

ABB BALDOR RELIANCE III

Customer information packet

ECTM3584T-G

1.5HP, 1770RPM, 3PH, 60HZ, 145T, 0524M, TEFC, F

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	145T
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	1.500 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	CURUSEEV NEMA PREMIUM
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	2.300 A @ 460.0 V 4.600 A @ 230.0 V 4.640 A @ 208.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	86.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	Drilled And Tapped Hole
Heater Indicator	Heater Included, 115 V
High Voltage Full Load Amps	2.3 a

Part Detail

Revision	-
Type	AC
Mech. spec.	05G440
Base	
Status	PRD/A
Elec. spec.	05WGX510
Layout	05LYG440
Eff. date	06-22-2023
CD Diagram	CD0005
Poles	04
Leads	9#18 Y
Proprietary	False
Created date	02-23-2023

Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	M
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	0524M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	12.82 IN
Power Factor	72
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	1770 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.	ECTM3584T-G								
SPEC.	05G440X510G1								
HP	1.5								
VOLTS	230/460								
AMP	4.6/2.3								
RPM	1770								
FRAME	145T		HZ	60		PH		3	
SER.F.	1.15		CODE	M	DES	B		CL	F
NEMA-NOM-EFF	86.5		PF	72					
RATING	40C AMB-CONT								
CC									
DE	6205		ODE		6203				
ENCL	TEFC	SN							
	INV DUTY 20:1 VT								

AC Induction Motor Performance Data

Record # 95408

Typical performance - not guaranteed values

Winding: 05WGX510-R001			Type: 0524M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		1.5	Full Load Torque		4.48 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		4.6/2.3	Breakdown Torque		18.8 LB-FT		
R.P.M.		1770	Pull-up Torque		9.6 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		12.6 LB-FT	
NEMA Design Code		B	KVA Code	M	Starting Current		19.7 A
Service Factor (S.F.)		1.15	No-load Current		1.51 A		
NEMA Nom. Eff.		86.5	Power Factor	72	Line-line Res. @ 25°C		11.8 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		48°C
S.F. Amps		5/2.5	Temp. Rise @ S.F. Load		57°C		
			Locked-rotor Power Factor		58.4		
			Rotor inertia		0.173 lb-ft²		

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	31	49	63	72	78	81	76
Efficiency	75.1	83.5	86	86.5	85.8	84.8	86.1
Speed	1792	1785	1777	1769	1760	1750	1764
Line amperes	1.56	1.72	1.97	2.28	2.65	3.06	2.5

ABB Motors and Mechanical Inc.

WINDING # 05WGX510

Typical performance - not guaranteed values.

1.5 HP 3 PH 60 HZ 1770 RPM 460 V 0524M

TORQUES (LB-FT): PO=18.8 PU=9.6 LR=12.6 LRA=19.7





