

ABB BALDOR RELIANCE III

Customer information packet

VEM3218T

5HP, 1750RPM, 3PH, 60HZ, 184TC, 3636M, ODP, N

Class - None

Division - Not Applicable

Specifications

Enclosure	ODP
Frame	184TC
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	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	14.000 A @ 208.0 V 14.000 A @ 230.0 V 7.000 A @ 460.0 V
Design Code	B
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	7.0 a

Part Detail

Revision	-
Type	AC
Mech. spec.	36Q489
Base	
Status	PRD/A
Elec. spec.	36WGZ657
Layout	36LYQ489
Eff. date	11-14-2025
CD Diagram	CD0005
Poles	04
Leads	9#16
Proprietary	False
Created date	11-05-2025

Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3636M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	18.04 IN
Power Factor	80
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
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	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

NP3553LUA										
CAT.NO.	VEM3218T									
SPEC.	36Q489Z657									
HP	5									
VOLTS	230/460									
AMPS	14/7									
RPM	1750									
FRAME	184TC		HZ	60			PH	3		
SF	1.15	CODE	J	DES	B	CLASS	F			
NEMA NOM. EFF	89.5	PF	80							
RATING	40C AMB-CONT									
CC	010A									
ENCL	ODP	SN								
DE	6206		ODE	6205						
VPWM INVERTER READY		SFA 15.0/7.5								
CT30-60(2:1) VT3-60(20:1)										
USABLE AT	50HZ 5HP 190/380V 15.6/7.8A									
										SF1.0

Parts List

Part number	Description	Quantity
SA443007	SA 36Q489Z657	1.000 ea
RA435503	RA 36Q489Z657	1.000 ea
36CB3004	36 CB CASTING W/1.09 DIA LEAD HOLE @ 6:0	1.000 ea
51XB1016A07	10-16 X 7/16 HWSSLD 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
36EP3204B01	B00 W/DRIP CVR	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 ea
36EP3403A03	PU E.P., TC, OPEN, 206 BRG, LESS TIGHT S	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
36AD2000	AIR BAFFLE	1.000 ea
60XW0632A06	6-32 X 3/8 TORX HEAD SCREW TAPTITE II	4.000 ea
10XN2520A28	1/4-20X 1 3/4 HEX HD	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 ea
36FH4012A01	DRIP COVER NOTCH BOTTOM, 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
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
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.022 ga
HA3101A28	THRUBOLT 1/4-20 X 12.500 OHIO ROD	4.000 ea
HW3200A01	3/8-16X3/4 EYEBOLT WELDED F/S	1.000 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
NP3553LUA	ALUM SUPER-E VPWM INV READY UL CC NEMA P	1.000 ea
GOPA1000	PKG GRP, PRINT PK1026A06	1.000 ea
PK3082	STYROFOAM CRADLE	1.000 ea

LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea
PE-0000011	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 115738

Typical performance - not guaranteed values

Winding: 36WGZ657-R001			Type: 3636M		Enclosure: OPSB	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		5	Full Load Torque			14.97 LB-FT
Volts		230/460	Start Configuration			direct on line
Full Load Amps		14/7	Breakdown Torque			58.2 LB-FT
R.P.M.		1750	Pull-up Torque			27 LB-FT
Hz	60	Phase	Locked-rotor Torque			32.1 LB-FT
NEMA Design Code	B	KVA Code	Starting Current			47.8 A
Service Factor (S.F.)		1.15	No-load Current			3.47 A
NEMA Nom. Eff.	89.5	Power Factor	Line-line Res. @ 25°C			2.6406 Ω
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load			41°C
S.F. Amps			Temp. Rise @ S.F. Load			50°C
			Locked-rotor Power Factor			42.5
			Rotor inertia			0.335 lb-ft²

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	37	58	70	77	81	83	79
Efficiency	84.7	89.8	90.7	90.3	89.3	87.9	89.7
Speed	1789	1778.9	1767.9	1755.9	1742.6	1728.3	1748
Line amperes	3.79	4.51	5.52	6.73	8.12	9.65	7.56

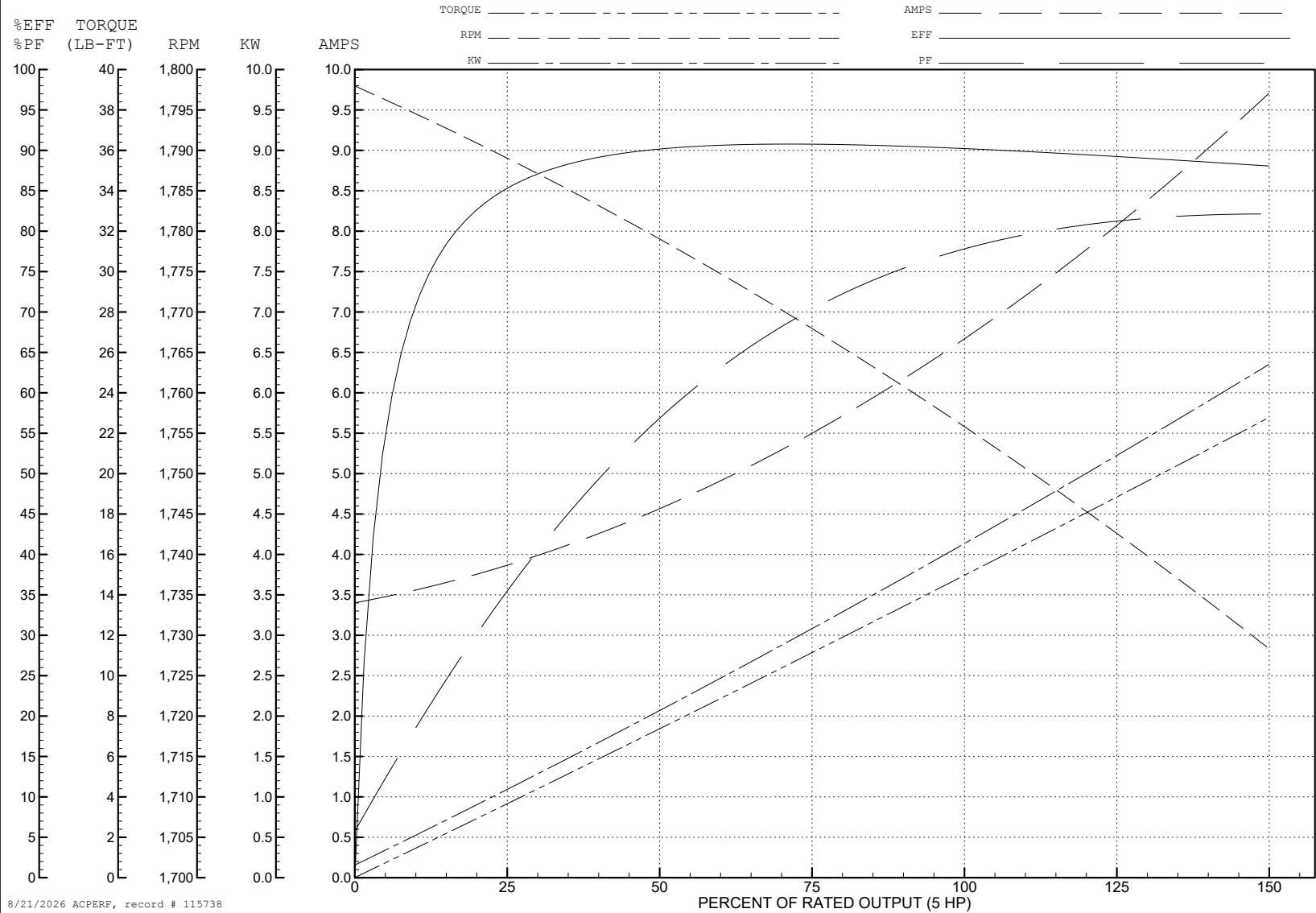
ABB Motors and Mechanical Inc.

WINDING # 36WGZ657

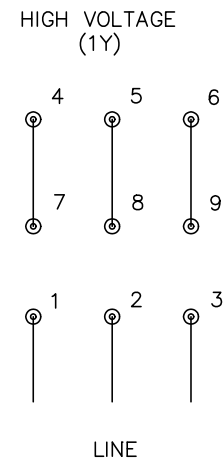
Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1750 RPM 460 V 3636M

TORQUES (LB-FT): PO=58.2 PU=27 LR=32.1 LRA=47.8



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