



Customer information packet

ECTM3704T-G-AO

3 AIR OVERHP, 1160RPM, 3PH, 60HZ, 213T, 3738M

Class - None

Division - Not Applicable

Specifications

Enclosure	TEAO
Frame	213T
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	3.000 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
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	9.600 A @ 208.0 V 9.200 A @ 230.0 V 4.600 A @ 460.0 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
Front Shaft Indicator	None

Part detail

Revision	D
Type	AC
Mech. spec.	37T571
Base	
Status	PRD/A
Elec. spec.	37WGS519
Layout	37LYT571
Eff. date	06-20-2024
CD Diagram	CD0005
Poles	06
Leads	9#14
Proprietary	False
Created date	04-01-2022

Heater Indicator	Heater Included, 120 V
High Voltage Full Load Amps	4.6 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	L
Lifting Lugs	Vertical Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3738M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	20.18 IN
Power Factor	68
Product Family	Chemical Process Features
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.375 IN
Shaft Ground Indicator	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

NP2178									
CAT.NO.	ECTM3704T-G-AO								
SPEC.	37T571S519G1								
HP	3 AIR OVER								
VOLTS	230/460								
AMP	9.2/4.6								
RPM	1160								
FRAME	213T		HZ	60		PH	3		
SER.F.	1.15		CODE	L	DES	B	CL	F	
NEMA-NOM-EFF	89.5		PF	68					
RATING	40C AMB-CONT								
CC									
DE	6307		ODE	6206					
ENCL	TEAO		SN						
	INV DUT 20:1 VT								

AC Induction Motor Performance Data

Record # 92595

Typical performance - not guaranteed values

Winding: 37WGS519-R060			Type: 3738M		Enclosure: TEAO		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		3	Full Load Torque		13.4 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		9.2/4.6	Breakdown Torque		50.4 LB-FT		
R.P.M.		1160	Pull-up Torque		31.8 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		33.9 LB-FT	
NEMA Design Code		B	KVA Code	L	Starting Current		34 A
Service Factor (S.F.)		1.15		No-load Current		2.56 A	
NEMA Nom. Eff.		89.5	Power Factor	68	Line-line Res. @ 25°C		2.67 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		38°C	
S.F. Amps		10.2/5.1		Temp. Rise @ S.F. Load		45°C	
				Locked-rotor Power Factor		22.9	
				Rotor inertia		0.945 lb-ft²	

Load Characteristics 460 V, 60 Hz, 3 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	30	50	62	69	73	75	71
Efficiency	82	88.5	89.4	89.7	89	87.5	89.3
Speed	1193	1186	1178	1170	1160	1149	1164
Line amperes	2.74	3.19	3.82	4.53	5.44	6.41	5.08

ABB Motors and Mechanical Inc.

WINDING # 37WGS519

Typical performance - not guaranteed values.

3 HP 3 PH 60 HZ 1160 RPM 460 V 3738M

TORQUES (LB-FT): PO=50.4 PU=31.8 LR=33.9 LRA=34





