

ABB BALDOR RELIANCE III

Customer information packet

CXM050542

.5//.33HP, 1770//1475RPM, 3PH, 60//50HZ, 56C

Class - CLI GP D; CLII GP F,G

Division - Division I

Specifications

Enclosure	XPFC
Frame	56C
Frame Material	Steel
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	.330 HP @ 50 HZ .500 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	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	6
Current @ Voltage	1.800 A @ 230.0 V 1.900 A @ 208.0 V 1.740 A @ 190.0 V .900 A @ 460.0 V .870 A @ 380.0 V
Design Code	B
Drip Cover	No Drip Cover

Part Detail

Revision	H
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	35WGG155
Layout	35LYE2098
Eff. date	02-23-2026
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	10-28-2021

Duty Rating	CONT
Efficiency @ 100% Load	80.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	0.9 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	M
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3512M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	14.30 IN
Power Factor	65
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1770 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

NP0887XPSL													
NO.							CC						
S/N							TEMP CODE	T3C					
SPEC.	35-0000-1381						INV.TYPE	PWM					
CAT.NO.	CXM050542						C HP FR	60	C HP TO	90			
HP	.5//.33/0.5//.33						CT HZ FROM	6	CT HZ TO	60			
VOLTS	230/460//190/380						VT HZ FROM	6	VT HZ TO	60			
AMPS	1.8/.9//1.74/.87				MAG CUR		1.58/0.79						
RPM	1770//1475				MX RPM		2700						
HZ	60//50	PH	3	CL	F	NOM.EFF.		80					
SER.F.	1.00	DES	B	SL HZ	1	WK2		0.087					
FRAME	56C	RATING		40C AMB-CONT									
	SFA 2/1												

AC Induction Motor Performance Data

Record # 90035

Typical performance - not guaranteed values

Winding: 35WGG155-R049			Type: 3512M		Enclosure: TEFC			
Nameplate Data				380 V, 50 Hz: High Voltage Connection				
Rated Output (HP)		.5//.33		Full Load Torque		1.18 LB-FT		
Volts		230/460//190/380		Start Configuration		direct on line		
Full Load Amps		1.8/.9//1.74/.87		Breakdown Torque		5.5 LB-FT		
R.P.M.		1770//1475		Pull-up Torque		2.98 LB-FT		
Hz		60//50	Phase	3	Locked-rotor Torque		3.69 LB-FT	
NEMA Design Code		B		KVA Code	M	Starting Current		6.08 A
Service Factor (S.F.)		1		No-load Current		0.775 A		
NEMA Nom. Eff.		80	Power Factor		65	Line-line Res. @ 25°C		43.2 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		19°C		
				Locked-rotor Power Factor		76.0359		
				Rotor inertia		0.0866 lb-ft²		

Load Characteristics 380 V, 50 Hz, 0.33 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	26	37	48	57	65	71
Efficiency	48.8	64.7	71.7	75.2	77	77.5
Speed	1493	1488	1482	1476	1470	1463
Line amperes	0.771	0.789	0.828	0.875	0.938	1.02

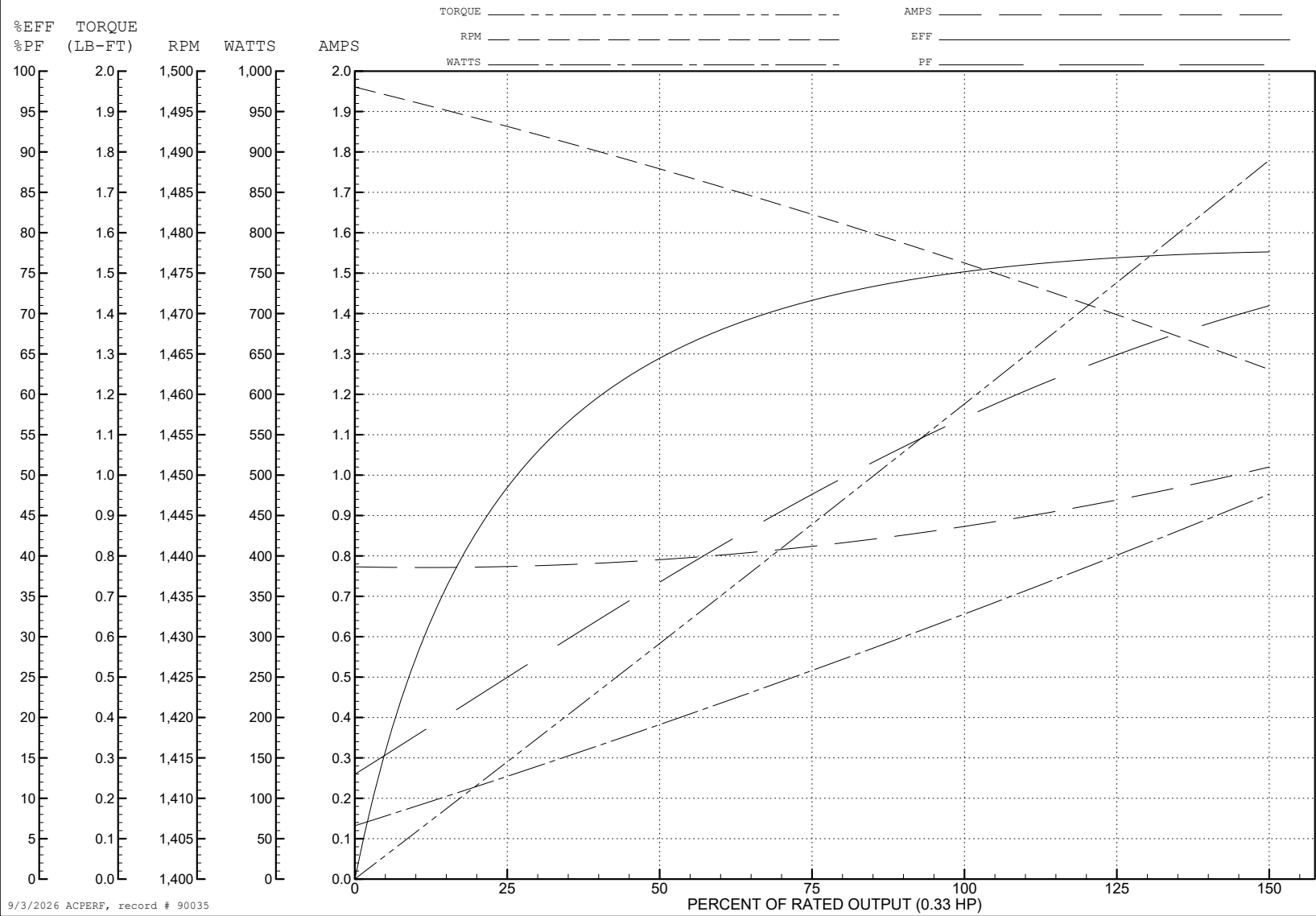
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WINDING # 35WGG155

Typical performance - not guaranteed values.

0.33 HP 3 PH 50 HZ 1476 RPM 380 V 3512M

TORQUES (LB-FT): PO=5.5 PU=2.98 LR=3.69 LRA=6.08



AC Induction Motor Performance Data

Record # 90036

Typical performance - not guaranteed values

Winding: 35WGG155-R049			Type: 3512M		Enclosure: TEFC			
Nameplate Data				460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		.5//.33		Full Load Torque		1.49 LB-FT		
Volts		230/460//190/380		Start Configuration		direct on line		
Full Load Amps		1.8/.9//1.74/.87		Breakdown Torque		6.28 LB-FT		
R.P.M.		1770//1475		Pull-up Torque		3.26 LB-FT		
Hz		60//50	Phase	3	Locked-rotor Torque		4.04 LB-FT	
NEMA Design Code		B		KVA Code	M	Starting Current		6.71 A
Service Factor (S.F.)		1		No-load Current		0.792 A		
NEMA Nom. Eff.		80	Power Factor		65	Line-line Res. @ 25°C		43.2 Ω
Rating - Duty		40C		AMB-CONT		Temp. Rise @ Rated Load		22°C
						Locked-rotor Power Factor		70.7767
						Rotor inertia		0.0866 lb-ft²

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	27	41	52	62	69	75
Efficiency	56.5	70.7	76.5	78.9	80	80
Speed	1792	1786	1779	1771	1763	1755
Line amperes	0.795	0.827	0.889	0.966	1.06	1.18

ABB Motors and Mechanical Inc.

WINDING # 35WGG155

Typical performance - not guaranteed values.

0.5 HP 3 PH 60 HZ 1771 RPM 460 V 3512M

TORQUES (LB-FT): PO=6.28 PU=3.26 LR=4.04 LRA=6.71

