

ABB BALDOR RELIANCE III

Customer information packet

VFSWDM3546-E

1HP, 1770RPM, 3PH, 60HZ, 56C, 3522M, TENV, F1, N

Class - None

Division - Not Applicable

Specifications

Enclosure	TENV
Frame	56C
Frame Material	Stainless 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	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM NEMA_PREMIUM UR CSA EEV
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	3.300 A @ 208.0 V 3.340 A @ 230.0 V 1.670 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	85.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None

Part Detail

Revision	G
Type	AC
Mech. spec.	35E4656
Base	
Status	PRD/A
Elec. spec.	35WGG184
Layout	35LYE4656
Eff. date	08-14-2023
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	07-16-2021

Heater Indicator	No Heater
High Voltage Full Load Amps	1.7 a
Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	N
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Finish	UNPAINTED
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3522M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	13.96 IN
Power Factor	66
Product Family	WD All SS Encapsulated
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1770 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

NP4427AAA01													
CAT #	VFSWDM3546-E					WT	37		LBS				
SPEC	35E4656G184G1					ENCL	TENV						
SER #						CC	010A		IP	69			
HP	1		MAG CUR			2.5/1.25							
VOLTS	230/460					NEMA NOM. EFF					85.5		
AMPS	3.34/1.67					PF	66						
RATING	40C AMB-CONT												
RPM	1770					MAX RPM	2700						
FRAME	56C	HZ	60		CODE	N	CLASS	H					
SER.F.	1.15	SF AMP	3.5/1.75				PH	3	DES	B			
DE	6205		ODE	6205									
LUBRICATION	POLYREX EM												
ID LOGO	INVERTER TYPE		VPWM		CHP	60		TO	90		1.5:1		
ID LOGO	WK2	0.159	CT	15	TO	60		4:1					
ID LOGO	SL HZ	1	VT	3	TO	60		20:1					
						QR							
YR													

AC Induction Motor Performance Data

Record # 87470

Typical performance - not guaranteed values

Winding: 35WGG184-R004			Type: 3522M		Enclosure: TENV	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		1	Full Load Torque		2.99 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		3.34/1.67	Breakdown Torque		16.6 LB-FT	
R.P.M.		1770	Pull-up Torque		7.42 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		10.32 LB-FT
NEMA Design Code		B	KVA Code		N	
Service Factor (S.F.)		1.15	No-load Current		1.23 A	
NEMA Nom. Eff.		85.5	Power Factor		66	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		63°C
S.F. Amps				Temp. Rise @ S.F. Load		71°C
				Locked-rotor Power Factor		59.4
				Rotor inertia		0.159 lb-ft²

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	27	43	56	66	73	78	72
Efficiency	70.8	81.2	84.5	85.9	85.8	85.2	85.5
Speed	1793	1786	1781	1773	1766	1758	1768
Line amperes	1.25	1.34	1.49	1.67	1.87	2.12	1.75

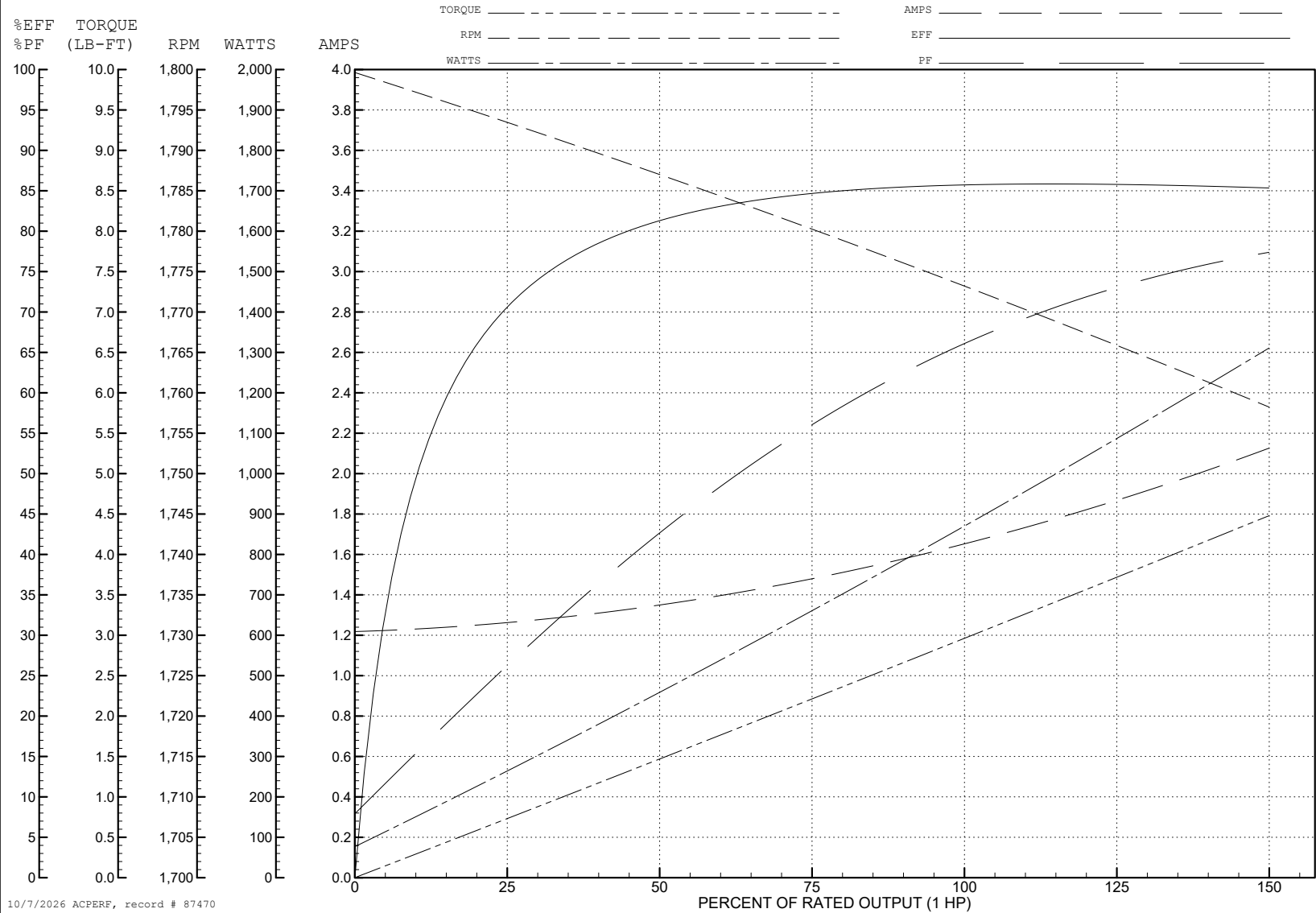
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WINDING # 35WGG184

Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 1770 RPM 460 V 3522M

TORQUES (LB-FT): PO=16.6 PU=7.42 LR=10.32 LRA=16.1



10/7/2026 ACPERF, record # 87470

AC Induction Motor Performance Data

Record # 89717

Typical performance - not guaranteed values

Winding: 35WGG184-R010		Type: 3522M	Enclosure: TENV
Nameplate Data		460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	1	Full Load Torque	2.99 LB-FT
Volts	208-230/460	Start Configuration	direct on line
Full Load Amps	3.3-3.34/1.67	Breakdown Torque	16.6 LB-FT
R.P.M.	1770	Pull-up Torque	7.42 LB-FT
Hz	60 Phase	Locked-rotor Torque	10.32 LB-FT
NEMA Design Code	B KVA Code	Starting Current	16.1 A
Service Factor (S.F.)	1.15	No-load Current	1.23 A
NEMA Nom. Eff.	85.5 Power Factor	Line-line Res. @ 25°C	14.4 Ω
Rating - Duty	65C AMB-CONT	Temp. Rise @ Rated Load	63°C
S.F. Amps	3.6-3.5/1.75	Temp. Rise @ S.F. Load	71°C
		Locked-rotor Power Factor	59.3666
		Rotor inertia	0.159 lb-ft ²

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	27	43	56	66	73	78	70
Efficiency	70.8	81.2	84.5	85.9	85.8	85.2	85.8
Speed	1793	1786	1781	1773	1766	1758	1769
Line amperes	1.25	1.34	1.49	1.67	1.87	2.12	1.79

ABB Motors and Mechanical Inc.

WINDING # 35WGG184

Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 1770 RPM 460 V 3522M

TORQUES (LB-FT): PO=16.6 PU=7.42 LR=10.32 LRA=16.1

