

ABB BALDOR RELIANCE III

Customer information packet

VECP3664T

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

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	184TC
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CL I 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	208.0 V @ 60 HZ 230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CCSA US CSA EEV NEMA PREMIUM NEMA_PREMIUM UR
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
Constant Torque Speed Range	1.8
Current @ Voltage	6.300 A @ 230.0 V 6.600 A @ 208.0 V 3.200 A @ 460.0 V
Design Code	B
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	88.5 %

Part Detail

Revision	Q
Type	AC
Mech. spec.	06H480
Base	
Status	PRD/A
Elec. spec.	06WGW970
Layout	06LYH480
Eff. date	10-01-2025
CD Diagram	CD0005
Poles	06
Leads	9#16
Proprietary	False
Created date	12-02-2010

Electrically Isolated Bearing	Not Electrically Isolated
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 Ready
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	16.98 IN
Power Factor	68
Product Family	Chemical Processing (Not DC)
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	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.	VECP3664T								
SPEC.	06H480W970G1								
HP	2 TE								
VOLTS	208-230/460								
AMP	6.6-6.3/3.2								
RPM	1165								
FRAME	184TC	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.	06H480W970G1		
D.E. BRG.	30BC02XP30X		
O.D.E. BRG.	30BC02XP30X		
GREASE	POLYREX EM		
RPM MAX		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.	

AC Induction Motor Performance Data

Record # 36478

Typical performance - not guaranteed values

Winding: 06WGW970-R004			Type: 0642M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		2	Full Load Torque		9.01 LB-FT		
Volts		208-230/460	Start Configuration		direct on line		
Full Load Amps		6.6-6.3/3.2	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		5.13 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		27°C
S.F. Amps					Temp. Rise @ S.F. Load		32°C
					Locked-rotor Power Factor		29
					Rotor inertia		0.395 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	79.2	86.4	88.1	88.3	87.4	86.3	87.8
Speed	1193	1186	1178	1170	1161	1150	1165
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





