

ABB BALDOR RELIANCE III

Customer information packet

XM141522T

20M 2P XPFC HOR 143T T'STATS INVERTER

Class - CLI GP D; CLII GP F,G

Division - Division I

Specifications

Enclosure	XPFC
Frame	143T
Frame Material	Steel
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	1.000 HP @ 50 HZ 1.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 380.0 V @ 50 HZ 230.0 V @ 60 HZ 190.0 V @ 50 HZ
Agency Approvals	CSA EEV 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	1.7
Current @ Voltage	3.800 A @ 230.0 V 3.400 A @ 190.0 V 1.900 A @ 460.0 V 1.700 A @ 380.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT

Part Detail

Revision	E
Type	AC
Mech. spec.	35Q558
Base	
Status	PRD/A
Elec. spec.	35WGM760
Layout	35LYQ558
Eff. date	04-29-2021
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	12-13-2018

Efficiency @ 100% Load	84.0 %
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	1.7 a
Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	NONE
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Max Speed	5400 rpm
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	X3520M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	14.34 IN
Power Factor	85
Product Family	Hazardous Location Motor
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	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	2900 rpm

	3500 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

NP0887XPSLEV											
NO.						CC	010A				
S/N						TEMP CODE		T3C			
SPEC.	35Q558M760G1					INV.TYPE		PWM			
CAT.NO.	XM141522T					C HP FR		60		C HP TO 90	
HP	1.5//1					CT HZ FROM		1.7		CT HZ TO 60	
VOLTS	230/460//190/380					VT HZ FROM		1.7		VT HZ TO 60	
AMPS	3.8/1.9//3.4/1.7					MAG CUR		1.8/.9			
RPM	3500//2900					MX RPM		5400			
HZ	60//50		PH	3	CL	F	NOM.EFF.		84		
SER.F.	1.00		DES	B	SL HZ		1.7		WK2	0.06	
FRAME	143T		RATING		40C AMB-CONT						
	55C AMB AT 1.00 SF SINEWAVE										
	NEMA MG-1 PART 5, IP54					1.15 SF SINEWAVE					

AC Induction Motor Performance Data

Record # 73829

Typical performance - not guaranteed values

Winding: 35WGM760-R091		Type: 3520M	Enclosure: XPFC
Nameplate Data		460 V, 60 Hz: High Voltage, High Speed Connection	
Rated Output (HP)	1.5//1	Full Load Torque	2.23 LB-FT
Volts	230/460//190/380	Start Configuration	direct on line
Full Load Amps	3.8/1.9//3.4/1.7	Breakdown Torque	9.38 LB-FT
R.P.M.	3500//2900	Pull-up Torque	3.61 LB-FT
Hz	60//50 Phase	Locked-rotor Torque	7.35 LB-FT
NEMA Design Code	B KVA Code	Starting Current	17.9 A
Service Factor (S.F.)	1	No-load Current	0.951 A
NEMA Nom. Eff.	84 Power Factor	Line-line Res. @ 25°C	12.2 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	46°C
		Locked-rotor Power Factor	60.1
		Rotor inertia	0.0553 LB-FT ²

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	50	70	81	87	90	91
Efficiency	61.4	74.1	78.3	80	80.3	79.3
Speed	3569	3545	3519	3491	3459	3425
Line amperes	1.08	1.32	1.63	2	2.41	2.9

ABB Motors and Mechanical Inc.

WINDING # 35WGM760

Typical performance - not guaranteed values.

1.5 HP 3 PH 60 HZ 3491 RPM 460 V 3520M

TORQUES (LB-FT): PO=9.38 PU=3.61 LR=7.35 LRA=17.9





