

ABB BALDOR RELIANCE III

Customer information packet

VDRX14244T

2/1.5HP, 1765//1455RPM, 3PH, 60//50HZ, 145TC

Class - CLI GP C,D

Division - Division I

Specifications

Enclosure	XPFC
Frame	145TC
Frame Material	Steel
Frequency	50.00 Hz 60.00 Hz
Haz Area Class and Group	CLI GP C,D
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	1.500 HP @ 60 HZ 2.000 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	5.600 A @ 230.0 V 5.800 A @ 208.0 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	E
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	35WGG073
Layout	35LYX734
Eff. date	05-23-2023
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	2.6 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3528M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	15.21 IN
Power Factor	77
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	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

NP1401XPSLEV												
NO.							CC	010A				
S/N							TEMP CODE		T3C			
SPEC.	35-0000-1350						INV.TYPE		PWM			
CAT.NO.	VDRX14244T						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//1465/1765//1455				MX RPM		2700					
HZ	60//50/6		PH	3	CL	F	NOM.EFF.		86.5			
SER.F.	1.00		DES	B	SL HZ		1.3	WK2	0.202			
FRAME	145TC		RATING		40C AMB-CONT							
	55C AMB @ 1.0 SF											
	1.15 SF SINEWAVE						NEMA MG-1 PT 5, IP55					

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

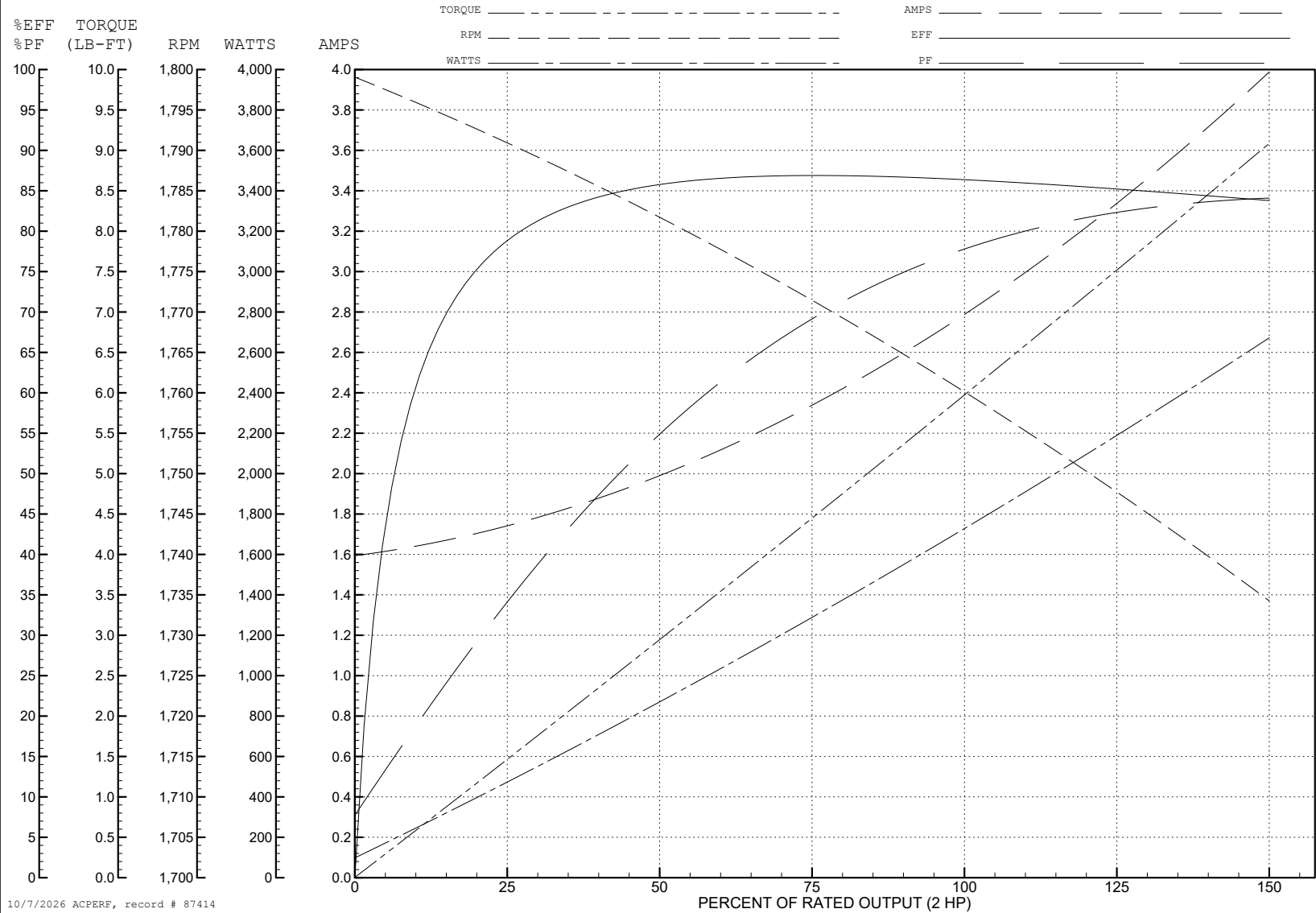
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WINDING # 35WGG073

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

