

ABB BALDOR RELIANCE III

Customer information packet

VDRX282544T

25HP, 1775//1475RPM, 3PH, 60/50HZ, 284TC, XPF

Class - CLI GP C,D

Division - Division I

Specifications

Enclosure	XPFC
Frame	284TC
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	20.000 HP @ 50 HZ 25.000 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	6
Current @ Voltage	64.000 A @ 208.0 V 62.000 A @ 230.0 V 60.000 A @ 190.0 V 31.000 A @ 460.0 V 30.000 A @ 380.0 V
Design Code	A
Drip Cover	No Drip Cover

Part Detail

Revision	K
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	10WGZ651
Layout	10LYG292
Eff. date	07-17-2023
CD Diagram	CD0180
Poles	04
Leads	9#10
Proprietary	False
Created date	06-06-2019

Duty Rating	CONT
Efficiency @ 100% Load	93.6 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	30.0 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	1054M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	28.67 IN
Power Factor	81
Product Family	Hazardous Location Motor
Pulley Face Code	C-Face
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
Service Factor	1.00
Shaft Diameter	1.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1775 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.	10-0000-0850						INV.TYPE	PWM				
CAT.NO.	VDRX282544T						C HP FR	60	C HP TO	90		
HP	25//20						CT HZ FROM	6	CT HZ TO	60		
VOLTS	230/460//190/380						VT HZ FROM	6	VT HZ TO	60		
AMPS	62/31//60/30						MAG CUR	28/14				
RPM	1775//1475						MX RPM	2700				
HZ	60//50	PH	3	CL	F	NOM.EFF.	93.6					
SER.F.	1.00	DES	A	SL HZ	0.83	WK2	4.13					
FRAME	284TC	RATING		40C AMB-CONT								
	55C AMB @ 1.0 SF, 60C RISE											
	1.15SF ON SINEWAVE						NEMA MG-1 PT.5,IP55					

AC Induction Motor Performance Data

Record # 67462

Typical performance - not guaranteed values

Winding: 10WGZ651-R004				Type: 1054M		Enclosure: XPFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		25		Full Load Torque		74.02 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		62/31		Breakdown Torque		262 LB-FT	
R.P.M.		1775		Pull-up Torque		118 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		142 LB-FT	
NEMA Design Code		A	KVA Code	J	Starting Current		223 A
Service Factor (S.F.)		1		No-load Current		13.6 A	
NEMA Nom. Eff.	93.6	Power Factor	81	Line-line Res. @ 25°C		0.2345 Ω	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		51°C	
				Locked-rotor Power Factor		30.6	

Load Characteristics 460 V, 60 Hz, 25 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	43	65	76	81	84	85
Efficiency	88.3	92.8	93.9	94	93.7	93.1
Speed	1794.1	1789.3	1783.5	1777.8	1770.8	1763.8
Line amperes	15.3	19.3	24.6	30.6	37.2	44.5

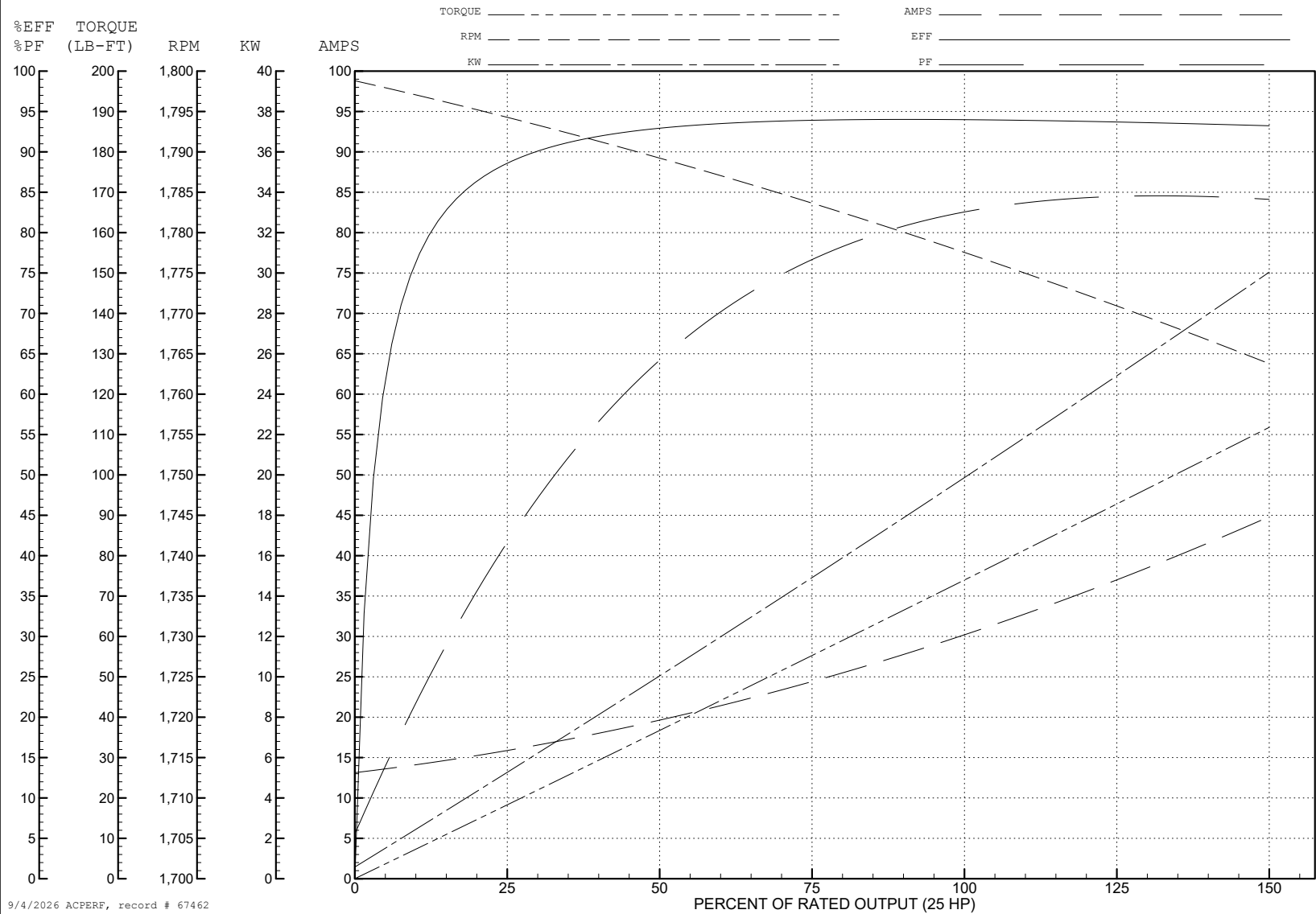
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WINDING # 10WGZ651

Typical performance - not guaranteed values.

25 HP 3 PH 60 HZ 1775 RPM 460 V 1054M

TORQUES (LB-FT): PO=262 PU=118 LR=142 LRA=223



AC Induction Motor Performance Data

Record # 74484

Typical performance - not guaranteed values

Winding: 10WGZ651-R024				Type: 1054M		Enclosure: XPFC	
Nameplate Data				380 V, 50 Hz: High Voltage Connection			
Rated Output (HP)		25//20		Full Load Torque		71.24 LB-FT	
Volts		230/460//190/380		Start Configuration		direct on line	
Full Load Amps		62/31//60/30		Breakdown Torque		254 LB-FT	
R.P.M.		1775//1475		Pull-up Torque		121 LB-FT	
Hz		60//50		Phase		3	
NEMA Design Code		A		KVA Code		J	
Service Factor (S.F.)		1		No-load Current		13.24 A	
NEMA Nom. Eff.		93.6		Power Factor		81	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		48°C	
S.F. Amps				Temp. Rise @ S.F. Load		58°C	
				Locked-rotor Power Factor		33.9	
				Rotor inertia		4.31 LB-FT2	

Load Characteristics 380 V, 50 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	43	66	76	82	84	85
Efficiency	88.8	93	93.8	93.8	93.3	92.9
Speed	1494	1490	1484	1479	1472	1465
Line amperes	14.85	18.69	23.83	29.65	36.06	43.17

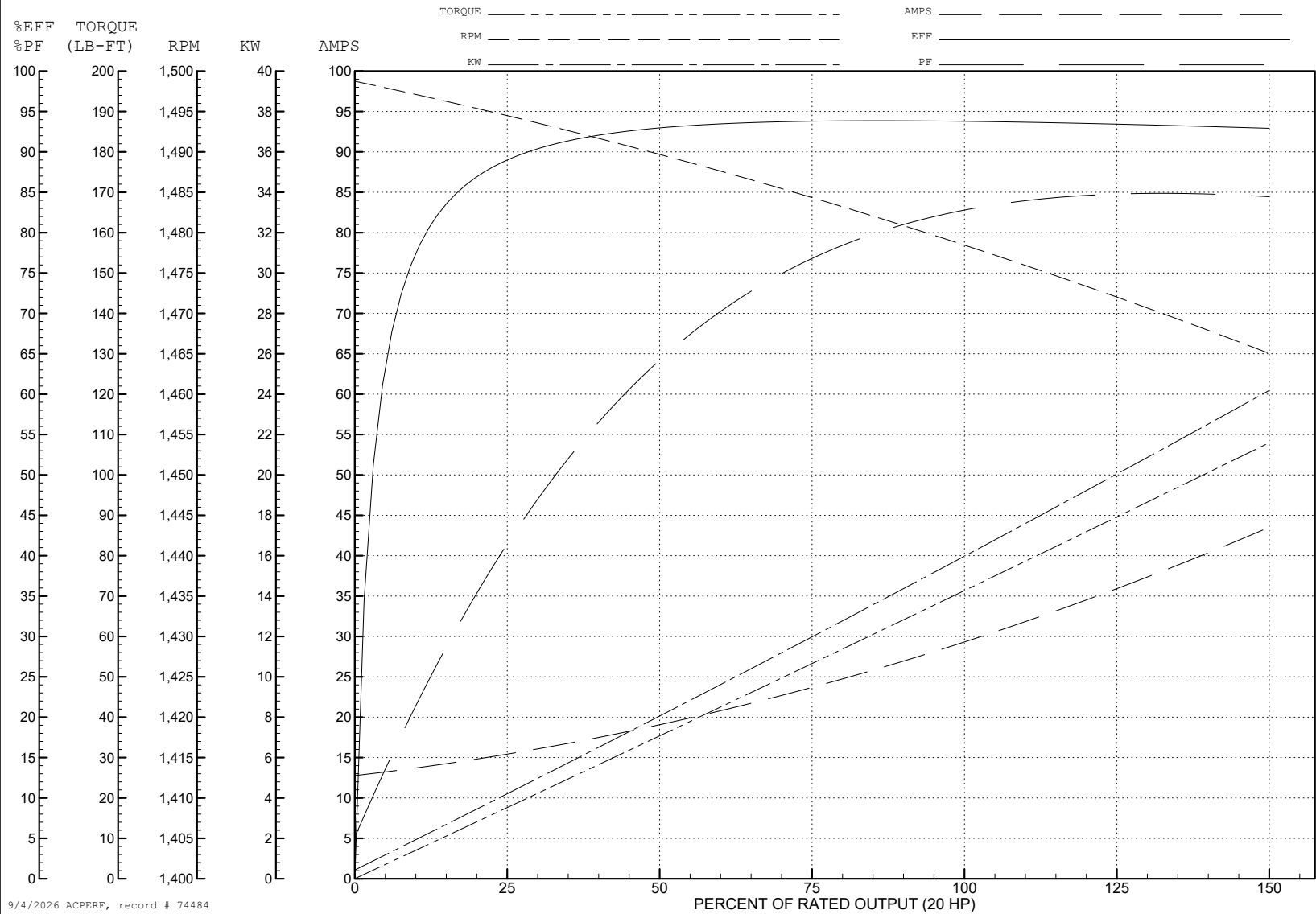
ABB Motors and Mechanical Inc.

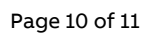
WINDING # 10WGZ651

Typical performance - not guaranteed values.

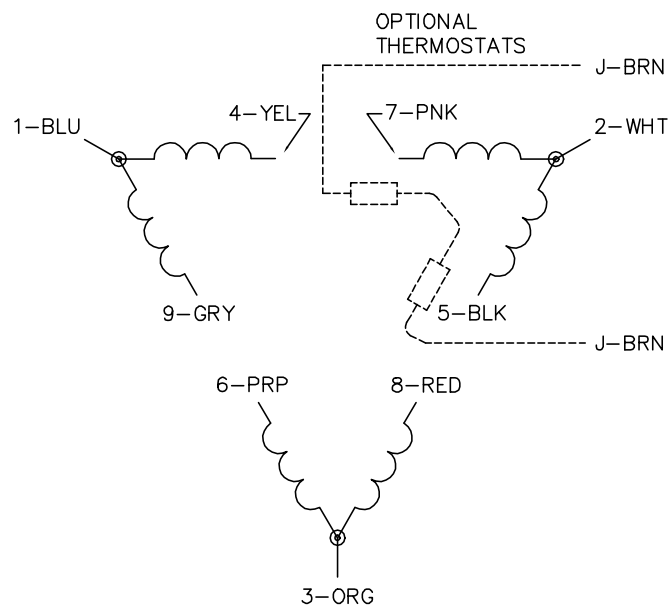
20 HP 3 PH 50 HZ 1479 RPM 380 V 1054M

TORQUES (LB-FT): PO=254 PU=121 LR=146 LRA=213

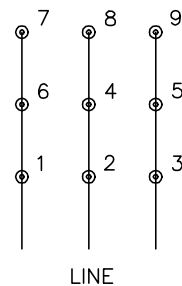




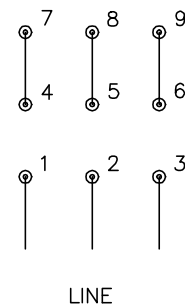
CD0180



LOW VOLTAGE
(2D)



HIGH VOLTAGE
(1D)



NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0180

REV. DESC: ADD CLASS CONN00000007

REV. LTR: D

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\148

REVISED: 10: 25: 29 02/19/2019

BY: ENBRIRO

MTL: -



BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

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