

ABB BALDOR RELIANCE III

Customer information packet

ECP3664T

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

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	184T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP A,B,C,D
Haz Area Division	Division II
Motor Letter Type	Three Phase
Output @ Frequency	2.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV NEMA PREMIUM NEMA_PREMIUM UR CCSA US
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
Constant Torque Speed Range	1.8
Current @ Voltage	6.400 A @ 230.0 V 3.200 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
Enclosure Modification	Severe Duty Features

Part Detail

Revision	X
Type	AC
Mech. spec.	06H483
Base	
Status	PRD/A
Elec. spec.	06WGW970
Layout	06LYH483
Eff. date	10-01-2025
CD Diagram	CD0005
Poles	06
Leads	9#16
Proprietary	False
Created date	12-02-2010

Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	3.2 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	K
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Max Speed	1800 rpm
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	15.93 IN
Power Factor	68
Product Family	Chemical Processing (Not DC)
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
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	Shaft 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

NP3257									
CAT.NO.	ECP3664T								
SPEC.	06H483W970G1								
HP	2 TE								
VOLTS	230/460								
AMP	6.4/3.2								
RPM	1165								
FRAME	184T	HZ		60		PH		3	
SER.F.	1.15	CODE		K	DES		B	CL	F
RATING	40C AMB-CONT								
SN									
DE	6206	ODE		6206					
NEMA-NOM-EFF	88.5	PF		68					
G.MIN.EFF	88.5	CC	010A						
T. CODE	T3C	T=	160						

NP3260			
SPEC.	06H483W970G1		
D.E. BRG.	30BC02XP30X		
O.D.E. BRG.	30BC02XP30X		
GREASE	POLYREX EM		
RPM MAX	1800	MAX. KVAR	N/A
BLANK			
INV.TYPE	PWM		
T=	160		
C HP FR	60	C HP TO	90
CT HZ FROM	1.8	CT HZ TO	60
VT HZ FROM	0-	VT HZ TO	60
HTR-VOLTS		HTR-AMPS	
HTR-WATTS		MAX. SPACE HEATER TEMP.	

Parts List

Part number	Description	Quantity
SA213040	SA 06H483W970G1	1.000 ea
RA200267	RA 06H483W970G1	1.000 ea
36FN3000B01	EXFN, PLASTIC, 6.00 OD, .912 ID	1.000 ea
HW3201A05	3/8-16 EYEBOLT	1.000 ea
06CB1000A02G	CONDUIT BOX, MACH GRAY	1.000 ea
RM1016	LEAD SEPARATOR GASKET - 305/306 C.P.MOTO	1.000 ea
51XF2520A16	SCREW,HEX SER SLT HD,ZN 1/4-20X1.00LG TD	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
10XN2520S06	1/4 20X3/8 HX HD CAP S.S.	2.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
36FE1100B72G	FREP ASSEMBLY FOR ROUTING PURPOSES	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 ea
36PE1100A29G	PUEP ASSEMBLY FOR ROUTING PURPOSES	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
HA3101A34	THRUBOLT- 1/4-20 X 10.375	4.000 ea
XY2520A12	1/4-20 HEX NUT, DIRECTIONAL SERRATIONS	4.000 ea
06FH1004A01G	FAN HOUSING MACH, W/GRAY EPOXY	1.000 ea
WD4100A02	DP-1000 HEYCO PLUG OR 62MP1000 MICRO PL	1.000 ea
10XN2520A24	1/4-20X 1 1/2 HEX HD X	3.000 ea
06CB1502G	LIPPED CONDUIT BOX LID CAST, GRAY EPOXY	1.000 ea
06GS1003	GASKET, KOBX LID, 1/8" THICK BLACK NEOPR	1.000 ea
10XN2520A12	1/4-20 X 3/4 HEX HEAD CAP	2.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 ea

HA1005A22	SLINGER, OD 2.00, ID 1.14, 206 BRG, GM	1.000 ea
HW4600B36SP	V-RING SLINGER 1.188 X 1.380 X .24 VITON	1.000 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
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 qt
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
37PA1074	PALLET PACK GRP, PRINT BOX PK1026A06	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LB1002N	LABEL,MARINE DUTY (ON ROLLS)	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1025N19	WILKOFAST, 778.50, RELIANCE BLUE-GREEN 8	0.028 ga
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
LB1449	DIV-2/NEC WARNING LABEL	1.000 ea
NP3257	SS CP SUPER-E DIV-2 UL CSA-C US EEV PREM	1.000 ea
NP3260	SS CP SUPER-E AUX DATA INFORMATION	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

AC Induction Motor Performance Data

Record # 47054

Typical performance - not guaranteed values

Winding: 06WGW970-R019			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		6.4/3.2	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





