

ABB BALDOR RELIANCE III

Customer information packet

XM251542T

15//10HP, 1765//1470RPM, 3PH, 60//50HZ, 254T

Class - CLI GP D; CLII GP F,G

Division - Division I

Specifications

Enclosure	XPFC
Frame	254T
Frame Material	Iron
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	15.000 HP @ 60 HZ 10.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	190.0 V @ 50 HZ 230.0 V @ 60 HZ 380.0 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	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	6
Current @ Voltage	38.000 A @ 208.0 V 36.200 A @ 230.0 V 30.400 A @ 190.0 V 18.100 A @ 460.0 V 15.100 A @ 380.0 V
Design Code	A
Drip Cover	No Drip Cover

Part Detail

Revision	G
Type	AC
Mech. spec.	09E270
Base	
Status	PRD/A
Elec. spec.	09WGT597
Layout	09LYE270
Eff. date	11-14-2023
CD Diagram	CD0005
Poles	04
Leads	9#12
Proprietary	False
Created date	02-02-2021

Duty Rating	CONT
Efficiency @ 100% Load	92.4 %
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	15.1 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	9 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	X0944M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	25.50 IN
Power Factor	84
Product Family	Hazardous Location Motor
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	None
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
Service Factor	1.15
Shaft Diameter	1.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1470 rpm

	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

NP0887XPSLEV												
NO.							CC	010A				
S/N							TEMP CODE		T3C			
SPEC.	09E270T597G3						INV.TYPE		PWM			
CAT.NO.	XM251542T						C HP FR		60	C HP TO		90
HP	15//10						CT HZ FROM		6	CT HZ TO		60
VOLTS	230/460//190/380						VT HZ FROM		6	VT HZ TO		60
AMPS	36.2/18.1//30.4/15.1				MAG CUR		14.6/7.3					
RPM	1765//1470				MX RPM		2700					
HZ	60//50	PH	3	CL	F	NOM.EFF.		92.4				
SER.F.	1.15	DES	A	SL HZ		1.2	WK2	1.93				
FRAME	254T	RATING		40C AMB-CONT								
	55C AMB @1.0SF ON VFD,60C RISE											
	NEMA MG-1 PT.5,IP54											

AC Induction Motor Performance Data

Record # 86566

Preliminary Data Sheet

Winding: 09WGT597-R012			Type: 0944M		Enclosure: XPFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		15	Full Load Torque		44.5 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		36.2/18.1	Breakdown Torque		154 LB-FT	
R.P.M.		1765	Pull-up Torque		67.2 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		83.5 LB-FT
NEMA Design Code		A	KVA Code	H	Starting Current	
Service Factor (S.F.)		1.15	No-load Current		7.32 A	
NEMA Nom. Eff.		92.4	Power Factor	84	Line-line Res. @ 25°C	
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load	
S.F. Amps		41/20.5	Temp. Rise @ S.F. Load		67°C	
				Locked-rotor Power Factor		38.1
				Rotor inertia		1.92 lb-ft²

Load Characteristics 460 V, 60 Hz, 15 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	48	69	79	84	86	87	86
Efficiency	88	92.1	92.7	92.5	91.7	90.7	91.9
Speed	1792	1785	1777	1768	1759	1749	1761
Line amperes	8.45	11	14.3	18.1	22.2	26.7	20.5

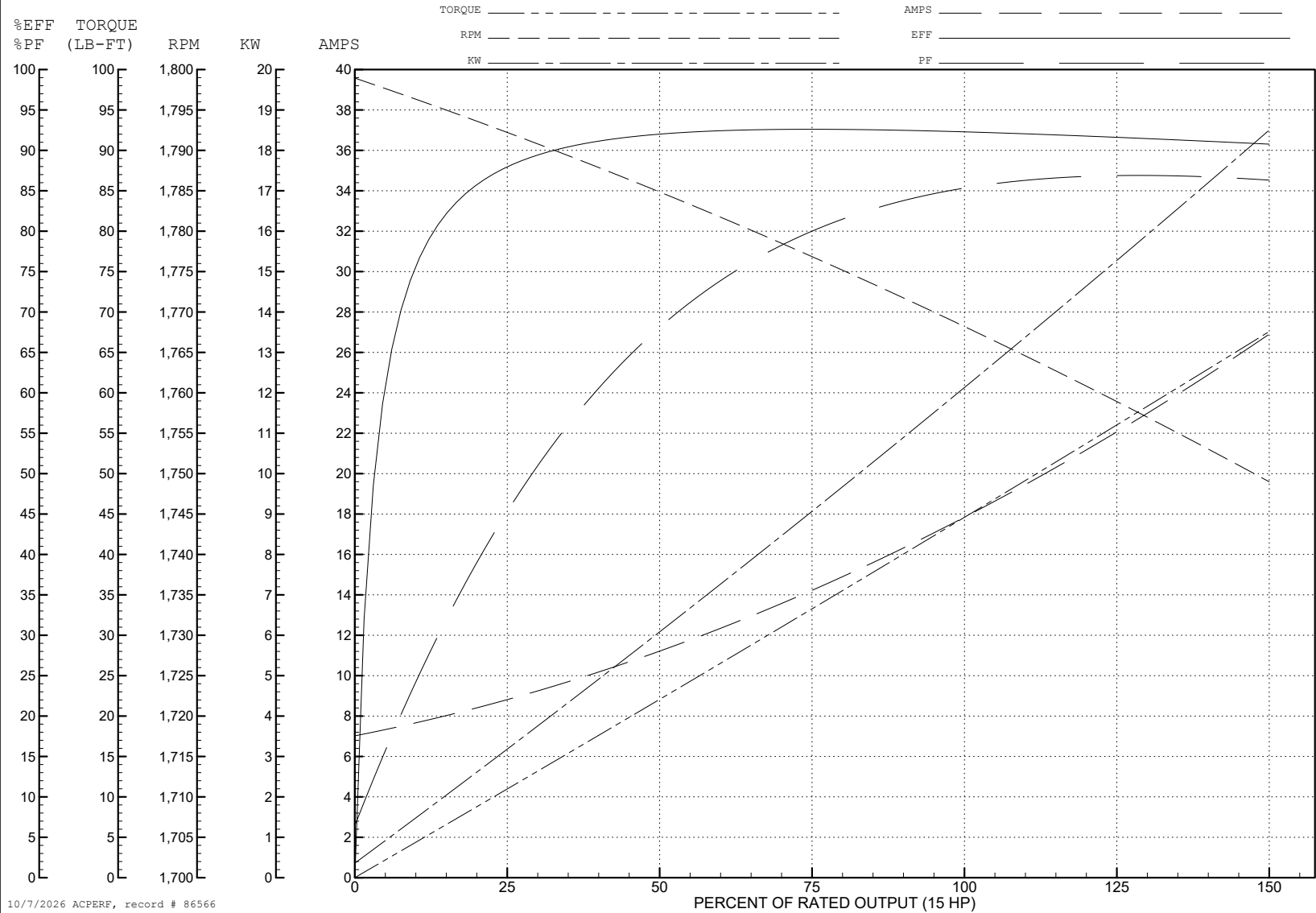
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WINDING # 09WGT597

Typical performance - not guaranteed values.

15 HP 3 PH 60 HZ 1765 RPM 460 V 0944M

TORQUES (LB-FT): PO=154 PU=67.2 LR=83.5 LRA=129



AC Induction Motor Performance Data

Record # 86567

Preliminary Data Sheet

Winding: 09WGT597-R012			Type: 0944M		Enclosure: XPFC		
Nameplate Data			380 V, 50 Hz: High Voltage Connection				
Rated Output (HP)		10	Full Load Torque		35.7 LB-FT		
Volts		190/380	Start Configuration		direct on line		
Full Load Amps		30.2/15.1	Breakdown Torque		153 LB-FT		
R.P.M.		1470	Pull-up Torque		51.8 LB-FT		
Hz	50 Phase	3	Locked-rotor Torque		72 LB-FT		
NEMA Design Code		A	KVA Code	K	Starting Current		123 A
Service Factor (S.F.)		1.15	No-load Current		6.49 A		
NEMA Nom. Eff.		91	Power Factor	81	Line-line Res. @ 25°C		0.61 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		35°C
S.F. Amps		33.2/16.6	Temp. Rise @ S.F. Load		45°C		
			Locked-rotor Power Factor		38.1		
			Rotor inertia		1.92 lb-ft²		

Load Characteristics 380 V, 50 Hz, 10 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	45	67	78	84	86	87	85
Efficiency	86	91.1	92.2	92.2	91.7	90.9	91.9
Speed	1494	1488	1481	1474	1467	1459	1469
Line amperes	7.36	9.3	11.9	14.9	17.9	21.4	16.6

ABB Motors and Mechanical Inc.

WINDING # 09WGT597

Typical performance - not guaranteed values.

10 HP 3 PH 50 HZ 1470 RPM 380 V 0944M

TORQUES (LB-FT): PO=153 PU=51.8 LR=72 LRA=123

