

ABB BALDOR RELIANCE III

Customer information packet

EM2511T

10HP, 1180RPM, 3PH, 60HZ, 256T, 3954M, OPSB, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	OPSB
Frame	256T
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	10.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 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	28.600 A @ 230.0 V 30.000 A @ 208.0 V 14.300 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	AR
Type	AC
Mech. spec.	39K57
Base	
Status	PRD/A
Elec. spec.	39WGW950
Layout	39LYK057
Eff. date	12-12-2025
CD Diagram	CD0180
Poles	06
Leads	9#12
Proprietary	False
Created date	01-01-0001

Heater Indicator	No Heater
High Voltage Full Load Amps	14.3 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3954M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	23.19 IN
Power Factor	71
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
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

NP3554LUA											
CAT.NO.	EM2511T			P/N						ENCL	OPSE
SPEC.	39K057W950	CC	010A	FRAME		256T	SER.NO.				
HP	10		CLASS		F	HZ	60				
RPM	1180		PH	3	DES		A				
VOLTS	230/460			CODE		J	ODE BRG	6208	DE BRG	6309	
AMPS	28.6/14.3										
RATING	40C AMB-CONT		NEMA-NOM-EFF				91.7	GREASE	POLYREX EM		
PF	71	SER.F.	1.15	CT30-60(2:1) VT3-60(20:1)							
USABLE AT	50HZ 10HP 190/380V 33.4/16.7A			SF 1.0							
HTR-VOLTS	HTR-AMPS	MAX. SPACE HEATER TEMP.									

Parts List

Part number	Description	Quantity
SA039734	SA 39K057W950	1.000 ea
RA035653	RA 39K057W950	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
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
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	4.000 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
LC0181	CONNECTION LABEL	1.000 ea
NP3554LUA	SS SUPER-E VPWM INV READY,CURUS-EEV,PREM	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

Accessories

Part number	Description	Multiplier
39-3400	C FACE KIT	A8

AC Induction Motor Performance Data

Record # 13008

Typical performance - not guaranteed values

Winding: 39WGW950-R001		Type: 3954M	Enclosure: OPSB
Nameplate Data		460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	10	Full Load Torque	44.4 LB-FT
Volts	230/460	Start Configuration	direct on line
Full Load Amps	28.6/14.3	Breakdown Torque	132 LB-FT
R.P.M.	1180	Pull-up Torque	53 LB-FT
Hz	60 Phase	Locked-rotor Torque	69.8 LB-FT
NEMA Design Code	A KVA Code	Starting Current	91.8 A
Service Factor (S.F.)	1.15	No-load Current	7.16 A
NEMA Nom. Eff.	91.7 Power Factor	Line-line Res. @ 25°C	0.746 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	22°C
S.F. Amps		Temp. Rise @ S.F. Load	29°C
		Locked-rotor Power Factor	25.9
		Rotor inertia	4.34 lb-ft ²

Load Characteristics 460 V, 60 Hz, 10 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	34	54	65	71	74	75	73
Efficiency	85.7	91	92	92	91.4	90.5	91.6
Speed	1196	1192	1187	1182	1177	1172	1179
Line amperes	8.04	9.52	11.7	14.25	17.29	20.7	16.07

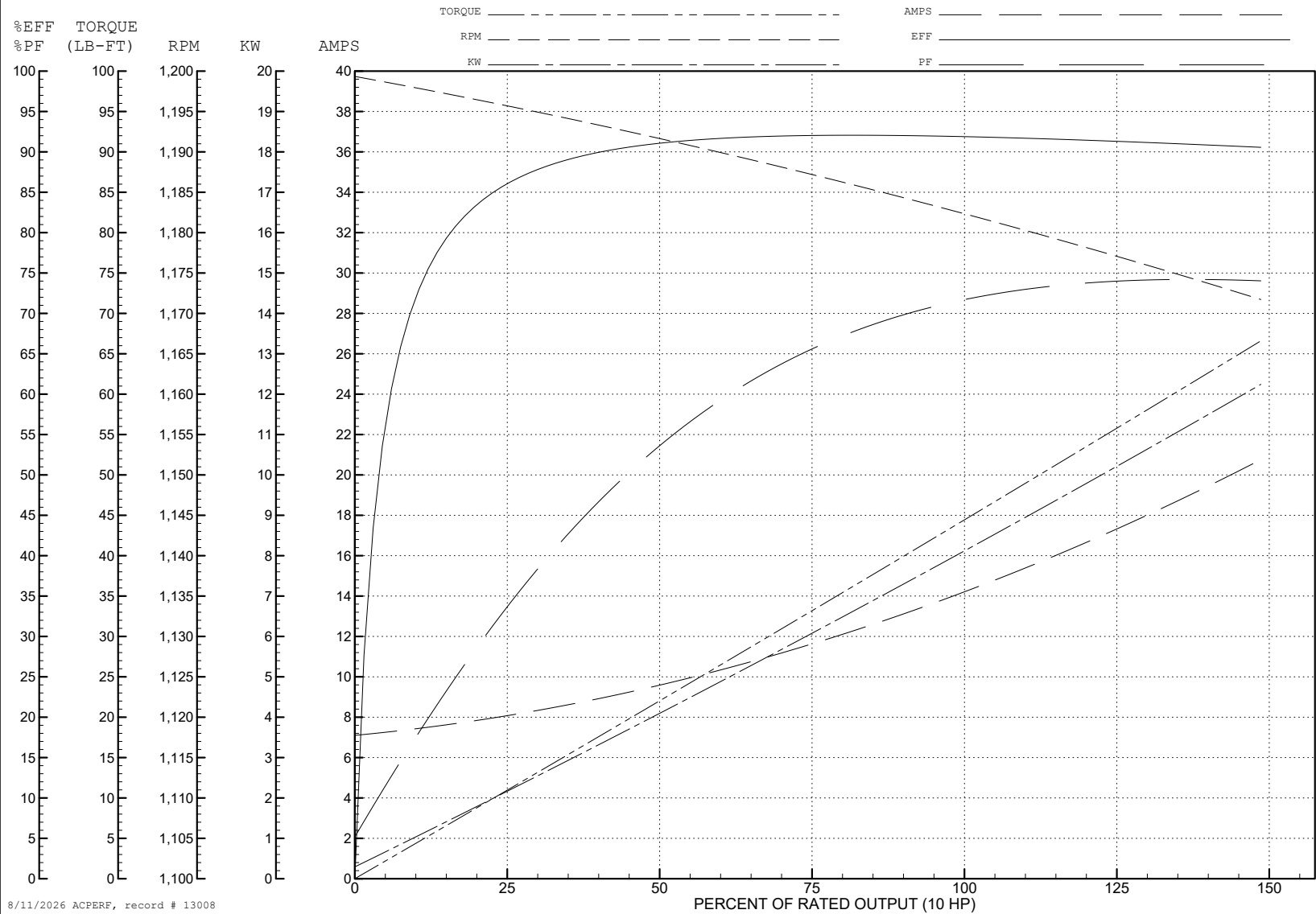
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WINDING # 39WGW950

Typical performance - not guaranteed values.

10 HP 3 PH 60 HZ 1180 RPM 460 V 3954M

TORQUES (LB-FT): PO=132 PU=53 LR=69.8 LRA=91.8



AC Induction Motor Performance Data

Record # 33857

Typical performance - not guaranteed values

Winding: 39WGW950-R001		Type: 3954M	Enclosure: OPSB
Nameplate Data		460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	10	Full Load Torque	44.1 LB-FT
Volts	230/460	Start Configuration	direct on line
Full Load Amps	28.6/14.3	Breakdown Torque	149 LB-FT
R.P.M.	1180	Pull-up Torque	55.5 LB-FT
Hz	60 Phase	Locked-rotor Torque	67.6 LB-FT
NEMA Design Code	A KVA Code	Starting Current	91.6 A
Service Factor (S.F.)	1.15	No-load Current	7.51 A
NEMA Nom. Eff.	91.7 Power Factor	Line-line Res. @ 25°C	0.72568 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	18°C
S.F. Amps		Temp. Rise @ S.F. Load	22°C
		Locked-rotor Power Factor	25.9
		Rotor inertia	4.34 LB-FT ²

Load Characteristics 460 V, 60 Hz, 10 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	34	53	64	70	73	74	72
Efficiency	84.5	90.2	91.8	92.1	91.8	91.1	91.9
Speed	1195.9	1191.9	1187.8	1182.8	1177.7	1171.6	1180
Line amperes	8.2	9.72	11.9	14.4	17.5	20.6	16.3

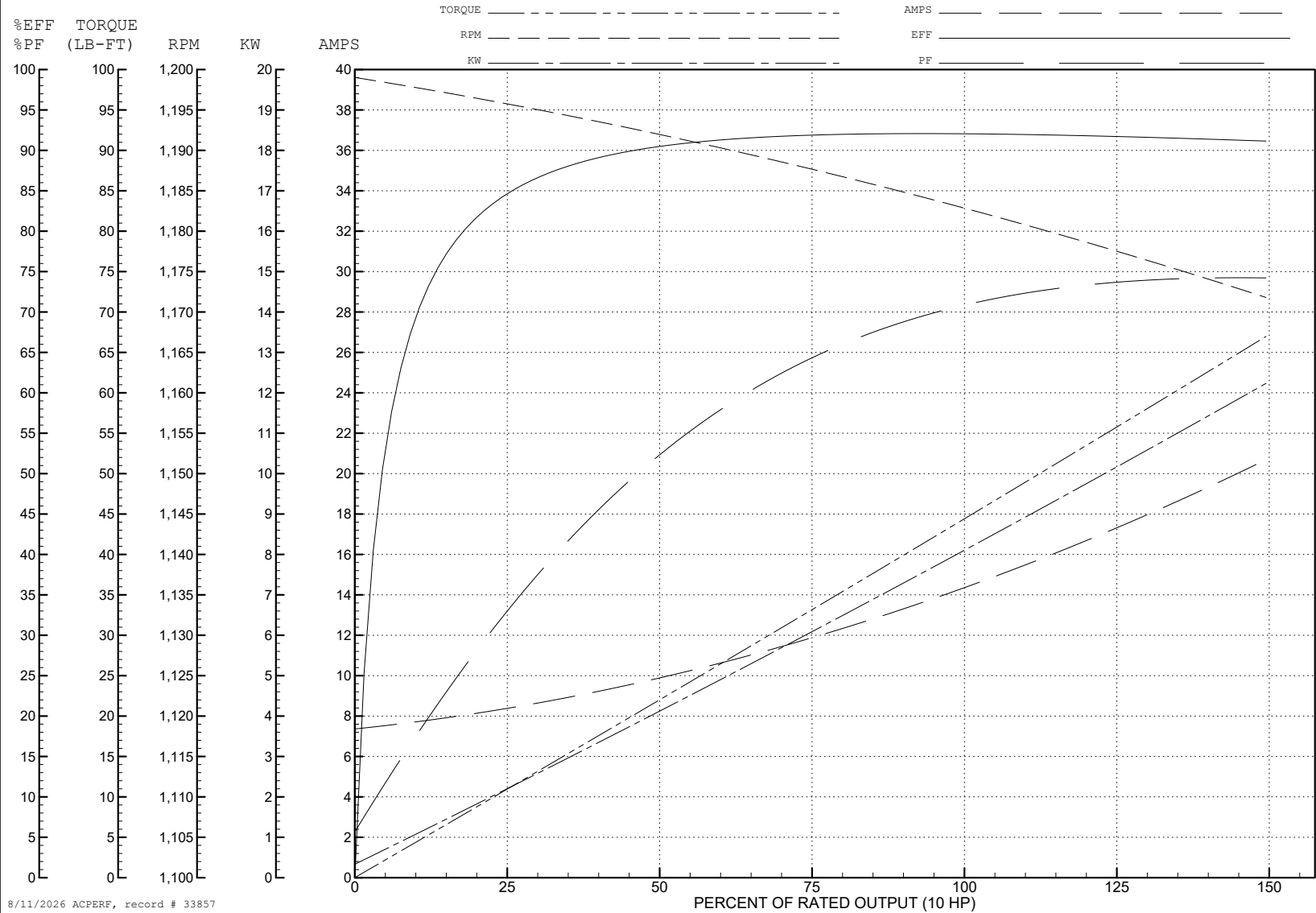
ABB Motors and Mechanical Inc.

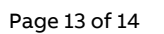
WINDING # 39GW950

Typical performance - not guaranteed values.

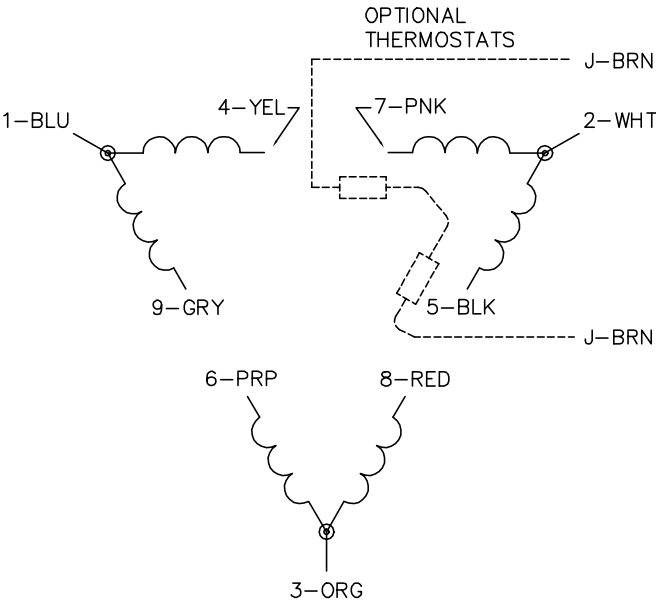
10 HP 3 PH 60 HZ 1180 RPM 460 V 3954M

TORQUES (LB-FT): PO=149 PU=55.5 LR=67.6 LRA=91.6

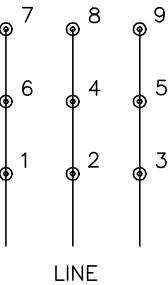




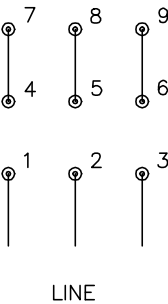
CD0180



LOW VOLTAGE
(2D)



HIGH VOLTAGE
(1D)



- 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.

CD0180

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: D	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\148	REVISED: 10: 25: 29 02/19/2019	BY: ENBRIRO
MTL: —		

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION
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