

ABB BALDOR RELIANCE III

Customer information packet

EBM3635TY

5HP, 1750RPM, 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	CURUSEEV NEMA PREMIUM
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 13.900 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 Face Code	Brake Mounting
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	G
Type	AC
Mech. spec.	36A021
Base	
Status	PRD/A
Elec. spec.	36WGS268
Layout	36LYA021
Eff. date	07-14-2026
CD Diagram	CD0005
Poles	04
Leads	9#16
Proprietary	False
Created date	10-08-2015

High Voltage Full Load Amps	6.7 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
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	15.00 IN
Power Factor	78
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1750 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

NP1259L											
CAT.NO.	EBM3635TY										
SPEC.	36A021S268G1										
HP	5										
VOLTS	230/460										
AMP	13.4/6.7										
RPM	1750										
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									
	SFA 14.8/7.4										

Parts List

Part number	Description	Quantity
SA308657	SA 36A021S268G1	1.000 ea
RA295993	RA 36A021S268G1	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
HW3001B01	BRASS CUP WASHER, FOR #10 SCREW	1.000 ea
36EP3306A05	FR ENDPLATE, TAP FOR T-BOLT, W/O TIGHTSL	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 ea
36EP3100A02	PU ENDPLATE, MACH	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW2501D08	KEY, 3/16 SQ X .875 AUTO	1.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
HW2500A16	KEY USA #606, WOODRUFF	1.000 ea
36FH4009A05SP	IEC FH,GREASER & 1.38 SHAFT HOLE,W/	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
HW3200A01	3/8-16X3/4 EYEBOLT WELDED F/S	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
84XN3816J28	HEX SOC HD, 3/8-16 X 1.75 LONG	2.000 ea
36FN3000A02SP	EXFN, PLASTIC, 7.00 OD, 1.175 ID	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.022 ga
HA3101A28	THRUBOLT 1/4-20 X 12.500 OHIO ROD	4.000 ea
76BK4100DQF	1-056-041-00-DQF BRAKE TDR# 79345	1.000 ea
LB1404	BRAKE CONNECTION LABEL	1.000 ea

LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP1259L	ALUM SUPER-E UL CC NEMA PREMIUM A60	1.000 ea
G0PA1000	PKG GRP, PRINT PK1026A06	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea

AC Induction Motor Performance Data

Record # 35063

Typical performance - not guaranteed values

Winding: 36WGS268-R016			Type: 3642M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		5	Full Load Torque		14.9 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		13.4/6.7	Breakdown Torque		52.2 LB-FT		
R.P.M.		1750	Pull-up Torque		31.5 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		34.9 LB-FT	
NEMA Design Code		B	KVA Code	J	Starting Current		49.1 A
Service Factor (S.F.)		1.15	No-load Current		3.24 A		
NEMA Nom. Eff.		89.5	Power Factor	78	Line-line Res. @ 25°C		2.27 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		71°C
S.F. Amps					Temp. Rise @ S.F. Load		87°C
					Locked-rotor Power Factor		39.8
					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	39	60	72	78	83	83	81
Efficiency	85	89.7	90.6	89.6	88.6	87	89
Speed	1789	1776	1762	1750	1733	1714	1740
Line amperes	3.55	4.31	5.43	6.65	7.94	9.64	7.42

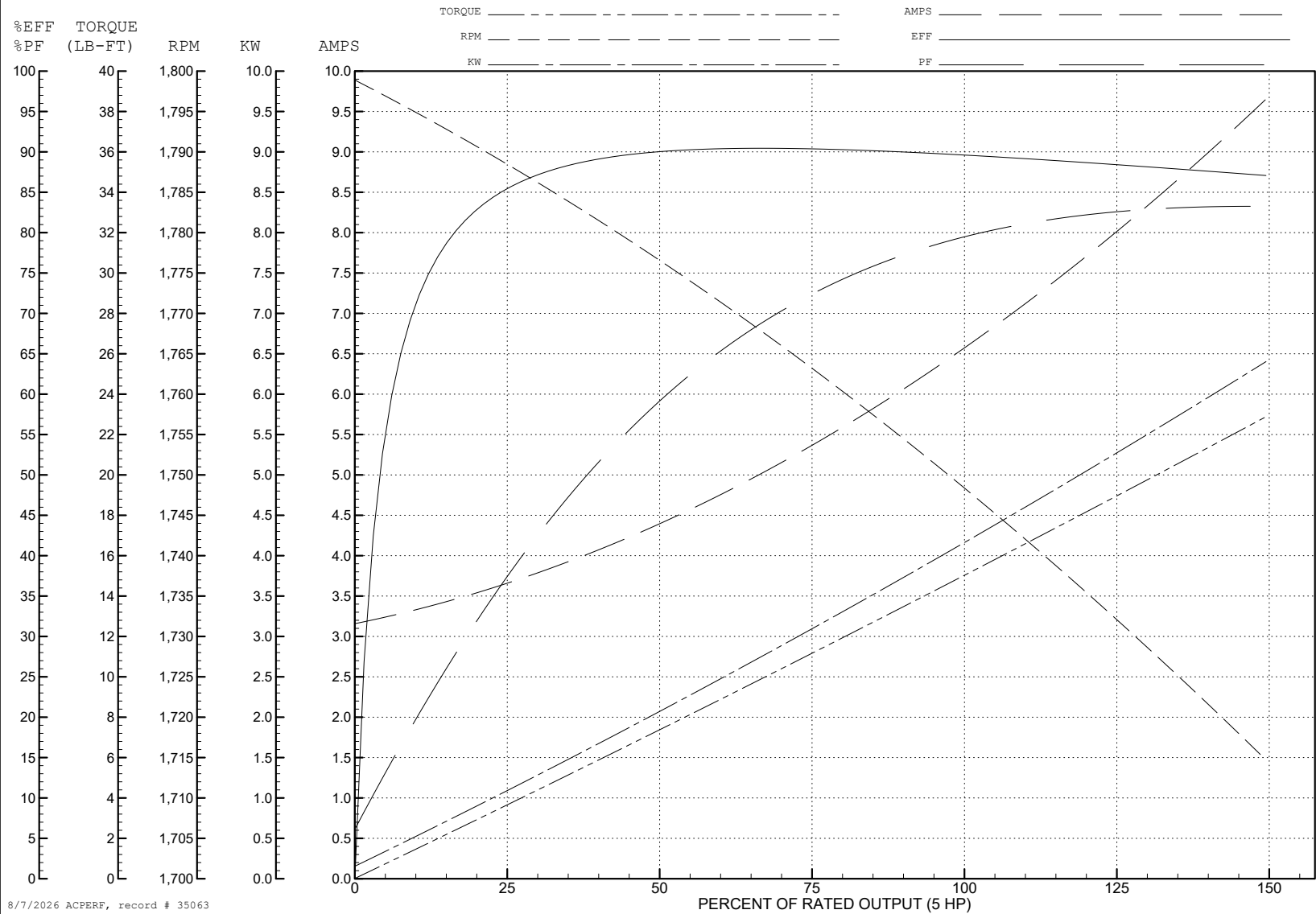
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WINDING # 36WGS268

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1750 RPM 460 V 3642M

TORQUES (LB-FT) : PO=52.2 PU=31.5 LR=34.9 LRA=49.1



AC Induction Motor Performance Data

Record # 93277

Typical performance - not guaranteed values

Winding: 36WGS268-R016			Type: 3642M		Enclosure: TEFC	
Nameplate Data			230 V, 60 Hz: Low Voltage Connection			
Rated Output (HP)		5	Full Load Torque		14.9 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		13.4/6.7	Breakdown Torque		52.2 LB-FT	
R.P.M.		1750	Pull-up Torque		31.5 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque		34.9 LB-FT	
NEMA Design Code		B KVA Code	Starting Current		98.2 A	
Service Factor (S.F.)		1.15	No-load Current		6.48 A	
NEMA Nom. Eff.		89.5 Power Factor	Line-line Res. @ 25°C		0.567 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		39.8	
			Rotor inertia		0.391 lb-ft²	

Load Characteristics 230 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	38	60	72	78	83	83	81
Efficiency	84.9	89.6	90.5	89.6	88.5	87	88.9
Speed	1789	1776	1762	1750	1733	1714	1740
Line amperes	7.1	8.62	10.86	13.3	15.88	19.28	14.8

ABB Motors and Mechanical Inc.

WINDING # 36WGS268

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1750 RPM 230 V 3642M

TORQUES (LB-FT) : PO=52.2 PU=31.5 LR=34.9 LRA=98.2

