

ABB BALDOR RELIANCE III

Customer information packet

CEM3158T

3HP, 3450RPM, 3PH, 60HZ, 145TC, 3530M, OPSB, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	OPSB
Frame	143TC
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	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM CURUSEEV
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
Current @ Voltage	3.800 A @ 460.0 V 7.600 A @ 230.0 V 8.000 A @ 208.0 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	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	V
Type	AC
Mech. spec.	35TT865
Base	
Status	PRD/A
Elec. spec.	35WGP988
Layout	35LYTT865
Eff. date	01-08-2026
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	08-03-2010

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	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	3530M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	13.01 IN
Power Factor	87
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
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	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None

Winding Thermal 2

None

Nameplate

NP3553LUA									
CAT.NO.	CEM3158T								
SPEC.	35TT865P988G1								
HP	3								
VOLTS	230/460								
AMPS	7.6/3.8								
RPM	3450								
FRAME	143TC		HZ	60			PH	3	
SF	1.15	CODE	K	DES	B	CLASS	F		
NEMA NOM. EFF	85.5	PF	87						
RATING	40C AMB-CONT								
CC	010A								
ENCL	OPSB	SN							
DE	6205		ODE	6203					
VPWM INVERTER READY									
CT30-60(2:1) VT3-60(20:1)									
USABLE AT	50HZ 3HP 190/380V 9/4.5A							SF1.0	

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





