

ABB BALDOR RELIANCE III

Customer information packet

XM18542T-CI

5//3HP, 1750//1450RPM, 3PH, 60//50HZ, 184T, 0

Class - CLI GP D; CLII GP F,G

Division - Division I

Specifications

Enclosure	XPFC
Frame	184T
Frame Material	Iron
Frequency	50.00 Hz 60.00 Hz
Haz Area Class and Group	CLI GP D; CLII GP F,G
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	5.000 HP @ 60 HZ 3.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	190.0 V @ 50 HZ 230.0 V @ 60 HZ 380.0 V @ 50 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA UL
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	6.600 A @ 460.0 V 5.100 A @ 380.0 V 14.000 A @ 208.0 V 13.200 A @ 230.0 V 10.200 A @ 190.0 V
Design Code	B
Drip Cover	No Drip Cover

Part Detail

Revision	B
Type	AC
Mech. spec.	06J014
Base	
Status	PRD/A
Elec. spec.	06WGY545
Layout	06LYJ014
Eff. date	01-30-2025
CD Diagram	CD0005
Poles	04
Leads	9#16
Proprietary	False
Created date	03-20-2024

Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	5.1 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	J
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	9 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	X0642M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	17.61 IN
Power Factor	79
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
Service Factor	1.00
Shaft Diameter	1.125 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1450 rpm

	1750 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP0887XPSL												
NO.							CC	010A				
S/N							TEMP CODE		T3C			
SPEC.	06J014Y545G1						INV.TYPE		PWM			
CAT.NO.	XM18542T-CI						C HP FR		60	C HP TO		90
HP	5//3						CT HZ FROM		6	CT HZ TO		60
VOLTS	230/460//190/380						VT HZ FROM		6	VT HZ TO		60
AMPS	13.2/6.6//10.2/5.1						MAG CUR		6/3			
RPM	1750//1450						MX RPM		2700			
HZ	60//50		PH	3	CL	F	NOM.EFF.		89.5			
SER.F.	1.00		DES	B	SL HZ		1.8	WK2		0.39		
FRAME	184T		RATING		40C AMB-CONT							
	NEMA MG-1 PART 5, IP54											
	1.15 SF ON SINE WAVE											

AC Induction Motor Performance Data

Record # 72834

Typical performance - not guaranteed values

Winding: 06WGY545-R005			Type: 0642M		Enclosure: XPFC			
Nameplate Data				460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		5//3		Full Load Torque		15 LB-FT		
Volts		230/460//190/380		Start Configuration		direct on line		
Full Load Amps		13.2/6.6//10.2/5.1		Breakdown Torque		53.9 LB-FT		
R.P.M.		1750//1450		Pull-up Torque		22.4 LB-FT		
Hz		60//50	Phase	3	Locked-rotor Torque		31.8 LB-FT	
NEMA Design Code		B		KVA Code	J	Starting Current		46.6 A
Service Factor (S.F.)		1		No-load Current		3.02 A		
NEMA Nom. Eff.		89.5	Power Factor		79	Line-line Res. @ 25°C		2.63 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		53°C		
				Locked-rotor Power Factor		40.5		
				Rotor inertia		0.391 LB-FT ²		

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	41	63	75	81	84	85
Efficiency	85.1	89.7	90.3	89.8	88.4	86.8
Speed	1789	1777	1765	1752	1737	1721
Line amperes	3.35	4.14	5.21	6.45	7.91	9.47

ABB Motors and Mechanical Inc.

WINDING # 06WGY545

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1752 RPM 460 V 0642M

TORQUES (LB-FT): PO=53.9 PU=22.4 LR=31.8 LRA=46.6





