

ABB BALDOR RELIANCE III

Customer information packet

ERM3158TA

3HP, 3450RPM, 3PH, 60HZ, 56HZ, 3530M, OPEN, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	OPEN
Frame	145TY
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
Agency Approvals	CSA CSA EEV UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Resilient
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	7.600 A @ 230.0 V 8.000 A @ 208.0 V 3.800 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	85.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Terminal Panel
Front Shaft Indicator	None

Part Detail

Revision	Q
Type	AC
Mech. spec.	35J829
Base	
Status	PRD/A
Elec. spec.	35WGP988
Layout	35LYJ829
Eff. date	01-05-2026
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	07-02-2010

Heater Indicator	No Heater
High Voltage Full Load Amps	3.8 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Terminal Panel
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3530M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	13.64 IN
Power Factor	87
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Resilient Mount
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.875 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	Do Not Use Eve-Not Valid
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	Automatic Thermal Overload

Winding Thermal 2

None

Nameplate

NP1259L											
CAT.NO.	ERM3158TA										
SPEC.	35J829P988G1										
HP	3										
VOLTS	230/460										
AMP	7.6/3.8										
RPM	3450										
FRAME	143TY		HZ	60				PH	3		
SER.F.	1.15		CODE	K	DES	B		CL	F		
NEMA-NOM-EFF	85.5		PF	87							
RATING	40C AMB-CONT										
CC	010A										
DE	6205		ODE	6203							
ENCL	OPEN		SN								

Parts List

Part number	Description	Quantity
SA199675	SA 35J829P988G1	1.000 ea
RA187003	RA 35J829P988G1	1.000 ea
11XW0832G06	#8-32 X 3/8, TAPTITE II, HEX WSHR SLTD	1.000 ea
35EP3202A01	STD OPEN FR EP - RESILIENT MTD	1.000 ea
RM1000A02	CUSHION RING, MODEL 35 SAME AS A07	1.000 ea
HA6005A01	CLAMP, BASE	2.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	1.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	1.000 ea
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	1.000 ea
LD5000A01	LEAD ASSY, ML1400DF14 7" RING TRM EA END	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	2.000 ea
HW1003A10	WASHER, #10 EX TH LK, ZN X	2.000 ea
SP1003A01	TERM. BOARD, MODE 35 SW X H-23655	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	2.000 ea
WD4100A01	DP-875 HEYCO PLUG OR 62MP0875 MICRO PLAS	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP1209A01	PU ENDPLATE, MACH	1.000 ea
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 ea
RM1000A02	CUSHION RING, MODEL 35 SAME AS A07	1.000 ea
HA6005A01	CLAMP, BASE	2.000 ea
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	1.000 ea
35CB4500	TERMINAL BOX LID STAMPED	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	2.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.017 ga
HA3100A22	THRUBOLT 10-32 X 10.125	4.000 ea
35BA4002C01	RESILIENT BASE, STAMPED	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea

LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
NP1259L	ALUM SUPER-E UL CC NEMA PREMIUM A60	1.000 ea
36PA1000	PKG GRP, PRINT PK1016A08	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 59451

Typical performance - not guaranteed values

Winding: 35WGP988-R004			Type: 3530M		Enclosure: OPSB		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		3	Full Load Torque		4.5 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		7.6/3.8	Breakdown Torque		18.1 LB-FT		
R.P.M.		3450	Pull-up Torque		11.3 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		15.1 LB-FT	
NEMA Design Code		B	KVA Code	K	Starting Current		32.5 A
Service Factor (S.F.)		1.15		No-load Current		1.55 A	
NEMA Nom. Eff.		85.5	Power Factor	87	Line-line Res. @ 25°C		5.8893 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		33°C	
S.F. Amps				Temp. Rise @ S.F. Load		40°C	
				Locked-rotor Power Factor		57.8	
				Rotor inertia		0.0822 LB-FT2	

Load Characteristics 460 V, 60 Hz, 3 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	50	72	82	87	90	91	89
Efficiency	76.1	84.3	86	85.8	84.7	83	85.1
Speed	3569.1	3541.6	3510.6	3478.3	3442.7	3400.2	3457
Line amperes	1.77	2.29	2.97	3.73	4.58	5.53	4.24

ABB Motors and Mechanical Inc.

WINDING # 35WGP988

Typical performance - not guaranteed values.

3 HP 3 PH 60 HZ 3450 RPM 460 V 3530M

TORQUES (LB-FT): PO=18.1 PU=11.3 LR=15.1 LRA=32.5





