB-FT		
R.P.M.		1755	Pull-up Torque		23.4 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		34.7 LB-FT	
NEMA Design Code		B	KVA Code	J	Starting Current		49.8 A
Service Factor (S.F.)		1.15	No-load Current		3.31 A		
NEMA Nom. Eff.		89.5	Power Factor	78	Line-line Res. @ 25°C		2.4 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		71°C
S.F. Amps					Temp. Rise @ S.F. Load		86°C
					Locked-rotor Power Factor		40.6635
					Rotor inertia		0.391 lb-ft²

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	38	60	72	79	82	84	81
Efficiency	83.8	88.9	89.8	89.5	88.4	86.8	88.8
Speed	1789	1778	1766	1753	1738	1722	1744
Line amperes	3.64	4.39	5.45	6.66	8.08	9.67	7.51

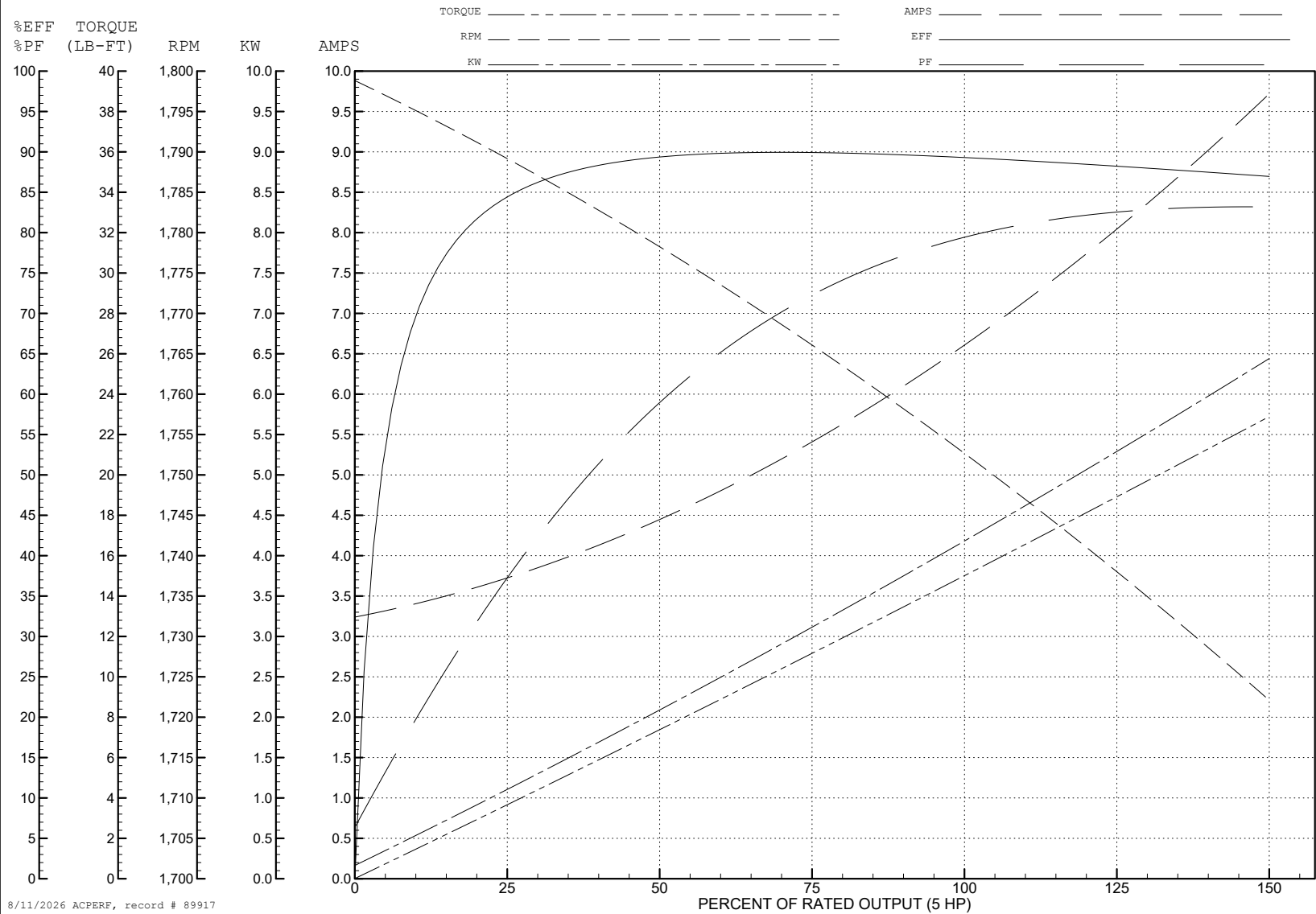
ABB Motors and Mechanical Inc.

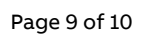
WINDING # 36WGQ032

Typical performance - not guaranteed values.

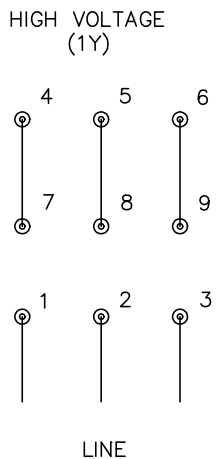
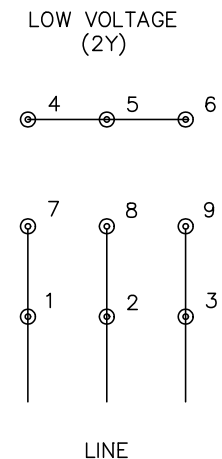
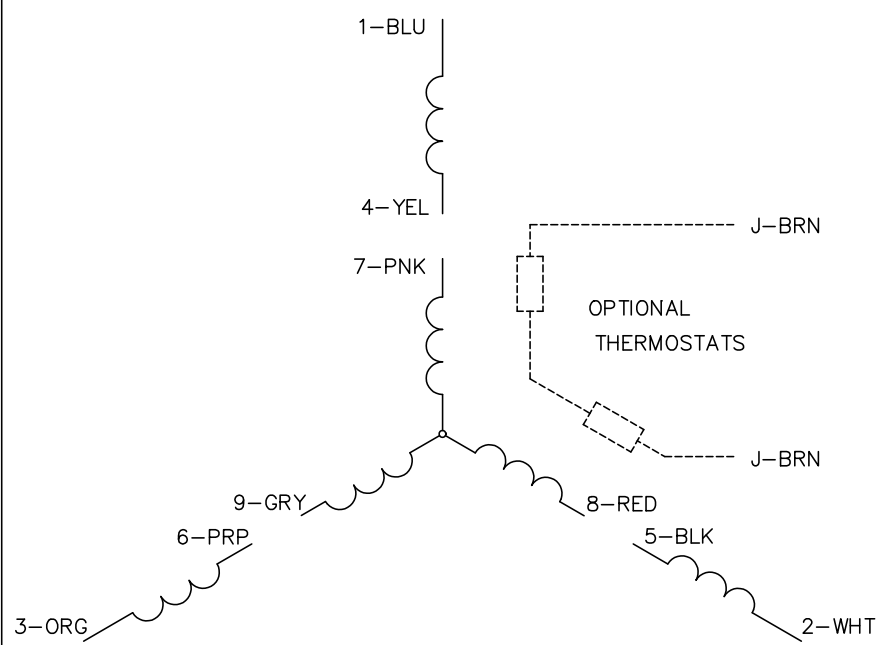
5 HP 3 PH 60 HZ 1755 RPM 460 V 3642M

TORQUES (LB-FT): PO=53.1 PU=23.4 LR=34.7 LRA=49.8





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