

ABB BALDOR RELIANCE III

Customer information packet

ECP3771T

10HP, 3500RPM, 3PH, 60HZ, 215T, 0742M, TEFC, F1

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	215T
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	10.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 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	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	6
Current @ Voltage	24.500 A @ 208.0 V 22.000 A @ 230.0 V 11.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	92.4 %
Electrically Isolated Bearing	Not Electrically Isolated

Part Detail

Revision	X
Type	AC
Mech. spec.	07K374
Base	
Status	PRD/A
Elec. spec.	07WGY012
Layout	07LYK374
Eff. date	06-25-2024
CD Diagram	CD0005
Poles	02
Leads	9#14
Proprietary	False
Created date	11-29-2011

Enclosure Modification	Severe Duty Features
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	11.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Max Speed	5400 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0742M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	19.50 IN
Power Factor	90
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	1.375 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	3500 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.	ECP3771T								
SPEC.	07K374Y012G1								
HP	10 TE								
VOLTS	230/460								
AMP	22/11								
RPM	3500								
FRAME	215T	HZ		60		PH	3		
SER.F.	1.15	CODE	H	DES	B	CL	F		
RATING	40C AMB-CONT								
SN									
DE	6307	ODE		6307					
NEMA-NOM-EFF	92.4	PF		90					
G.MIN.EFF	91.0	CC	010A						
T. CODE	T3C	T=	160						

NP3260			
SPEC.	07K374Y012G1		
D.E. BRG.	35BC03XP30X		
O.D.E. BRG.	35BC03XP30X		
GREASE	POLYREX EM		
RPM MAX	5400	MAX. KVAR	N/A
BLANK			
INV.TYPE	PWM		
T=	160		
C HP FR	60	C HP TO	90
CT HZ FROM	6	CT HZ TO	60
VT HZ FROM	3	VT HZ TO	60
HTR-VOLTS		HTR-AMPS	
HTR-WATTS		MAX. SPACE HEATER TEMP.	

AC Induction Motor Performance Data

Record # 47063

Typical performance - not guaranteed values

Winding: 07WGY012-R046			Type: 0742M		Enclosure: TEFC			
Nameplate Data			460 V, 60 Hz: High Voltage Connection					
Rated Output (HP)		10	Full Load Torque		14.9 LB-FT			
Volts		230/460	Start Configuration		direct on line			
Full Load Amps		22/11	Breakdown Torque		70.8 LB-FT			
R.P.M.		3500	Pull-up Torque		24.2 LB-FT			
Hz	60	Phase	3	Locked-rotor Torque		32.6 LB-FT		
NEMA Design Code		B	KVA Code	H	Starting Current		88.5 A	
Service Factor (S.F.)		1.15	No-load Current		3.61 A			
NEMA Nom. Eff.		92.4	Power Factor		90	Line-line Res. @ 25°C		0.776 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		40°C	
S.F. Amps			Temp. Rise @ S.F. Load		51°C			
			Rotor inertia		0.383 LB-FT2			

Load Characteristics 460 V, 60 Hz, 10 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	58	79	88	90	92	91	91
Efficiency	90.1	93	93.2	92.5	91.4	90	91.8
Speed	3578.4	3554.5	3528.7	3503.4	3473.7	3440.8	3486
Line amperes	4.43	6.32	8.64	11.1	13.9	17.1	12.8

ABB Motors and Mechanical Inc.

WINDING # 07WGY012

Typical performance - not guaranteed values.

10 HP 3 PH 60 HZ 3500 RPM 460 V 0742M

TORQUES (LB-FT): PO=70.8 PU=24.2 LR=32.6 LRA=88.5



