

ABB BALDOR RELIANCE III

Customer information packet

ECR9204T

20HP, 1765RPM, 3PH, 60HZ, 256T, 0962M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	256T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	20.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CCSA US CSA EEV NEMA PREMIUM NEMA_PREMIUM UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	6
Current @ Voltage	24.000 A @ 460.0 V 48.000 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK

Part Detail

Revision	AC
Type	AC
Mech. spec.	09L575
Base	
Status	PRD/A
Elec. spec.	09WGT156
Layout	09LYL575
Eff. date	06-24-2024
CD Diagram	CD0180
Poles	04
Leads	9#10 Y
Proprietary	False
Created date	01-14-2015

Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	24.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0962M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	24.77 IN
Power Factor	83
Product Family	Super-E Chemical Processing
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.25
Shaft Diameter	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1765 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None



Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3293																	
CAT.NO.	ECR9204T			P/N					ENCLOSURE		TEFC						
SPEC.	09L575T156G1		CC	010A	FRAME		256T		S/N								
HP	20		CLASS		F	HZ		60	DES		A						
RPM	1765		RPM MAX		2700		PH		3	KVA-CODE		G					
VOLT	230/460					I.P.		55									
AMP	48/24			SER.F.		1.25		PF		83	ODE BRG		6309		DE BRG		6311
RATING	40C AMB-CONT			NEMA-NOM-EFF				93		GREASE		POLYREX EM					
HTR-VOLTS	HTR-AMPS		HTR-WATTS					INV.TYPE									
	SFA 60/30																
				C HP FR		60		C HP TO		90							
				CT HZ FROM			6			CT HZ TO			60				
				MOTOR WEIGHT				366		VT HZ FROM			6		VT HZ TO		60

AC Induction Motor Performance Data

Record # 49624

Typical performance - not guaranteed values

Winding: 09WGT156-R001			Type: 0962M		Enclosure: TEFC			
Nameplate Data			460 V, 60 Hz: Single Voltage Motor					
Rated Output (HP)		20	Full Load Torque		59.7 LB-FT			
Volts		230/460	Start Configuration		direct on line			
Full Load Amps		48/24	Breakdown Torque		173 LB-FT			
R.P.M.		1765	Pull-up Torque		120 LB-FT			
Hz	60	Phase	3	Locked-rotor Torque		152 LB-FT		
NEMA Design Code		A	KVA Code	G	Starting Current		149 A	
Service Factor (S.F.)		1.25	No-load Current		8.82 A			
NEMA Nom. Eff.		93	Power Factor		83	Line-line Res. @ 25°C		0.40887 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		61°C	
S.F. Amps		60/30	Temp. Rise @ S.F. Load		78°C			
			Locked-rotor Power Factor		37			

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	50	71	80	83	85	84	84
Efficiency	91.3	93.7	93.8	93.1	92	90.6	92.4
Speed	1791.3	1783.1	1774.9	1764.6	1753.7	1740.2	1758
Line amperes	10.4	14.2	18.8	24.2	30.1	36.8	27.7

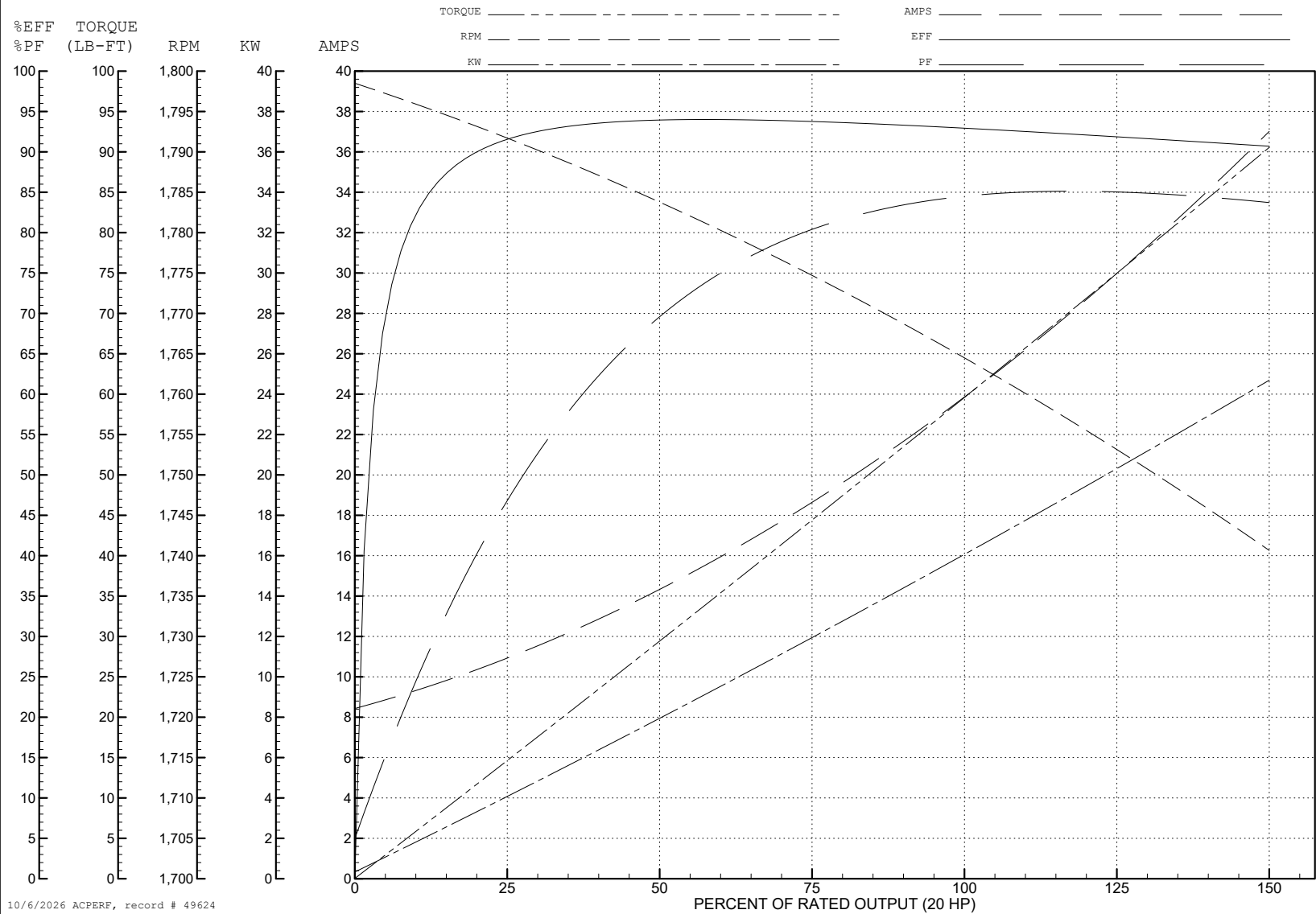
ABB Motors and Mechanical Inc.

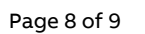
WINDING # 09WGT156

Typical performance - not guaranteed values.

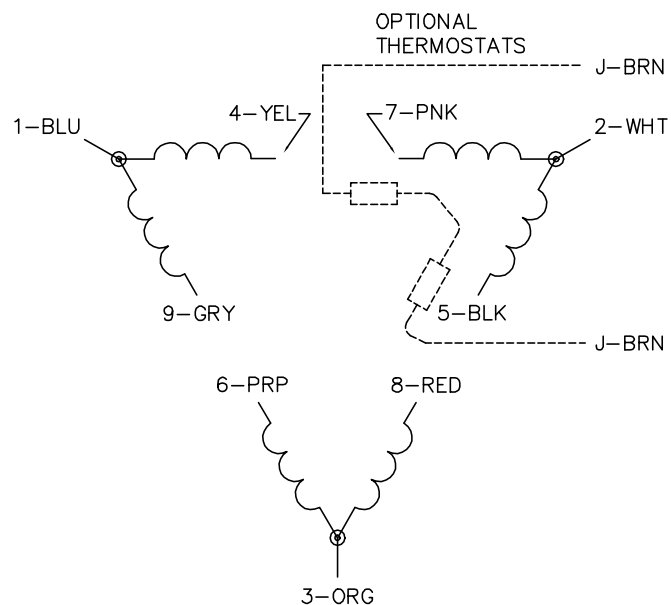
20 HP 3 PH 60 HZ 1765 RPM 460 V 0962M

TORQUES (LB-FT): PO=173 PU=120 LR=152 LRA=149

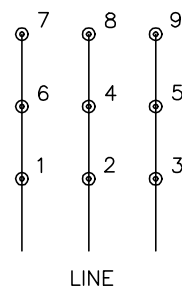




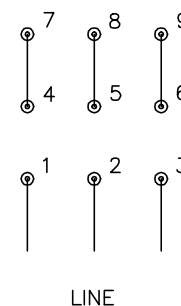
CD0180



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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