

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							

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	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	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		5.8893 Ω	
S.F. Amps			Temp. Rise @ S.F. Load		33°C	
			Locked-rotor Power Factor		40°C	
			Rotor inertia		57.8	
					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





