

ABB BALDOR RELIANCE III

Customer information packet

EM2504T

5HP, 885RPM, 3PH, 60HZ, 254T, 3952M, OPSB, N

Class - None

Division - Not Applicable

Specifications

Enclosure	OPSB
Frame	254T
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	5.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	900 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CURUSEEV NEMA PREMIUM NEMA PREMIUM (OLD LOGO)
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	17.200 A @ 208.0 V 8.000 A @ 460.0 V 16.000 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	88.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	C
Type	AC
Mech. spec.	39K57
Base	
Status	PRD/A
Elec. spec.	39WGY445
Layout	39LYK057
Eff. date	12-12-2025
CD Diagram	CD0005
Poles	08
Leads	9#12
Proprietary	False
Created date	11-01-2023

High Voltage Full Load Amps	8.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3952M
Mounting Arrangement	F1
Number of Poles	8
Overall Length	23.19 IN
Power Factor	66
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	885 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

NP1259L									
CAT.NO.	EM2504T								
SPEC.	39K057Y445								
HP	5								
VOLTS	230/460								
AMP	16/8								
RPM	885								
FRAME	254T		HZ	60			PH	3	
SER.F.	1.15	CODE	H	DES	B	CL	F		
NEMA-NOM-EFF	88.5	PF	66						
RATING	40C AMB-CONT								
CC	010A								
DE	6309		ODE	6208					
ENCL	OPSB	SN							

Parts List

Part number	Description	Quantity
SA419449	SA 39K057Y445	1.000 ea
RA411382	RA 39K057Y445	1.000 ea
HA6361A01	LIFTING LUG FOR 37, 39 & 40 FRAME ZINC	2.000 ea
HA6016	ADAPTER, CAST CONDUIT BOX	1.000 ea
09CB3003	CB W/1.75" DIA LD HL - 37, 39, 307 & 309	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
59XW2520G07	.25-20X.44,HEX SER WSHR,TAPTITE 2,GREEN	1.000 ea
39EP3200A01SP	FR/PU ENDPLATE, MACH	1.000 ea
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 ea
39EP3201A13	PU ENDPLATE, MACH	1.000 ea
XY3816A12	3/8-16 FINISHED NUT W/SERRATIONS	8.000 ea
09CB3501SP	CONDUIT BOX LID FOR 09CB3001 & 09CB3002	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 ea
HW2501G25	KEY, 3/8 SQ X 2.875	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.030 lb
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.050 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
39AD2002A01	BAFFLE PLATE 39 OPEN, SLOTTED BAND MTRS	1.000 ea
39AD2002A01	BAFFLE PLATE 39 OPEN, SLOTTED BAND MTRS	1.000 ea
HA3154A03	STUD, 3/8-16 X 17.75	4.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP1259L	ALUM SUPER-E UL CC NEMA PREMIUM A60	1.000 ea
39PA1000	PACKAGING GROUP 39 PRINT	1.000 ea

MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LD7020D09	LEAD SET, 12AWG, 9 LEAD, 20" LONG LEADS	1.000 ea

AC Induction Motor Performance Data

Record # 102112

Typical performance - not guaranteed values

Winding: 39WGY445-R001			Type: 3952M		Enclosure: OPSB		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		5	Full Load Torque		29.77 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		16/8	Breakdown Torque		72.7 LB-FT		
R.P.M.		885	Pull-up Torque		39.5 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		58.7 LB-FT	
NEMA Design Code		B	KVA Code	H	Starting Current		42.6 A
Service Factor (S.F.)		1.15	No-load Current		4.45 A		
NEMA Nom. Eff.		88.5	Power Factor	66	Line-line Res. @ 25°C		1.89 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		23°C
S.F. Amps					Temp. Rise @ S.F. Load		29°C
					Locked-rotor Power Factor		27.1
					Rotor inertia		4.19 lb-ft²

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	30	48	59	66	69	71	68
Efficiency	82.6	88	89.1	88.7	87.7	86	88.1
Speed	897	892	889	884	879	873	881
Line amperes	4.79	5.57	6.65	8.02	9.62	11.55	8.98

ABB Motors and Mechanical Inc.

WINDING # 39WGY445

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 885 RPM 460 V 3952M

TORQUES (LB-FT) : PO=72.7 PU=39.5 LR=58.7 LRA=42.6



