

ABB BALDOR RELIANCE III

Customer information packet

VEM3665T

5HP, 1755RPM, 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	5.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 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	14.000 A @ 208.0 V 6.600 A @ 460.0 V 13.200 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Enclosure Modification	841
Feedback Device	NO FEEDBACK
Front Face Code	Standard

Part Detail

Revision	W
Type	AC
Mech. spec.	06H016
Base	
Status	PRD/A
Elec. spec.	06WGX182
Layout	06LYH016
Eff. date	08-06-2026
CD Diagram	CD0005
Poles	04
Leads	9#16
Proprietary	False
Created date	08-04-2010

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	6.6 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	J
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	4
Overall Length	15.98 IN
Power Factor	80
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	1.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1750 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.	VEM3665T									
SPEC	06H016X182G1									
HP	5									
VOLTS	230/460									
AMPS	13.2/6.6									
RPM	1750									
FRAME	184TC		HZ	60			PH	3		
SF	1.15		CODE	J	DES	B	CLASS	F		
NEMA NOM. EFF	89.5		PF	80						
RATING	40C AMB-CONT									
CC	010A									
ENCL	TEFC		SER							
DE	6206		ODE	6205						
VPWM INVERTER READY			SFA 14.6/7.3							
CT6-60H(10:1)VT3-60H(20:1										
	50Hz 5HP 190/380V 15.8/7.9A								SF1.0	

AC Induction Motor Performance Data

Record # 34381

Typical performance - not guaranteed values

Winding: 06WGX182-R004			Type: 0642M		Enclosure: TEFC		
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		5		Full Load Torque		15 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		13.2/6		Breakdown Torque		53.9 LB-FT	
R.P.M.		1750		Pull-up Torque		22.4 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		31.8 LB-FT	
NEMA Design Code		B	KVA Code	J		Starting Current	46.6 A
Service Factor (S.F.)		1.15		No-load Current		3.02 A	
NEMA Nom. Eff.		89.5	Power Factor	80	Line-line Res. @ 25°C		2.63 Ω
Rating - Duty		40C		AMB-CONT		Temp. Rise @ Rated Load	53°C
S.F. Amps						Temp. Rise @ S.F. Load	65°C
						Locked-rotor Power Factor	40.5
						Rotor inertia	0.391 LB-FT2

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	41	63	75	81	84	85	81
Efficiency	85.2	89.8	90.4	89.8	88.4	86.9	88.7
Speed	1789	1777	1765	1752	1737	1721	1739
Line amperes	3.35	4.14	5.21	6.45	7.91	9.47	7.52

ABB Motors and Mechanical Inc.

WINDING # 06WGX182

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1750 RPM 460 V 0642M

TORQUES (LB-FT): PO=53.9 PU=22.4 LR=31.8 LRA=46.6





