

ABB BALDOR RELIANCE III

Customer information packet

CTM4104T

30 AIR OVERHP, 1760RPM, 3PH, 60HZ, 286T, 0964

Class - None

Division - Not Applicable

Specifications

Enclosure	TEAO
Frame	286T
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	30.000 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 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	77.400 A @ 208.0 V 72.000 A @ 230.0 V 36.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	92.4 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	R
Type	AC
Mech. spec.	09L879
Base	
Status	PRD/A
Elec. spec.	09WGY208
Layout	09LYL879
Eff. date	11-14-2023
CD Diagram	CD0005
Poles	04
Leads	9#8
Proprietary	False
Created date	08-14-2015

High Voltage Full Load Amps	36.0 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	H
Lifting Lugs	Vertical Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0964M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	25.78 IN
Power Factor	84
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	1.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No 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

NP1258									
CAT.NO.	CTM4104T								
SPEC.	09L879Y208H2								
HP	30 AIR OVER								
VOLTS	230/460								
AMP	72/36								
RPM	1760								
FRAME	286T	HZ		60		PH		3	
SER.F.	1.15	CODE		H	DES		B	CL	F
NEMA-NOM-EFF	92.4	PF		84					
RATING	40C AMB-CONT								
CC									
DE	6311	ODE		6208					
ENCL	TEAO	SN							
	1800 FPM @ 250 CFM								

Accessories

Part number	Description	Multiplier
09-1310	C FACE KIT	A8

AC Induction Motor Performance Data

Record # 52121

Typical performance - not guaranteed values

Winding: 09WGY208-R014			Type: 0964M		Enclosure: TEAO		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		30 AIR OVER	Full Load Torque		88.9 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		72/36	Breakdown Torque		270 LB-FT		
R.P.M.		1760	Pull-up Torque		117 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		192 LB-FT	
NEMA Design Code		B	KVA Code	H	Starting Current		259 A
Service Factor (S.F.)		1.15		No-load Current		12.7 A	
NEMA Nom. Eff.		92.4	Power Factor	84	Line-line Res. @ 25°C		0.257 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		68°C	
S.F. Amps				Temp. Rise @ S.F. Load		84°C	
				Locked-rotor Power Factor		30	
				Rotor inertia		2.8 LB-FT2	

Load Characteristics 460 V, 60 Hz, 30 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	51	73	81	84	86	86	85
Efficiency	88.9	92.7	93.2	92.8	92	90.9	92.3
Speed	1791	1782	1772	1761	1749	1736	1754
Line amperes	15	20.7	27.5	35.8	44.1	53.4	40.78

ABB Motors and Mechanical Inc.

WINDING # 09WGY208

Typical performance - not guaranteed values.

30 HP 3 PH 60 HZ 1760 RPM 460 V 0964M

TORQUES (LB-FT): PO=270 PU=117 LR=192 LRA=259





