

ABB BALDOR RELIANCE III

Customer information packet

VXM05122

1HP, 3450//2885RPM, 3PH, 60HZ, 56C, XPFC, F1

Class - CLI GP D; CLII GP F,G

Division - Division I

Specifications

Enclosure	XPFC
Frame	56C
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP D; CLII GP F,G
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	1.000 HP @ 60 HZ .750 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 190.0 V @ 50 HZ 230.0 V @ 60 HZ 380.0 V @ 50 HZ
Agency Approvals	UL 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
Constant Torque Speed Range	6
Current @ Voltage	1.300 A @ 380.0 V 1.400 A @ 460.0 V 2.600 A @ 190.0 V 2.800 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	82.5 %

Part Detail

Revision	A
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	35WGS921
Layout	35LYQ643
Eff. date	03-16-2022
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	08-11-2020

Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	1.3 a
Insulation Class	B
Inverter Code	Inverter Duty
IP Rating	NONE
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3516M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	14.30 IN
Power Factor	82
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
Service Factor	1.00
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	3450 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None

Winding Thermal 2

None

Nameplate

NP0887XPSLEV													
NO.							CC	010A					
S/N							TEMP CODE		T3C				
SPEC.	35-0000-0882						INV.TYPE		PWM				
CAT.NO.	VXM05122						C HP FR		60	C HP TO		90	
HP	1//0.75						CT HZ FROM		6	CT HZ TO		60	
VOLTS	230/460//190/380						VT HZ FROM		6	VT HZ TO		60	
AMPS	2.8/1.4//2.6/1.3				MAG CUR		.67						
RPM	3450//2885				MX RPM		5400						
HZ	60//50		PH	3	CL	F	NOM.EFF.		82.5				
SER.F.	1.00		DES	B	SL HZ		2.5	WK2		0.05			
FRAME	56C		RATING		40C AMB-CONT								
	NEMA MG-1 PART 5, IP54												
	1.15 SF ON SINE WAVE												

AC Induction Motor Performance Data

Record # 58785

Typical performance - not guaranteed values

Winding: 35WGS921-R006			Type: 3516M		Enclosure: XPFC			
Nameplate Data			460 V, 60 Hz: High Voltage Connection					
Rated Output (HP)		1	Full Load Torque		1.5 LB-FT			
Volts		230/460	Start Configuration		direct on line			
Full Load Amps		2.8/1.4	Breakdown Torque		6.5 LB-FT			
R.P.M.		3450	Pull-up Torque		4.8 LB-FT			
Hz	60	Phase	3	Locked-rotor Torque		5.7 LB-FT		
NEMA Design Code		B	KVA Code	L	Starting Current		12.1 A	
Service Factor (S.F.)		1	No-load Current		0.68 A			
NEMA Nom. Eff.		84	Power Factor		82	Line-line Res. @ 25°C		15.1 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		33°C	
					Locked-rotor Power Factor		56.1	
					Rotor inertia		0.0443 LB-FT2	

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	44	65	77	84	87	89
Efficiency	70.5	80.5	83.6	84.6	84.4	83.7
Speed	3567	3539	3510	3479	3446	3410
Line amperes	0.75	0.9	1.09	1.33	1.56	1.88

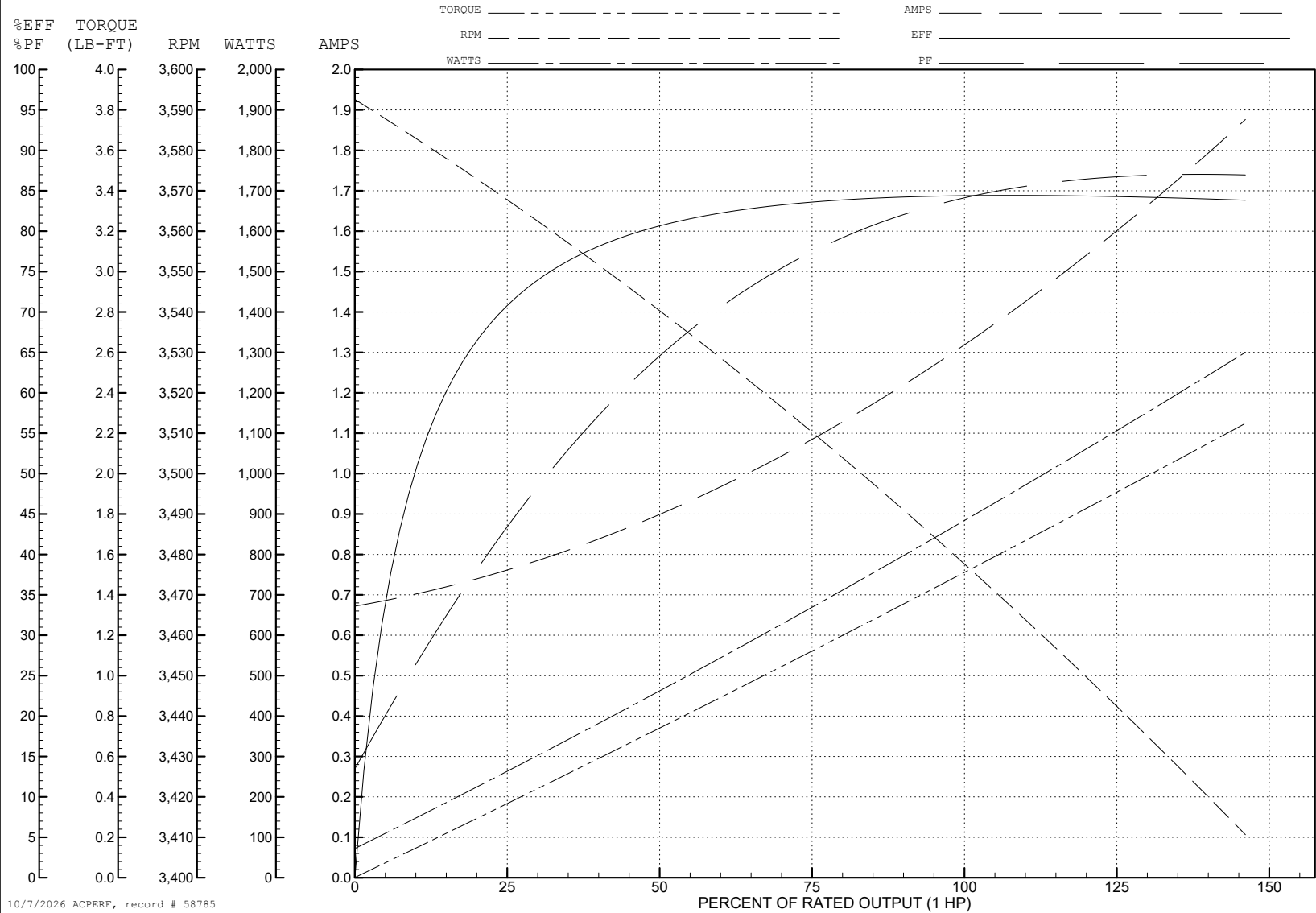
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WINDING # 35WGS921

Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 3450 RPM 460 V 3516M

TORQUES (LB-FT): PO=6.5 PU=4.8 LR=5.7 LRA=12.1



AC Induction Motor Performance Data

Record # 84243

Typical performance - not guaranteed values

Winding: 35WGS921-R020			Type: 3516M		Enclosure: XPFC			
Nameplate Data				380 V, 50 Hz: High Voltage Connection				
Rated Output (HP)		1//.75		Full Load Torque		1.35 LB-FT		
Volts		230/460//190/380		Start Configuration		direct on line		
Full Load Amps		2.8/1.4//2.6/1.3		Breakdown Torque		5.97 LB-FT		
R.P.M.		3450//2885		Pull-up Torque		4.9 LB-FT		
Hz		60//50	Phase	3	Locked-rotor Torque		5.82 LB-FT	
NEMA Design Code		B		KVA Code	L	Starting Current		11.24 A
Service Factor (S.F.)		1		No-load Current		0.664 A		
NEMA Nom. Eff.		84	Power Factor		82	Line-line Res. @ 25°C		15.2 Ω
Rating - Duty		40C		AMB-CONT		Temp. Rise @ Rated Load		29°C
						Locked-rotor Power Factor		56.1
						Rotor inertia		0.0443 lb-ft²

Load Characteristics 380 V, 50 Hz, 0.75 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	43	63	76	82	87	87
Efficiency	70.4	80.7	83.7	83.9	84.1	83
Speed	2970	2945	2918	2890	2860	2827
Line amperes	0.717	0.846	1.01	1.23	1.44	1.73

ABB Motors and Mechanical Inc.

WINDING # 35WGS921

Typical performance - not guaranteed values.

0.75 HP 3 PH 50 HZ 2890 RPM 380 V 3516M

TORQUES (LB-FT): PO=5.97 PU=4.9 LR=5.82 LRA=11.24

