

ABB BALDOR RELIANCE III

Customer information packet CEM2524T

15HP, 1180RPM, 3PH, 60HZ, 284TC, OPSB, F1

Specifications

Enclosure	OPSB
Frame	284TC
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	15.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 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	20.500 A @ 460.0 V 41.000 A @ 230.0 V 42.000 A @ 208.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	20.5 a
Insulation Class	F
Inverter Code	Inverter Ready

Part Detail

Revision	D
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	40WGX775
Layout	40LYD102
Eff. date	01-31-2025
CD Diagram	CD0005
Poles	06
Leads	9#10
Proprietary	False
Created date	02-20-2020

IP Rating	NONE
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	4038M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	23.81 IN
Power Factor	75
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1180 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

NP2138L																	
CAT.NO.	CEM2524T				P/N					ENCLOSURE		OPSB					
SPEC.	40-0000785			CC	010A		FRAME		284TC		S/N						
HP	15				CLASS		F		HZ		60						
RPM	1180				PH	3		DES		B							
VOLT	230/460								KVA-CODE		G		ODE BRG		6309	DE BRG	6311
AMP	41/20.5																
RATING	40C AMB-CONT						GREASE		POLYREX EM								
NEMA-NOM-EFF	91.7	PF	75	SER.F.		1.15											
HTR-VOLTS			HTR-AMPS														

Parts List

Part number	Description	Quantity
SA379249	SA 40-0000785	1.000 ea
RA369235	RA 40-0000785	1.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
NP2138L	ALUM SUPER-E UL PREM CC (300	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
HA6361A01	LIFTING LUG FOR 37, 39 & 40 FRAME ZINC	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.130 lb
HA3154A03	STUD, 3/8-16 X 17.75	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	8.000 ea
XY3816A12	3/8-16 FINISHED NUT W/SERRATIONS	8.000 ea
40EP3200A02	STD FREP OPEN 309 BRG	1.000 ea
HW5100A11	W3917-042 WVY WSHR (WB)	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
40EP1400A13	PU ENDPLATE, CFACE MACH W/O BAFFEL	1.000 ea
10XN3118K40	5/16-18 X 2.25" HEX HD, GRADE 5	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 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
10CB3000SP	KOBX, CAST W/2.00 LEAD HOLE	1.000 ea
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	2.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	2.000 ea
WD1000B25	GND LUG, BURNDY L125HP OR T&B L125HP-BB	1.000 ea
19XW3118G08	.31-18X.50,HEX WSHR HD,TAPTITE 2,GREEN	1.000 ea
HA6017	CAST ADAPTER, 40,42 KOBX	1.000 ea
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	2.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	2.000 ea
10CB3500SP	CONDUIT BOX LID, CAST	1.000 ea

51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 ea
40AD2002B01	LEXAN BAFFLE 40 FR OPEN	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.125 ga
40AD2002B01	LEXAN BAFFLE 40 FR OPEN	1.000 ea
40PA1000	PACKAGING GROUP	1.000 ea
HW2501H28	KEY, 1/2 SQ X 3.250	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea

AC Induction Motor Performance Data

Record # 30818

Typical performance - not guaranteed values

Winding: 40WGX775-R001			Type: 4038M		Enclosure: OPSB		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		15	Full Load Torque		66.8 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		41/20.5	Breakdown Torque		185 LB-FT		
R.P.M.		1180	Pull-up Torque		87.7 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		105 LB-FT	
NEMA Design Code		B	KVA Code	G	Starting Current		116 A
Service Factor (S.F.)		1.15	No-load Current		10.1 A		
NEMA Nom. Eff.		91.7	Power Factor	75	Line-line Res. @ 25°C		0.67748 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		26°C
S.F. Amps					Temp. Rise @ S.F. Load		31°C
					Locked-rotor Power Factor		34
					Rotor inertia		4.65 LB-FT2

Load Characteristics 460 V, 60 Hz, 15 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	37	58	69	75	78	79	77
Efficiency	85.5	90.7	91.8	91.8	91.2	89.9	91.4
Speed	1195.6	1191.7	1187.6	1182.8	1177.5	1169.8	1180
Line amperes	11.1	13.4	16.6	20.4	24.8	30.7	23

ABB Motors and Mechanical Inc.

WINDING # 40WGX775

Typical performance - not guaranteed values.

15 HP 3 PH 60 HZ 1180 RPM 460 V 4038M

TORQUES (LB-FT): PO=185 PU=87.7 LR=105 LRA=116





