

ABB BALDOR RELIANCE III

Customer information packet

VECP3768T

5HP, 1160RPM, 3PH, 60HZ, 215TC, 0748M, TEFC, F1

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	215TC
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	5.000 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	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	2
Current @ Voltage	14.600 A @ 230.0 V 7.300 A @ 460.0 V
Design Code	A
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	90.2 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK

Part Detail

Revision	AB
Type	AC
Mech. spec.	07K370
Base	
Status	PRD/A
Elec. spec.	07WGX823
Layout	07LYK370
Eff. date	10-01-2025
CD Diagram	CD0005
Poles	06
Leads	9#14
Proprietary	False
Created date	07-13-2007

Front Face Code	Standard
Front Shaft Indicator	None
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	7.3 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	K
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	1800 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0748M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	21.36 IN
Power Factor	72
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	1.375 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1160 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.	VECP3768T								
SPEC.	07K370X823G1								
HP	5 TE								
VOLTS	230/460								
AMP	14.6/7.3								
RPM	1160								
FRAME	215TC	HZ		60		PH	3		
SER.F.	1.15	CODE	K	DES	A	CL	F		
RATING	40C AMB-CONT								
SN									
DE	6307	ODE		6307					
NEMA-NOM-EFF	90.2	PF		72					
G.MIN.EFF	88.5	CC	010A						
T. CODE	T3C	T=	160						

NP3260			
SPEC.	07K370X823G1		
D.E. BRG.	35BC03XP30X		
O.D.E. BRG.	35BC03XP30X		
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	2	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 # 47060

Typical performance - not guaranteed values

Winding: 07WGX823-R030			Type: 0748M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		5	Full Load Torque		22.8 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		14.6/7.3	Breakdown Torque		77.4 LB-FT		
R.P.M.		1160	Pull-up Torque		46.7 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		56.1 LB-FT	
NEMA Design Code		A	KVA Code	K	Starting Current		51.9 A
Service Factor (S.F.)		1.15	No-load Current		3.7 A		
NEMA Nom. Eff.		90.2	Power Factor	72	Line-line Res. @ 25°C		1.58 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		50°C
S.F. Amps					Temp. Rise @ S.F. Load		62°C
					Rotor inertia		1.19 LB-FT2

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	34	54	65	72	75	76	74
Efficiency	86.2	90.3	91	90.5	89.3	87.7	89.8
Speed	1190	1181	1173	1163	1151	1138	1156
Line amperes	4.01	4.79	5.88	7.29	8.77	10.44	8.18

ABB Motors and Mechanical Inc.

WINDING # 07WGX823

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1160 RPM 460 V 0748M

TORQUES (LB-FT): PO=77.4 PU=46.7 LR=56.1 LRA=51.9





