

ABB BALDOR RELIANCE III

Customer information packet

ECTM3581T-G

1HP, 1760RPM, 3PH, 60HZ, 143T, 0520M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	143T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	1.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 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	3.260 A @ 230.0 V 3.200 A @ 208.0 V 1.630 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	85.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	Drilled And Tapped Hole

Part Detail

Revision	C
Type	AC
Mech. spec.	05G440
Base	
Status	PRD/A
Elec. spec.	05WGX508
Layout	05LYG440
Eff. date	06-08-2023
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	04-18-2022

Heater Indicator	Heater Included, 115 V
High Voltage Full Load Amps	1.6 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	N
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0520M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	12.82 IN
Power Factor	67
Product Family	Chemical Processing (Not DC)
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	Standard
Pulley Shaft Indicator	Tapped & Key
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1760 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

NP1260											
CAT.NO.	ECTM3581T-G										
SPEC.	05G440X508G1										
HP	1										
VOLTS	230/460										
AMP	3.26/1.63										
RPM	1760										
FRAME	143T		HZ	60		PH		3			
SER.F.	1.15		CODE	N	DES	B		CL		F	
NEMA-NOM-EFF	85.5		PF	67							
RATING	40C AMB-CONT										
CC											
DE	6205		ODE		6203						
ENCL	TEFC		SN								
	INV DUTY 20:1 VT										

AC Induction Motor Performance Data

Record # 82131

Typical performance - not guaranteed values

Winding: 05WGX508-R001			Type: 0520M		Enclosure: TEFC			
Nameplate Data			460 V, 60 Hz: High Voltage Connection					
Rated Output (HP)		1	Full Load Torque		2.979 LB-FT			
Volts		230/460	Start Configuration		direct on line			
Full Load Amps		3.2-3.2/1.6	Breakdown Torque		13.9 LB-FT			
R.P.M.		1760	Pull-up Torque		8 LB-FT			
Hz	60	Phase	3	Locked-rotor Torque		9.18 LB-FT		
NEMA Design Code		B	KVA Code	N	Starting Current		14.4 A	
Service Factor (S.F.)		1.15	No-load Current		1.11 A			
NEMA Nom. Eff.		0	Power Factor		0	Line-line Res. @ 25°C		16.215 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		24°C	
S.F. Amps					Temp. Rise @ S.F. Load		28°C	
					Locked-rotor Power Factor		62	

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	29	46	59	68	74	79	72
Efficiency	71.2	81.4	84.6	85.5	85.4	84.7	85.4
Speed	1791.4	1784.2	1776.7	1768.6	1760	1750.7	1763
Line amperes	1.14	1.25	1.41	1.61	1.84	2.11	1.75

ABB Motors and Mechanical Inc.

WINDING # 05WGX508

Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 1760 RPM 460 V 0520M

TORQUES (LB-FT): PO=13.9 PU=8 LR=9.18 LRA=14.4





