

ABB BALDOR RELIANCE III

Customer information packet

VEM3664T

2HP, 1165RPM, 3PH, 60HZ, 184TC, 0642M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	184TC
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	2.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CURUSEEV NEMA PREMIUM NEMA PREMIUM (OLD LOGO)
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	6.300 A @ 230.0 V 6.600 A @ 208.0 V 3.150 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	88.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	H
Type	AC
Mech. spec.	06C103
Base	
Status	PRD/A
Elec. spec.	06WGW970
Layout	06LYC103
Eff. date	05-21-2025
CD Diagram	CD0005
Poles	06
Leads	9#16
Proprietary	False
Created date	04-22-2015

Heater Indicator	No Heater
High Voltage Full Load Amps	3.2 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	K
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0642M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	15.98 IN
Power Factor	68
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1165 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

NP3441LUA									
CAT.NO.	VEM3664T								
SPEC	06C103W970G1								
HP	2								
VOLTS	230/460								
AMPS	6.3/3.15								
RPM	1165								
FRAME	184TC		HZ	60			PH	3	
SF	1.15		CODE	K	DES	B	CLASS	F	
NEMA NOM. EFF	88.5		PF	68					
RATING	40C AMB-CONT								
CC	010A								
ENCL	TEFC		SER						
DE	6206		ODE	6205					
VPWM INVERTER READY		SFA 7/3.5							
CT6-60H(10:1)VT3-60H(20:1									
	50HZ 2HP 190/380V 7.4/3.7A							SF1.0	

AC Induction Motor Performance Data

Record # 53064

Typical performance - not guaranteed values

Winding: 06WGW970-R023			Type: 0642M		Enclosure: TEFC			
Nameplate Data			460 V, 60 Hz: High Voltage Connection					
Rated Output (HP)		2	Full Load Torque		9.05 LB-FT			
Volts		230/460	Start Configuration		direct on line			
Full Load Amps		6.3/3.15	Breakdown Torque		31.2 LB-FT			
R.P.M.		1165	Pull-up Torque		16.7 LB-FT			
Hz	60	Phase	3	Locked-rotor Torque		19.9 LB-FT		
NEMA Design Code		B	KVA Code	K	Starting Current		20.9 A	
Service Factor (S.F.)		1.15	No-load Current		1.84 A			
NEMA Nom. Eff.		88.5	Power Factor		68	Line-line Res. @ 25°C		5.42 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		27°C	
S.F. Amps					Temp. Rise @ S.F. Load		33°C	
					Rotor inertia		0.394 LB-FT2	

Load Characteristics 460 V, 60 Hz, 2 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	31	48	60	68	73	75	71
Efficiency	80.5	86.9	88.5	88.6	87.9	86.6	88.2
Speed	1193.1	1186	1178.3	1170	1160.8	1150	1164
Line amperes	1.97	2.26	2.67	3.14	3.68	4.33	3.46

ABB Motors and Mechanical Inc.

WINDING # 06WGW970

Typical performance - not guaranteed values.

2 HP 3 PH 60 HZ 1165 RPM 460 V 0642M

TORQUES (LB-FT): PO=31.2 PU=16.7 LR=19.9 LRA=20.9





