

ABB BALDOR RELIANCE III

Customer information packet

VDRX21144T

10HP, 1765//1465RPM, 3PH, 60/50HZ, 215TC, XPF

Class - CLI GP C,D

Division - Division I

Specifications

Enclosure	XPFC
Frame	215TC
Frame Material	Iron
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	7.500 HP @ 50 HZ 10.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 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	11.600 A @ 380.0 V 12.500 A @ 460.0 V 23.200 A @ 190.0 V 25.000 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT

Part Detail

Revision	C
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	07WGX598
Layout	07LYK484
Eff. date	02-14-2024
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	06-21-2019

Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	11.6 a
Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	NONE
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0750M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	20.77 IN
Power Factor	81
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
Service Factor	1.00
Shaft Diameter	1.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1765 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.	07-0000-0165						INV.TYPE		PWM			
CAT.NO.	VDRX21144T						C HP FR	60	C HP TO	90		
HP	10//7.5						CT HZ FROM		6	CT HZ TO		60
VOLTS	230/460//190/380						VT HZ FROM		6	VT HZ TO		60
AMPS	25/12.5//23.2/11.6						MAG CUR		5.6			
RPM	1765//1465						MX RPM		2700			
HZ	60//50	PH	3	CL	F	NOM.EFF.		91.7				
SER.F.	1.00	DES	A	SL HZ		1.2	WK2	1.18				
FRAME	215TC	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 # 39054

Typical performance - not guaranteed values

Winding: 07WGX598-R007				Type: 0750M		Enclosure: XPFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		10//7.5		Full Load Torque		29.7 LB-FT	
Volts		230/460//190/380		Start Configuration		direct on line	
Full Load Amps		24.6/12.3//23/11.5		Breakdown Torque		94.2 LB-FT	
R.P.M.		1765//1465		Pull-up Torque		56.3 LB-FT	
Hz		60//50		Phase		3	
NEMA Design Code		A		KVA Code		J	
Service Factor (S.F.)		1.15		No-load Current		5.6 A	
NEMA Nom. Eff.		92.4		Power Factor		81	
Rating - Duty		40C		AMB-CONT			
S.F. Amps				Temp. Rise @ Rated Load		55°C	
				Temp. Rise @ S.F. Load		70°C	
				Locked-rotor Power Factor		35	
				Rotor inertia		1.23 LB-FT ²	

Load Characteristics 460 V, 60 Hz, 10 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	41	64	76	81	84	85	83
Efficiency	89.8	93.6	92.6	92.4	91.3	90.2	91.7
Speed	1790	1782	1772	1764	1753	1743	1757
Line amperes	6.28	7.9	10	12.5	15.3	18.3	14.2

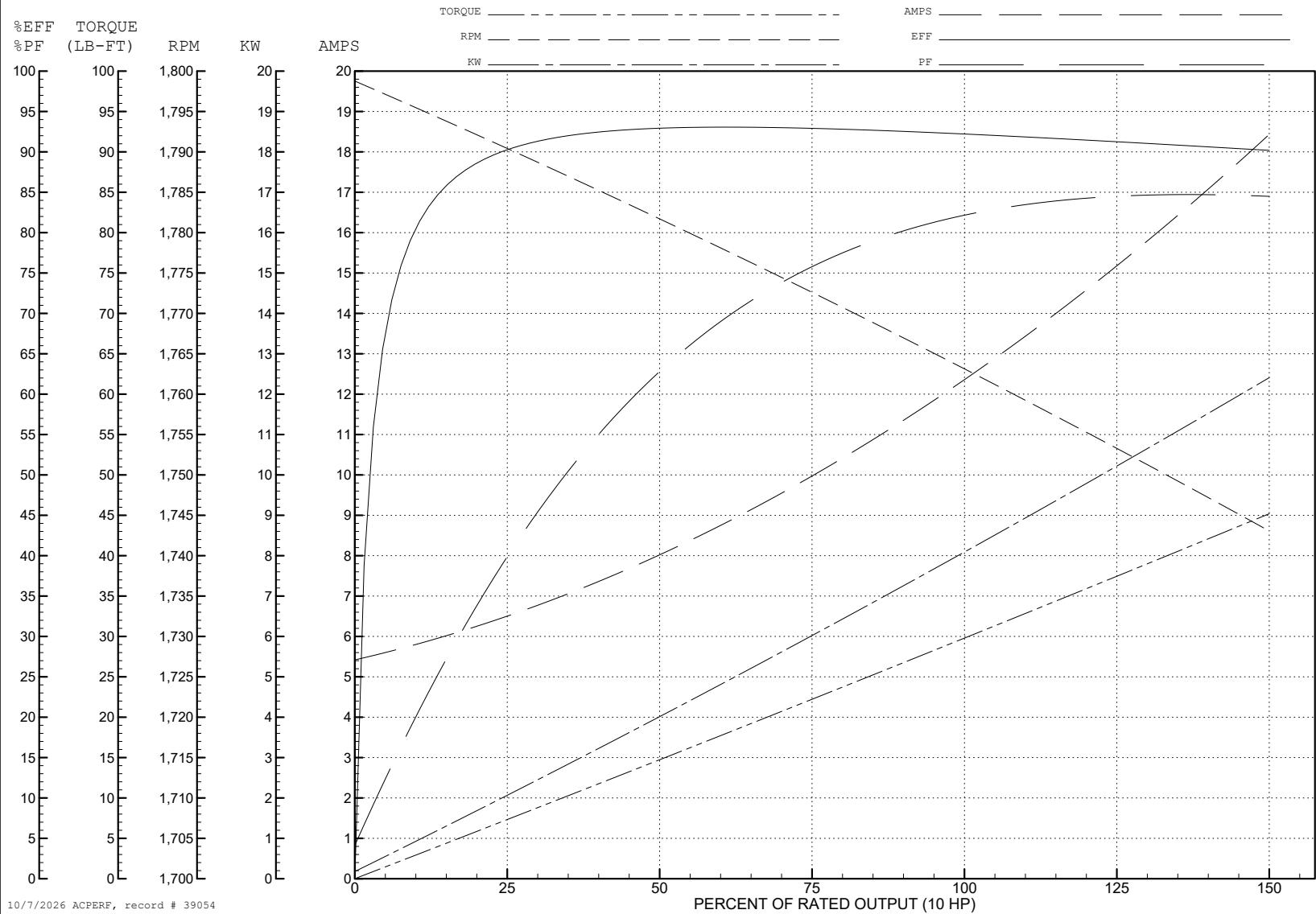
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WINDING # 07WGX598

Typical performance - not guaranteed values.

10 HP 3 PH 60 HZ 1764 RPM 460 V 0750M

TORQUES (LB-FT) : PO=94.2 PU=56.3 LR=62.4 LRA=95.7



AC Induction Motor Performance Data

Record # 73683

Typical performance - not guaranteed values

Winding: 07WGX598-R015				Type: 0750M		Enclosure: XPFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		10//7.5		Full Load Torque		29.7 LB-FT	
Volts		230/460//190/380		Start Configuration		direct on line	
Full Load Amps		25/12.5//23.2/11.6		Breakdown Torque		94.2 LB-FT	
R.P.M.		1765//1465		Pull-up Torque		56.3 LB-FT	
Hz		60//50		Phase		3	
NEMA Design Code		A		KVA Code		J	
Service Factor (S.F.)		1		No-load Current		5.6 A	
NEMA Nom. Eff.		91.7		Power Factor		81	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		55°C	
				Locked-rotor Power Factor		35.2	
				Rotor inertia		1.23 LB-FT2	

Load Characteristics 460 V, 60 Hz, 10 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	41	64	76	81	84	85
Efficiency	89.8	93.5	92.5	92.2	91.3	90.1
Speed	1790	1782	1772	1764	1753	1743
Line amperes	6.28	7.9	10	12.5	15.3	18.3

ABB Motors and Mechanical Inc.

WINDING # 07WGX598

Typical performance - not guaranteed values.

10 HP 3 PH 60 HZ 1764 RPM 460 V 0750M

TORQUES (LB-FT) : PO=94.2 PU=56.3 LR=62.4 LRA=95.7

