

ABB BALDOR RELIANCE III

Customer information packet

VXM051542

1.5//1HP, 1770//1475RPM, 3PH, 60//50HZ, 56C

Class - CLI GP D; CLII GP F,G

Division - Division I

Specifications

Enclosure	XPFC
Frame	56C
Frame Material	Steel
Frequency	50.00 Hz 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 @ 50 HZ 1.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 190.0 V @ 50 HZ 460.0 V @ 60 HZ 380.0 V @ 50 HZ
Agency Approvals	CSA EEV UL
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	4.600 A @ 230.0 V 4.640 A @ 208.0 V 4.000 A @ 190.0 V 2.300 A @ 460.0 V 2.000 A @ 380.0 V
Design Code	B
Drip Cover	No Drip Cover

Part Detail

Revision	A
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	35WGL955
Layout	35LYQ643
Eff. date	10-25-2023
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	10-28-2021

Duty Rating	CONT
Efficiency @ 100% Load	86.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	2.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3524M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	15.12 IN
Power Factor	72
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1770 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.	35-0000-1370						INV.TYPE		PWM			
CAT.NO.	VXM051542						C HP FR		60	C HP TO		90
HP	1.5//1						CT HZ FROM		6	CT HZ TO		60
VOLTS	230/460//190/380						VT HZ FROM		6	VT HZ TO		60
AMPS	4.6/2.3//4.0/2				MAG CUR		2.5/1.25					
RPM	1770//1475				MX RPM		2700					
HZ	60//50	PH	3	CL	F	NOM.EFF.		86.5				
SER.F.	1.00	DES	B	SL HZ		1	WK2	0.174				
FRAME	56C	RATING		40C AMB-CONT								

AC Induction Motor Performance Data

Record # 87532

Typical performance - not guaranteed values

Winding: 35WGL955-R010			Type: 3522M		Enclosure: XPFC			
Nameplate Data				460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		1.5//1		Full Load Torque		4.48 LB-FT		
Volts		230/460//190/380		Start Configuration		direct on line		
Full Load Amps		4.4/2.2//3.8/1.9		Breakdown Torque		17.1 LB-FT		
R.P.M.		1760//1475		Pull-up Torque		9.2 LB-FT		
Hz		60//50	Phase	3	Locked-rotor Torque		11.3 LB-FT	
NEMA Design Code		B		KVA Code	L	Starting Current		18.1 A
Service Factor (S.F.)		1		No-load Current		1.26 A		
NEMA Nom. Eff.		86.5	Power Factor		73	Line-line Res. @ 25°C		13.4 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		41°C		
				Locked-rotor Power Factor		61.8		
				Rotor inertia		0.159 lb-ft²		

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	36	56	68	76	81	84
Efficiency	76.7	84.6	86.6	86.8	85.9	84.7
Speed	1792	1785	1777	1769	1760	1750
Line amperes	1.33	1.51	1.79	2.13	2.52	2.96

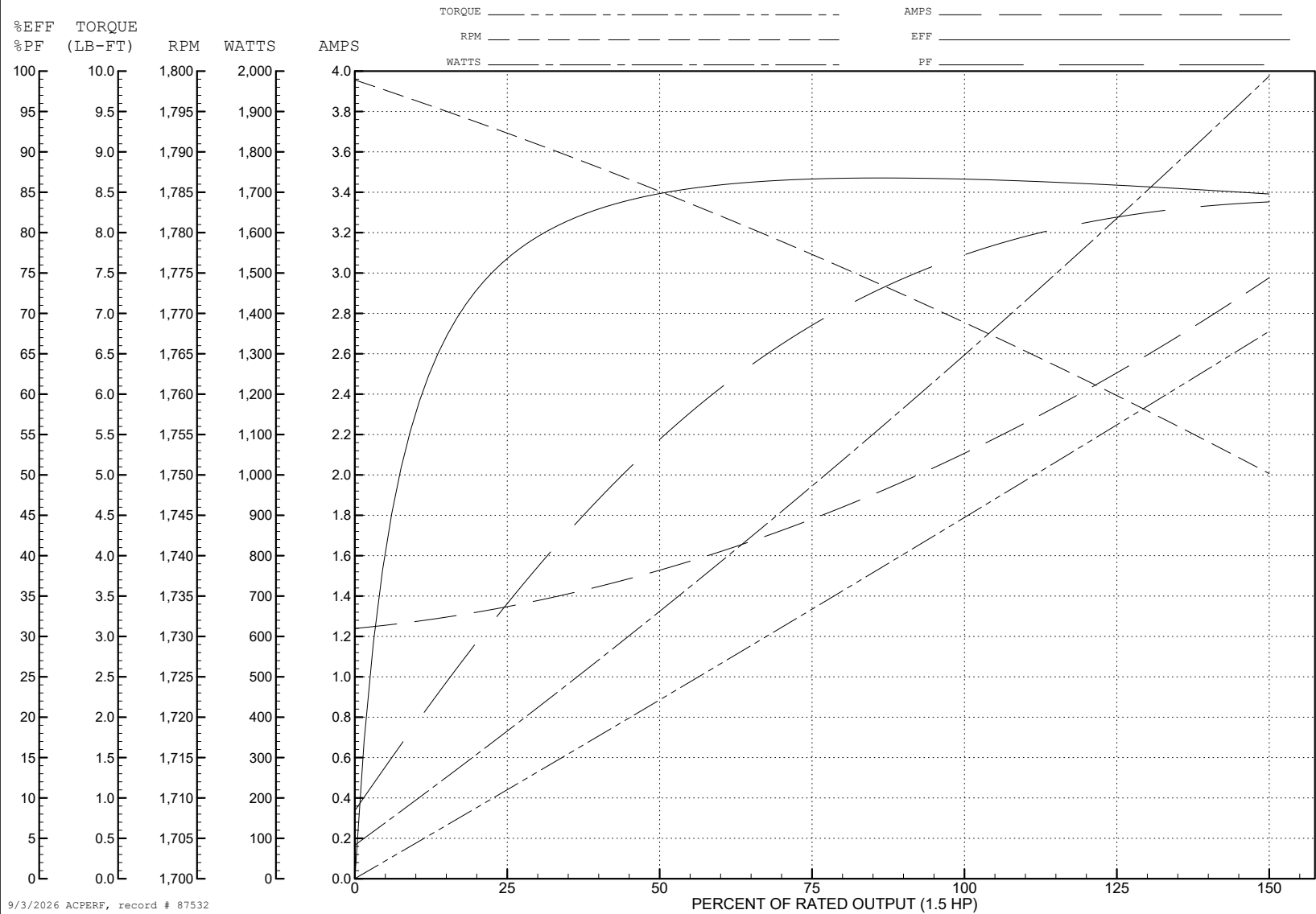
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WINDING # 35WGL955

Typical performance - not guaranteed values.

1.5 HP 3 PH 60 HZ 1769 RPM 460 V 3522M

TORQUES (LB-FT): PO=17.1 PU=9.2 LR=11.3 LRA=18.1



AC Induction Motor Performance Data

Record # 87533

Typical performance - not guaranteed values

Winding: 35WGL955-R010			Type: 3522M		Enclosure: XPFC		
Nameplate Data			380 V, 50 Hz: High Voltage Connection				
Rated Output (HP)		1.5//1	Full Load Torque		3.58 LB-FT		
Volts		230/460//190/380	Start Configuration		direct on line		
Full Load Amps		4.4/2.2//3.8/1.9	Breakdown Torque		15.38 LB-FT		
R.P.M.		1760//1475	Pull-up Torque		8.71 LB-FT		
Hz		60//50	Phase		3	Locked-rotor Torque	10.69 LB-FT
NEMA Design Code		B	KVA Code		L	Starting Current	16.78 A
Service Factor (S.F.)					1	No-load Current	1.23 A
NEMA Nom. Eff.		86.5	Power Factor		73	Line-line Res. @ 25°C	13.4 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		33°C	
				Locked-rotor Power Factor		67.3	
				Rotor inertia		0.159 lb-ft²	

Load Characteristics 380 V, 50 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	32	50	63	72	78	82
Efficiency	71.4	81.1	84.2	85.1	84.7	83.7
Speed	1493	1487	1481	1475	1467	1460
Line amperes	1.28	1.41	1.62	1.87	2.16	2.49

ABB Motors and Mechanical Inc.

WINDING # 35WGL955

Typical performance - not guaranteed values.

1 HP 3 PH 50 HZ 1475 RPM 380 V 3522M

TORQUES (LB-FT): PO=15.38 PU=8.71 LR=10.69 LRA=16.78

