

ABB BALDOR RELIANCE III

Customer information packet

VEM3158T

3HP, 3450RPM, 3PH, 60HZ, 145TC, 3528M, ODP, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	OPEN
Frame	145TC
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	No Mounting
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	Q
Type	AC
Mech. spec.	35Z413
Base	
Status	PRD/A
Elec. spec.	35WGL051
Layout	35LYZ413
Eff. date	01-05-2026
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	07-15-2016

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	3528M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	13.25 IN
Power Factor	89
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.	VEM3158T								
SPEC.	35Z413L051G1								
HP	3								
VOLTS	230/460								
AMPS	7.6/3.8								
RPM	3450								
FRAME	145TC		HZ	60			PH	3	
SF	1.15	CODE	K	DES	B	CLASS	F		
NEMA NOM. EFF	85.5	PF	89						
RATING	40C AMB-CONT								
CC	010A								
ENCL	OPEN	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 # 48297

Typical performance - not guaranteed values

Winding: 35WGL051-R004		Type: 3528M	Enclosure: ODP
Nameplate Data		460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	3	Full Load Torque	4.65 LB-FT
Volts	230/460	Start Configuration	direct on line
Full Load Amps	7.6/3.8	Breakdown Torque	18.7 LB-FT
R.P.M.	3450	Pull-up Torque	12.2 LB-FT
Hz	60 Phase	Locked-rotor Torque	17.3 LB-FT
NEMA Design Code	B KVA Code	Starting Current	32 A
Service Factor (S.F.)	1.15	No-load Current	1.36 A
NEMA Nom. Eff.	85.5 Power Factor	Line-line Res. @ 25°C	4.7021 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	

Load Characteristics 460 V, 60 Hz, 3 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	55	76	85	89	92	93	91
Efficiency	82.1	87	87.4	86.2	84.6	82.2	85.2
Speed	3566.3	3535	3499.4	3457.2	3415.1	3364.7	3432
Line amperes	1.63	2.16	2.88	3.74	4.57	5.58	4.24

ABB Motors and Mechanical Inc.

WINDING # 35WGL051

Typical performance - not guaranteed values.

3 HP 3 PH 60 HZ 3450 RPM 460 V 3528M

TORQUES (LB-FT): PO=18.7 PU=12.2 LR=17.3 LRA=32





