

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								

Parts List

Part number	Description	Quantity
SA201042	SA 06H016X182G1	1.000 ea
RA188347	RA 06H016X182G1	1.000 ea
36FN3000C01SP	EXFN, PLASTIC, 5.25 OD, .912 ID	1.000 ea
HW3201A05	3/8-16 EYEBOLT	1.000 ea
06CB3000	BALDOR CONDUIT BOX CAST	1.000 ea
06GS1000	GASKET, CONDUIT BOX	1.000 ea
51XW2520A12	SCREW, HEX SER SLT HD, ZN, 1/4-20 X .75	2.000 ea
WD1000B17	T&B CX35TN OR L35P TERMINAL LUG	1.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
36EP1101A21	FR ENDPLATE, MACH	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 ea
36EP1300A13	PU ENDPLATE, MACH	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
10XN2520A28	1/4-20X 1 3/4 HEX HD	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 ea
HA3101A34	THRUBOLT- 1/4-20 X 10.375	4.000 ea
36FH4009A31	IEC FH W/GREASER & SPL NOTCH, W/ PRIMER	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
06CB3500	BALDOR CONDUIT BOX LID	1.000 ea
06GS1001	BALDOR CONDUIT BOX GASKET	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 ea
HW2501E16	KEY, 1/4 SQ X 1.750	1.000 ea
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
51XB1214A16	12-14X1.00 HWSSLD SERTYB	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.028 ga

LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP3441LUA	AL SUPER-E VPWM INV RDY,UL EEV,NEMA PREM	1.000 ea
36PA1001	PKG GRP, PRINT PK1017A07	1.000 ea
PK3082	STYROFOAM CRADLE	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea

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





