



Customer information packet

ECP3580T

1HP, 3450RPM, 3PH, 60HZ, 143T, 0516M, TEFC, F1

Class - CLI GP A,B,C,D

Division - Division II

Specifications

Enclosure	TEFC
Frame	143T
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	1.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV NEMA PREMIUM NEMA_PREMIUM UR CCSA US
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	2.800 A @ 230.0 V 1.400 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	84.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Enclosure Modification	Severe Duty Features

Part detail

Revision	AA
Type	AC
Mech. spec.	05F008
Base	
Status	PRD/A
Elec. spec.	05WGW546
Layout	05LYF008
Eff. date	07-17-2023
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	02-24-2009

Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Haz Area Temp Code	T4
Heater Indicator	No Heater
High Voltage Full Load Amps	1.4 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	L
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 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0516M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	12.88 IN
Power Factor	82
Product Family	Super-E Chemical Processing
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	3450 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

NP3258									
CAT.NO.	ECP3580T								
SPEC.	05F008W546G1								
HP	1 TE								
VOLTS	230/460								
AMP	2.8/1.4								
RPM	3450								
FRAME	143T	HZ	60		PH	3			
SER.F.	1.15	CODE	L	DES	B	CL	F		
RATING	40C AMB-CONT								
SN									
DE	6205	ODE	6205						
NEMA-NOM-EFF	84	PF	82						
G.MIN.EFF	81.5	CC	010A						
T. CODE	T4	T=	135						

NP3261			
SPEC.	05F008W546G1		
D.E. BRG.	25BC02XP30X		
O.D.E. BRG.	25BC02XP30X		
GREASE	POLYREX EM		
RPM MAX	5400	MAX. KVAR	0.2
BLANK			
INV.TYPE	PWM		
T=	135		
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 # 47147

Typical performance - not guaranteed values

Winding: 05WGW546-R015			Type: 0516M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		1	Full Load Torque		1.5 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		2.8/1.4	Breakdown Torque		6.5 LB-FT		
R.P.M.		3450	Pull-up Torque		4.8 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		5.7 LB-FT	
NEMA Design Code		B	KVA Code	L	Starting Current		12.1 A
Service Factor (S.F.)		1.15		No-load Current		0.68 A	
NEMA Nom. Eff.		84	Power Factor	82	Line-line Res. @ 25°C		15.3 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		33°C	
S.F. Amps				Temp. Rise @ S.F. Load		38°C	
				Rotor inertia		0.0442 LB-FT2	

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	45	65	77	83	87	87	85
Efficiency	70.4	80.6	84	84.6	84.7	83.7	84.7
Speed	3567	3539	3510	3479	3446	3410	3459
Line amperes	0.75	0.9	1.09	1.33	1.56	1.88	1.47

ABB Motors and Mechanical Inc.

WINDING # 05WGW546

Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 3450 RPM 460 V 0516M

TORQUES (LB-FT): PO=6.5 PU=4.8 LR=5.7 LRA=12.1





