

ABB BALDOR RELIANCE III

Customer information packet

CEM3120T

1.5HP, 3490RPM, 3PH, 60HZ, 143TC, 3518M, OPSB

Class - None

Division - Not Applicable

Specifications

Enclosure	OPSB
Frame	143TC
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	1.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM NEMA PREMIUM (OLD LOGO) CURUSEEV
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	2.000 A @ 460.0 V 4.000 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	84.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Heater Indicator	No Heater
High Voltage Full Load Amps	2.0 a
Insulation Class	F

Part Detail

Revision	E
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	35WGM761
Layout	35LYBB102
Eff. date	01-02-2026
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	03-09-2020

Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3518M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	17.07 IN
Power Factor	83
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	3490 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.	CEM3120T										
SPEC.	35-0000-0671										
HP	1.5										
VOLTS	230/460										
AMP	4/2										
RPM	3490										
FRAME	143TC		HZ	60				PH	3		
SER.F.	1.15	CODE	L	DES	B	CL	F				
NEMA-NOM-EFF	84	PF	83								
RATING	40C AMB-CONT										
CC	010A										
DE	6205		ODE	6203							
ENCL	OPSB	SN									

Parts List

Part number	Description	Quantity
SA379818	SA 35-0000-0671	1.000 ea
RA369844	RA 35-0000-0671	1.000 ea
NP1259L	ALUM SUPER-E UL CC NEMA PREMIUM A60	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
HA3100A14	THRUBOLT 10-32 X 7.875	4.000 ea
35EP3209A00	MASTER ODE,203 BRG,GRSR	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
35EP3402B00	MASTER DE,205 BRG,OPEN,W/GREASER	1.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
35CB3009	35 CB W/1.09 DIA. LEAD HOLE @ 6:	1.000 ea
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
35CB4521	35 LIPPED CB LID (GALV & PHOSPH)	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35AD2005B01	BAFFLE PLATE,MOD 35-SLTD BAND MTR TDR	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.022 ga
35AD2005B01	BAFFLE PLATE,MOD 35-SLTD BAND MTR TDR	1.000 ea
36PA1000	PKG GRP, PRINT PK1016A08	1.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea
LC0005	CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 53126

Typical performance - not guaranteed values

Winding: 35WGM761-R007			Type: 3518M		Enclosure: OPSB	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		1.5	Full Load Torque		2.26 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		4/2	Breakdown Torque		9.32 LB-FT	
R.P.M.		3490	Pull-up Torque		4.18 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque		6.79 LB-FT	
NEMA Design Code		B	KVA Code		L	
Starting Current		17.2 A	No-load Current		1.05 A	
Service Factor (S.F.)		1.15	Line-line Res. @ 25°C		12.7 Ω	
NEMA Nom. Eff.		84	Power Factor		83	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		24°C	
S.F. Amps			Temp. Rise @ S.F. Load		28°C	
			Locked-rotor Power Factor		64	
			Rotor inertia		0.0493 lb-ft²	

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	43	64	77	83	87	89	85
Efficiency	73.9	82.4	85.1	85.1	84.3	83.1	84.6
Speed	3574	3550	3524	3496	3465	3430	3477
Line amperes	1.14	1.35	1.63	1.99	2.41	2.84	2.24

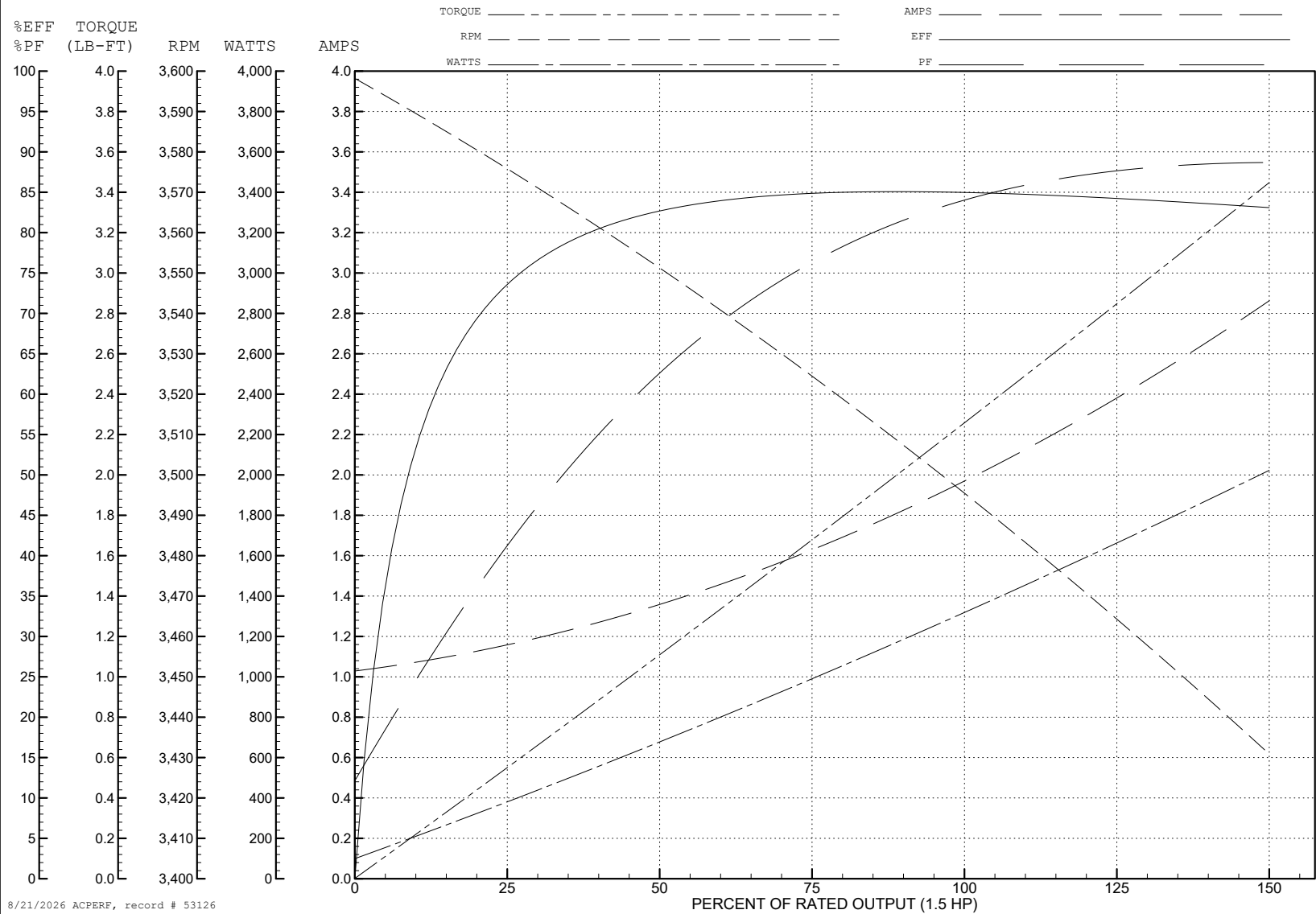
ABB Motors and Mechanical Inc.

WINDING # 35WGM761

Typical performance - not guaranteed values.

1.5 HP 3 PH 60 HZ 3490 RPM 460 V 3518M

TORQUES (LB-FT): PO=9.32 PU=4.18 LR=6.79 LRA=17.2





CD0005



- NOTES:
- 1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
 - 2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
 - 3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
 - 4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
S00000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005