

ABB BALDOR RELIANCE III

Customer information packet

EM3665T-BG

5HP, 1750RPM, 3PH, 60HZ, 184T, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	184T
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	CSA CSA EEV UR
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	6.600 A @ 460.0 V 14.000 A @ 208.0 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
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	6.6 a

Part Detail

Revision	C
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	06WGX182
Layout	06LYK800
Eff. date	04-29-2024
CD Diagram	CD0005
Poles	04
Leads	9#16
Proprietary	False
Created date	04-10-2019

Insulation Class	H
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0642M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	15.24 IN
Power Factor	79
Product Family	General Purpose
Pulley Face Code	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.125 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
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.	EM3665T-BG								
SPEC	06-0000-0085								
HP	5								
VOLTS	230/460								
AMPS	13.2/6.6								
RPM	1750								
FRAME	184T		HZ	60		PH	3		
SF	1.15	CODE	J	DES	B	CLASS	H		
NEMA NOM. EFF	89.5	PF	79						
RATING	40C AMB-CONT								
CC	010A								
ENCL	TEFC	SER							
DE	6206		ODE	6205					
VPWM INVERTER READY									
CT6-60H(10:1)VT3-60H(20:1									
	50HZ 5HP 190/380V 15.8/7.9A							SF1.0	

Parts List

Part number	Description	Quantity
SA368308	SA 06-0000-0085	1.000 ea
RA357809	RA 06-0000-0085	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
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
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
HW3201A05	3/8-16 EYEBOLT	1.000 ea
36FH4009A03SP	IEC FH , W/ PRIMER	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
36FN3000A01SP	EXFN, PLASTIC, 7.00 OD, .912 ID	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
HA3101A53	THRUBOLT 1/4-20 X 10.50	4.000 ea
LB1508	LABEL "SHAFT GROUNDING BRUSH" 1.50 X .81	1.000 ea
XY2520A12	1/4-20 HEX NUT, DIRECTIONAL SERRATIONS	4.000 ea
36EP1101A01	FR ENDPLATE, MACH	1.000 ea
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
36EP1100A118	PU EP W/206 LOCKED BRG & TGSLV	1.000 ea
10XN2520A20	1/4-20X 1 1/4 HEX HD X	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
BP5338A06	SHAFT GRD BRUSH, RB4014A05 RETAINER RING	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
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
HW3001B02	BRASS CUP WASHER W/GROUND SYMBOL TAB,	1.000 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

MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.022 ga
36PA1001	PKG GRP, PRINT PK1017A07	1.000 ea
HW2501E17	.250 SQUARE X 1.875 LONG LOW CARBON STEE	1.000 ea
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 ea

AC Induction Motor Performance Data

Record # 75464

Typical performance - not guaranteed values

Winding: 06WGX182-R019			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		13.2/6.6		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	79	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	66°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	83
Efficiency	85.1	89.7	90.3	89.8	88.4	86.8	89
Speed	1789	1777	1765	1752	1737	1721	1743
Line amperes	3.35	4.14	5.21	6.45	7.91	9.47	7.33

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





