

ABB BALDOR RELIANCE III

Customer information packet

VXM05242

2//1.5HP, 1760//1456RPM, 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	1.500 HP @ 50 HZ 2.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	380.0 V @ 50 HZ 230.0 V @ 60 HZ 190.0 V @ 50 HZ 460.0 V @ 60 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	3
Current @ Voltage	5.800 A @ 208.0 V 5.600 A @ 230.0 V 5.200 A @ 190.0 V 2.800 A @ 460.0 V 2.600 A @ 380.0 V
Design Code	B
Drip Cover	No Drip Cover

Part Detail

Revision	D
Type	AC
Mech. spec.	35E374
Base	
Status	PRD/A
Elec. spec.	35WGG073
Layout	35LYE374
Eff. date	11-19-2024
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	01-10-2022

Duty Rating	CONT
Efficiency @ 100% Load	86.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	2.6 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	X3528M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	15.17 IN
Power Factor	77
Product Family	Hazardous Location Motor
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1465 rpm
	1760 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.	35E374G073G1						INV.TYPE						
CAT.NO.	VXM05242						C HP FR	60	C HP TO	90			
HP	2//1.5						CT HZ FROM	6	CT HZ TO	60			
VOLTS	230/460//190/380						VT HZ FROM	6	VT HZ TO	60			
AMPS	5.6/2.8//5.2/2.6				MAG CUR		3.2/1.6						
RPM	1760//1465				MX RPM		2700						
HZ	60//50	PH	3	CL	F	NOM.EFF.		86.5					
SER.F.	1.00	DES	B	SL HZ		1.3	WK2	0.202					
FRAME	56C	RATING		40C AMB-CONT									

AC Induction Motor Performance Data

Record # 87414

Typical performance - not guaranteed values

Winding: 35WGG073-R008			Type: 3528M		Enclosure: XPFC		
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		2//1.5		Full Load Torque		5.99 LB-FT	
Volts		230/460//190/380		Start Configuration		direct on line	
Full Load Amps		5.6/2.8//5/2.5		Breakdown Torque		20.5 LB-FT	
R.P.M.		1760//1456		Pull-up Torque		13.8 LB-FT	
Hz	60//50	Phase	3	Locked-rotor Torque		15 LB-FT	
NEMA Design Code		B	KVA Code	L	Starting Current		22.5 A
Service Factor (S.F.)		1		No-load Current		1.62 A	
NEMA Nom. Eff.		86.5	Power Factor	74	Line-line Res. @ 25°C		9.54 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		64°C	
				Locked-rotor Power Factor		57.9	
				Rotor inertia		0.202 lb-ft²	

Load Characteristics 460 V, 60 Hz, 2 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	35	55	68	76	81	84
Efficiency	78.2	85.3	86.8	86.5	85.4	83.6
Speed	1791	1782	1771	1760	1748	1734
Line amperes	1.71	1.97	2.34	2.82	3.36	3.97

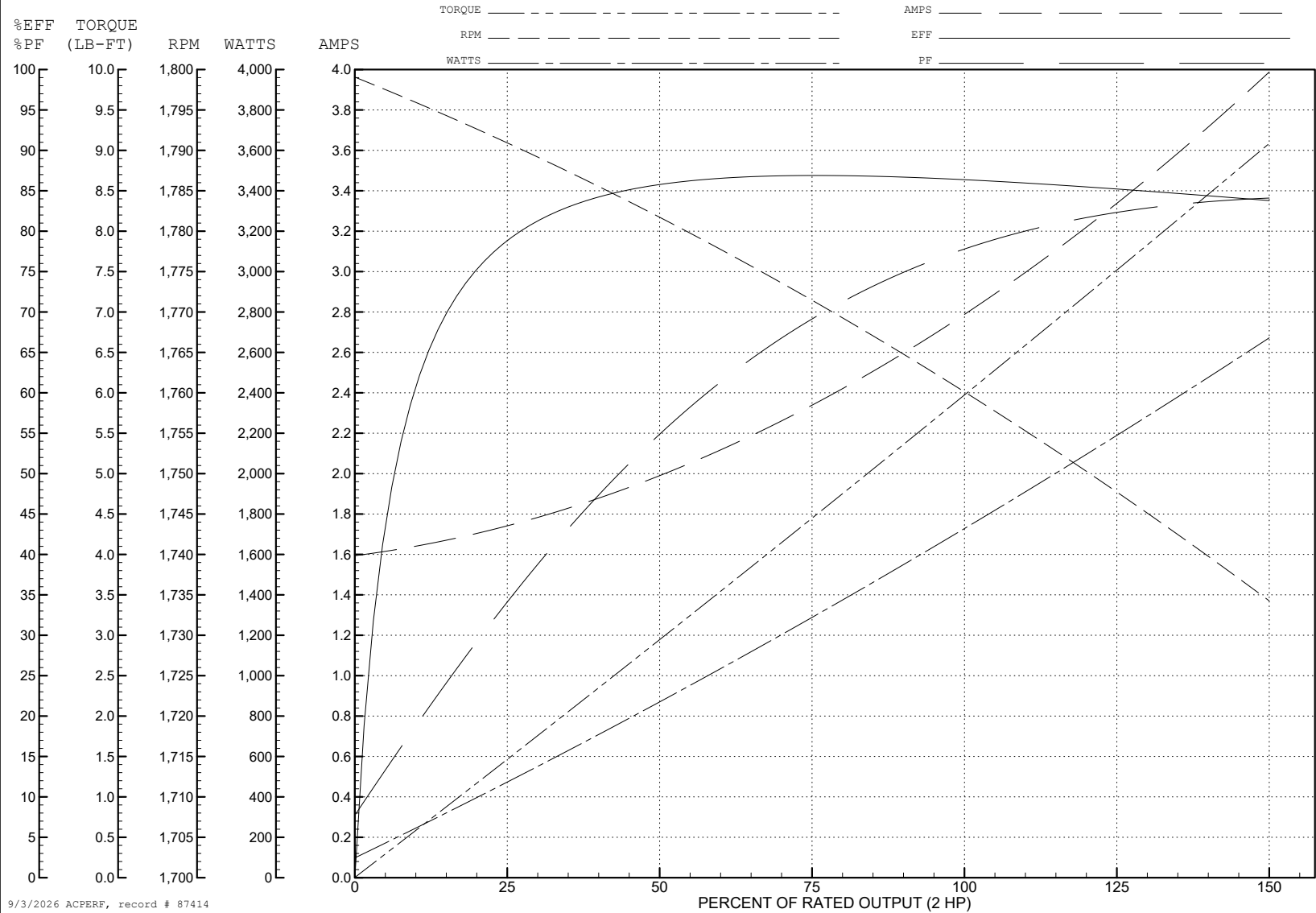
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WINDING # 35WGG073

Typical performance - not guaranteed values.

2 HP 3 PH 60 HZ 1760 RPM 460 V 3528M

TORQUES (LB-FT): PO=20.5 PU=13.8 LR=15 LRA=22.5



AC Induction Motor Performance Data

Record # 87415

Typical performance - not guaranteed values

Winding: 35WGG073-R008			Type: 3528M		Enclosure: XPFC			
Nameplate Data				380 V, 50 Hz: High Voltage Connection				
Rated Output (HP)		2//1.5		Full Load Torque		5.4 LB-FT		
Volts		230/460//190/380		Start Configuration		direct on line		
Full Load Amps		5.6/2.8//5/2.5		Breakdown Torque		18.6 LB-FT		
R.P.M.		1760//1456		Pull-up Torque		13.3 LB-FT		
Hz		60//50	Phase	3	Locked-rotor Torque		14.4 LB-FT	
NEMA Design Code		B		KVA Code	L	Starting Current		21 A
Service Factor (S.F.)		1		No-load Current		1.58 A		
NEMA Nom. Eff.		86.5	Power Factor		74	Line-line Res. @ 25°C		9.54 Ω
Rating - Duty		40C		AMB-CONT		Temp. Rise @ Rated Load		58°C
						Locked-rotor Power Factor		63.3
						Rotor inertia		0.202 lb-ft²

Load Characteristics 380 V, 50 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	33	53	67	75	81	84
Efficiency	75.7	83.6	85.4	85.3	84.1	82.2
Speed	1492	1484	1474	1464	1453	1440
Line amperes	1.66	1.88	2.2	2.63	3.12	3.68

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WINDING # 35WGG073

Typical performance - not guaranteed values.

1.5 HP 3 PH 50 HZ 1464 RPM 380 V 3528M

TORQUES (LB-FT): PO=18.6 PU=13.3 LR=14.4 LRA=21

