

ABB BALDOR RELIANCE III

Customer information packet

JM3158

3HP, 3450RPM, 3PH, 60HZ, 56J, 3524M, ODTF, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	ODTF
Frame	56J
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	3.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ 208.0 V @ 60 HZ
Agency Approvals	CSA UR
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
Current @ Voltage	8.500 A @ 208.0 V 8.000 A @ 230.0 V 4.000 A @ 460.0 V
Design Code	B
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	80.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Drip Cover Mounting
Front Shaft Indicator	None

Part Detail

Revision	AG
Type	AC
Mech. spec.	35E065
Base	
Status	PRD/A
Elec. spec.	35WGR286
Layout	35LYE065
Eff. date	10-29-2024
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	06-21-2007

Heater Indicator	No Heater
High Voltage Full Load Amps	4.0 a
Insulation Class	B
Inverter Code	Not Inverter
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3524M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	13.74 IN
Power Factor	87
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Ext Thread
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3450 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

NP1256L									
CAT.NO.	JM3158								
SPEC.	35E065R286								
HP	3								
VOLTS	208-230/460								
AMP	8.5-8/4								
RPM	3450								
FRAME	56J		HZ	60			PH	3	
SER.F.	1.15	CODE	K	DES	B	CLASS		B	
NEMA-NOM-EFF	80	PF	87						
RATING	40C AMB-CONT								
CC									
DE	6205		ODE	6203					
ENCL	ODTF	SN							

Parts List

Part number	Description	Quantity
SA047478	SA 35E065R286	1.000 ea
RA042740	RA 35E065R286	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35CB3007	35 CB CASTING W/.88 DIA. LEAD HOLE	1.000 ea
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
35EP3209D00	MASTER ODE,203 BRG,.683SH,DRIP CVR	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3402A00	MASTER DE,205 BRG,OPEN,W/TIGHTSLEEVE	1.000 ea
35AD2000	AIR BAFFLE - GALVANNEAL	1.000 ea
60XW0632A06	6-32 X 3/8 TORX HEAD SCREW TAPTITE II	4.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 ea
35FH4006A02	DRIP COVER STAMPED, VERT., W/ PRIMER	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
WD4100A10	465 NIAGARA PLUG (SO ELEC),FOR 1.093 DIA	1.000 ea
35CB4521	35 LIPPED CB LID (GALV & PHOSPH)	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.017 ga
HA3100A15	THRUBOLT 10-32 X 8.375	4.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
LB1009N	LABEL,ROTATION DIRECTION (ON ROLLS)	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
NP1256L	ALUM UL CC INDUSTRIAL MOTOR A60	1.000 ea
35PA1066	PKG GRP, PRINT PK1008A07	1.000 ea
PK3083	STYROFOAM PACKING CRADLE	1.000 ea
PK3088	MICROFOAM, 8"X"8 PERF. SHEETS	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea

PE-0000011

ZRTG PE ASSEMBLY

1.000 ea

AC Induction Motor Performance Data

Record # 8536

Typical performance - not guaranteed values

Winding: 35WGR286-R001			Type: 3524M		Enclosure: OPEN		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		3	Full Load Torque		4.6 LB-FT		
Volts		208-230/460	Start Configuration		direct on line		
Full Load Amps		8.5-8/4	Breakdown Torque		16.8 LB-FT		
R.P.M.		3450	Pull-up Torque		10.1 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		14.2 LB-FT	
NEMA Design Code		B	KVA Code	K	Starting Current		30.9 A
Service Factor (S.F.)		1.15		No-load Current		1.6 A	
NEMA Nom. Eff.		80	Power Factor	87	Line-line Res. @ 25°C		5.928 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		42°C	
S.F. Amps				Temp. Rise @ S.F. Load		50°C	
				Locked-rotor Power Factor		55	
				Rotor inertia		0.0664 LB-FT2	

Load Characteristics 460 V, 60 Hz, 3 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	56	74	83	87	89	89	88
Efficiency	68.6	78.2	80.7	81	79.9	78.1	80.3
Speed	3565	3520	3484	3444	3400	3346	3418
Line amperes	1.9	2.5	3.2	4	4.9	5.9	4.5

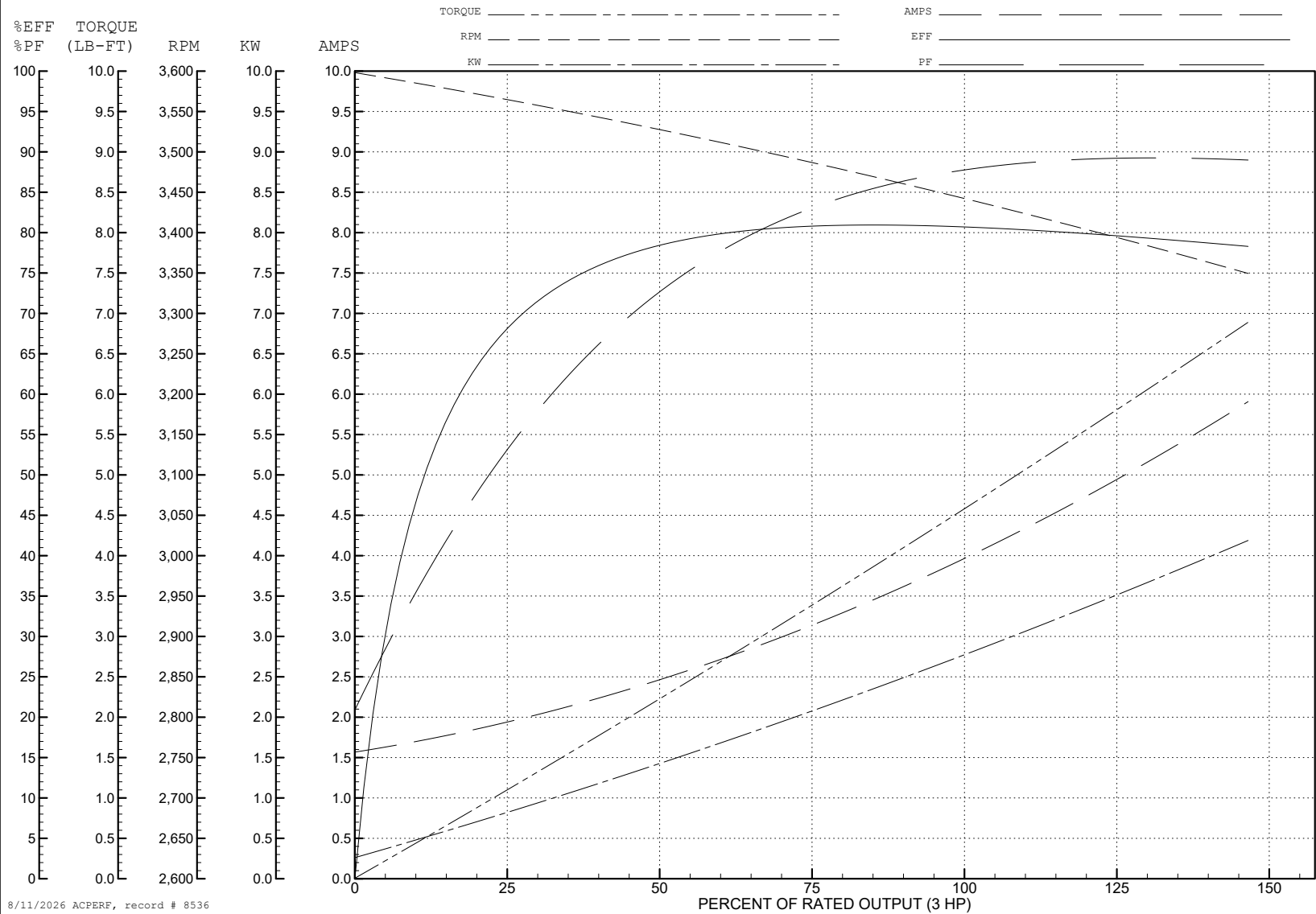
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WINDING # 35WGR286

Typical performance - not guaranteed values.

3 HP 3 PH 60 HZ 3450 RPM 460 V 3524M

TORQUES (LB-FT): PO=16.8 PU=10.1 LR=14.2 LRA=30.9



AC Induction Motor Performance Data

Record # 20324

Typical performance - not guaranteed values

Winding: 35WGR286-R002			Type: 3524M		Enclosure: OPEN		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		3	Full Load Torque		4.6 LB-FT		
Volts		208-230/460	Start Configuration		direct on line		
Full Load Amps		8.5-8/4	Breakdown Torque		16.8 LB-FT		
R.P.M.		3450	Pull-up Torque		10.1 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		14.2 LB-FT	
NEMA Design Code		B	KVA Code	K	Starting Current		30.9 A
Service Factor (S.F.)		1.15	No-load Current		1.6 A		
NEMA Nom. Eff.		80	Power Factor	87	Line-line Res. @ 25°C		5.928 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		42°C
S.F. Amps					Temp. Rise @ S.F. Load		50°C
					Locked-rotor Power Factor		55
					Rotor inertia		0.0664 LB-FT2

Load Characteristics 460 V, 60 Hz, 3 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	56	74	83	87	89	89	88
Efficiency	68.6	78.2	80.7	81	79.9	78.1	80.3
Speed	3565	3520	3484	3444	3400	3346	3418
Line amperes	1.9	2.5	3.2	4	4.9	5.9	4.5

ABB Motors and Mechanical Inc.

WINDING # 35WGR286

Typical performance - not guaranteed values.

3 HP 3 PH 60 HZ 3450 RPM 460 V 3524M

TORQUES (LB-FT): PO=16.8 PU=10.1 LR=14.2 LRA=30.9

