Kiln Duty Motors

Model No: 215TTTS17077
Catalog No: S510

Kiln Duty Motor, 5 HP, 3 Ph, 60 Hz, 460 V, 1200 RPM, 215T Frame, TEAO

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marathon®

Product Information Packet: Model No: 215TTTS17077, Catalog No: S510 Kiln Duty Motor, 5 HP, 3 Ph, 60 Hz, 460 V, 1200 RPM, 215T Frame, TEAO

Nameplate Specifications

Phase	**3**	Output HP	**5 Hp**
Output KW	**3.7 kW**	Voltage	**460 V**
Speed	**1170 r/min**	Synchronous RPM	**1200 r/min**
Service Factor	**1.15**	Frame	**215T**
Enclosure	**Totally Enclosed Air Over**	Thermal Protection	**Thermostat**
Efficiency	**87.5 %**	Ambient Temperature	**90 °C**
Frequency	**60 Hz**	Current	**6.9 A**
Power Factor	**77**	Duty	**Continuous**
Insulation Class	**H**	Design Code	**B**
KVA Code	**H**	Drive End Bearing Size	**6307**
Opp Drive End Bearing Size	**6206**	UL	**Recognized**
CSA	**Y**	CE	**N**
IP Code	**54**	Number of Speeds	**1**

Technical Specifications

Electrical Type	**Squirrel Cage Inverter Rated**	Starting Method	**Line Or Inverter**
Poles	**6**	Rotation	**Reversible**
Resistance Main	**1.9 O**	Mounting	**Rigid Base**
Motor Orientation	**Horizontal**	Drive End Bearing	**Ball / Heat Stabilized**
Opp Drive End Bearing	**Ball / Heat Stabilized**	Frame Material	**Cast Iron**
Shaft Type	**T**	Overall Length	**17.19 in**
Frame Length	**8.75 in**	Shaft Diameter	**1 3/8 in**
Shaft Extension	**3.56 in**	Assembly/Box Mounting	**F1/F2 Capable**
Inverter Load	**Variable 20:1**		

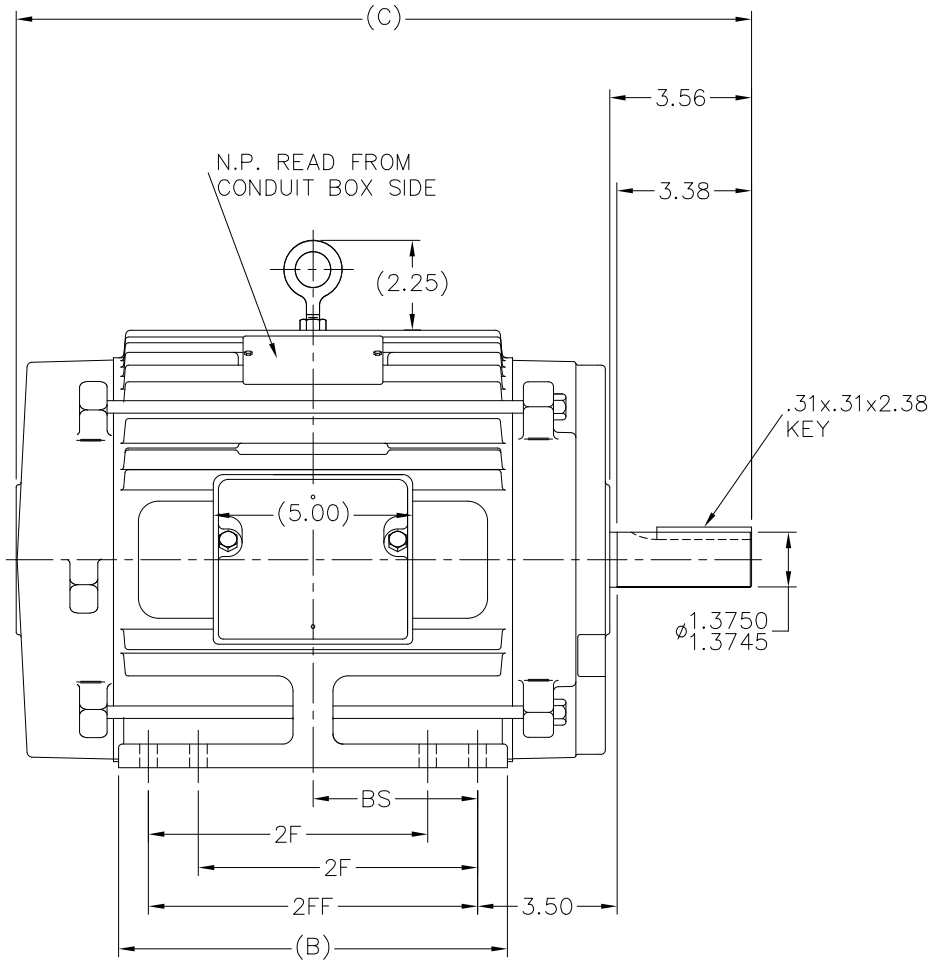
Drawings

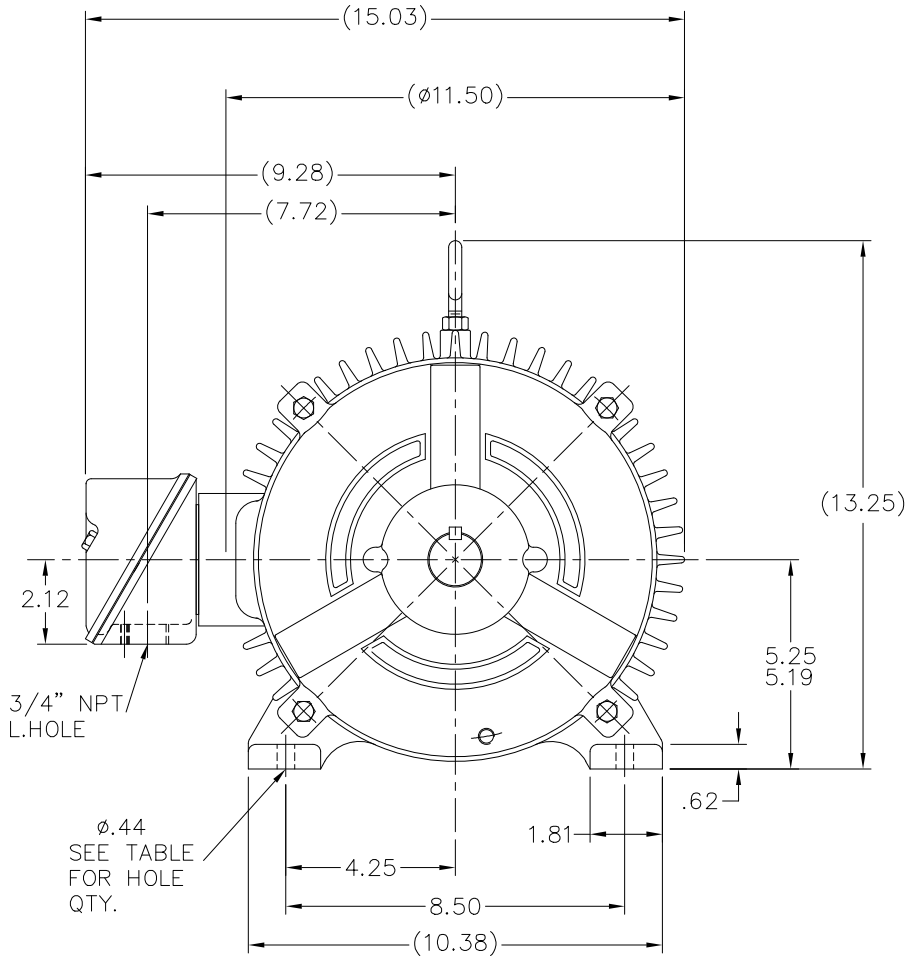
Connection Drawing	**A-EE7300T**	Outline Drawing	**B-SS85995-875**

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*** Released For Use ***

SS85995





NOTES:
1. BOX CAN BE ROTATED IN 90° STEPS.
2. BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.

DASH	FRAME	B	2F	2FF	BS	C	FOOT HOLE QTY.	MOUNTING
725	213T	7.00	–	5.50	2.75	15.69	4	F1 OR F2
875	215T	8.50	–	7.00	3.50	17.19	4	F1 OR F2
875	213/5T	8.50	5.50	7.00	3.50	17.19	8	F1 OR F2
1000	213T	9.75	5.50	8.25	4.12	18.44	8	F1 OR F2
1000	215T	9.75	7.00	8.25	4.12	18.44	8	F1 OR F2

(REPLACES A-SS87840)

NO.	REVISION	BY & DATE	CHK
8	CLARIFIED EXT. DIMENSION MU43615	TAT 02-13-2004	ML
7	ADDED FOOT HOLE QTY. & MTG. TO TABLE CN 37322	TAT 01-14-2004	ML
6	FOOT HOLES WERE 4 NOW 8 CN 29200-450	DRS 05-16-2000	
5	REVISED CONDUIT BOX CN 28426	NJS 01-18-2000	
4	AD'D '213/15 MAY ONLY HAVE..' NOTE CN 27400-361	BLR 08-31-1999	

TOLERANCES UNLESS SPECIFIED: DEC. .X ±.1; .XX ±.03; .XXX ±.005; .XXXX ±.0005; ANG ±7'30"

MARATHON ELECTRIC

DRAWN BRH 06-17-1996
CHK KL 06-28-1996
APPD ML 06-28-1996
SCALE 5=16
REF
FMF
PREV

TITLE OUTLINE
210T FR. – TENV – CAST CONDUIT BOX
MAT'L.
FINISH
CAD FILE ss85995

RFP
DIST LB

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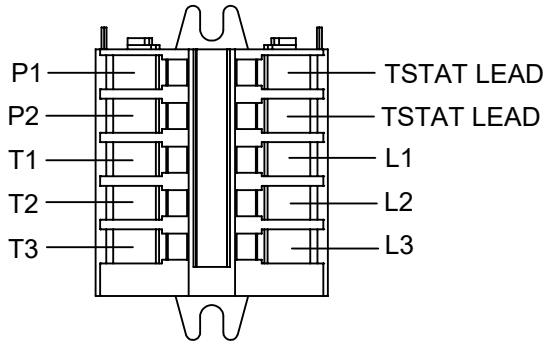
SIZE B | DRAWING NO. SS85995 | PAGE OF | REV. 8

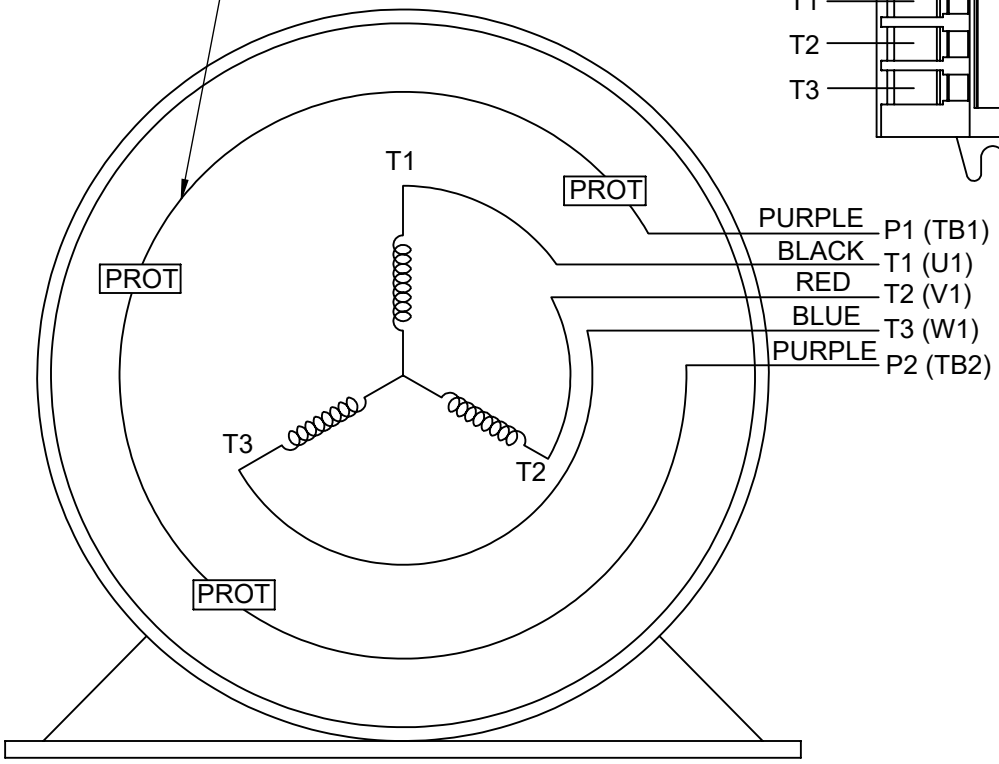
THREE PHASE - SINGLE VOLTAGE
MOTOR - CONDUIT BOX @ 'A'

TO REVERSE ROTATION:
INTERCHANGE ANY TWO LINE
LEAD CONNECTIONS

NOTE FOR FACTORY USE ONLY:
TO SURGE TEST:
FOR 3 LEAD COMMON CONNECT:
CONNECT P1 TO T1 THEN P2 TO L1
FOR 6 LEAD COMMON CONNECT:
CONNECT P1 TO BOTH T1
THEN P2 TO L1

TERMINIAL BLOCK WHEN SPECIFIED

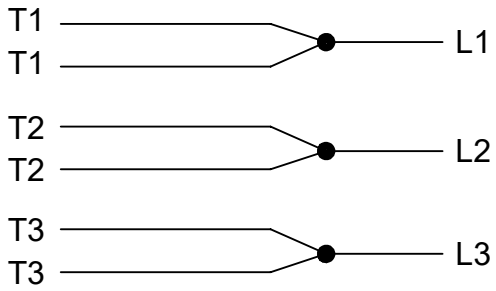




VIEW OF TERMINAL END

T2BM
T6AW
T6AL
T6Z
T4EG
T4BF
T8A
T6H
T6A
T4AX
T4A
T2A
T2F

IF MOTOR HAS MULTIPLE
T'S PER LEAD CONNECT
TOGETHER LIKE T'S



A-9806 DECAL

DRAWING REVISION AC	REVISION BY SB	REV DATE/© DATE 08/01/2025	PRIMARY DIMENSIONS ARE INCH mm DIMENSIONS IN [BRACKETS] ARE FOR REFERENCE ONLY	DRAWN BY LZ	marathon™
REQUEST NUMBER CR-0023654	APPROVED BY SBD	DATE 08/01/2025		DATE 01-04-1994	
REQUEST NUMBER DESCRIPTION DRAWING TITLE BLOCK UPDATED				APPROVED BY GK	DESCRIPTION CONN DIAGRAM-EXTERNAL 3Ø-SINGLE VOLT-MOTOR WITH PROTECTOR
				DATE 01-20-1994	
				REFERENCE	MATERIAL / PROCESS/FINISH
				THIRD ANGLE PROJECTION	SIZE A / DRAWING NUMBER EE7300T / SHEET 1 OF 1

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Data Sheet

Date: 6/29/2017
Customer:
Attention:
Submitted by: FAREEDA DUDEKULA

marathon electric

215TTTS17077

Submittal

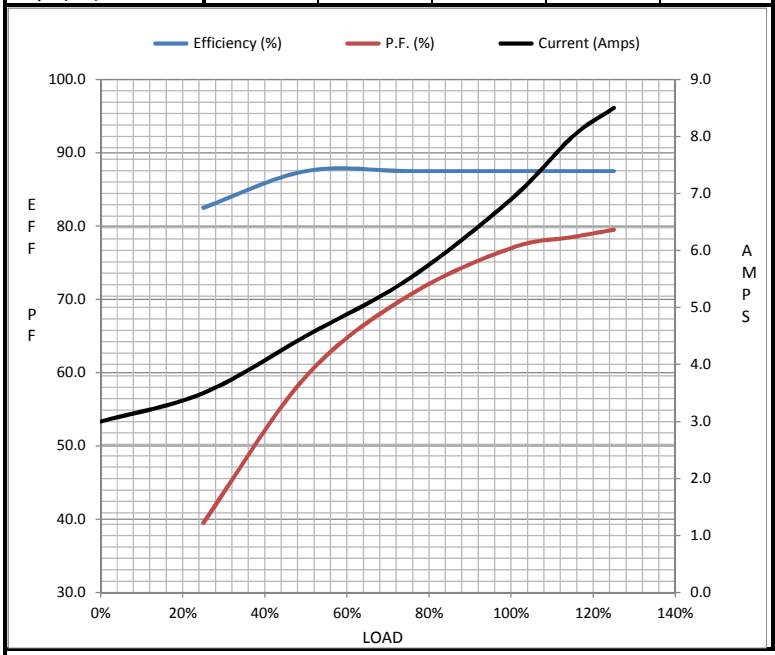
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	3.0	3.5	4.5	5.5	6.9	8.0	8.5	44.0	
Torque (ft-lb)	0.00	5.5	11.0	16.5	22.5	26.0	28.5	43.0	
RPM	1200	1195	1185	1175	1170	1,165	1160	0	
Efficiency (%)		82.5	87.5	87.5	87.5	87.5	87.5		
P.F. (%)	6.5	39.5	59.5	70.5	77.0	78.5	79.5	43.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1030	1170	1200
Current (Amps)	44.0	40.0	30.0	6.9	3.0
Torque (ft-lb)	43.0	40.0	70.0	22.5	0.00



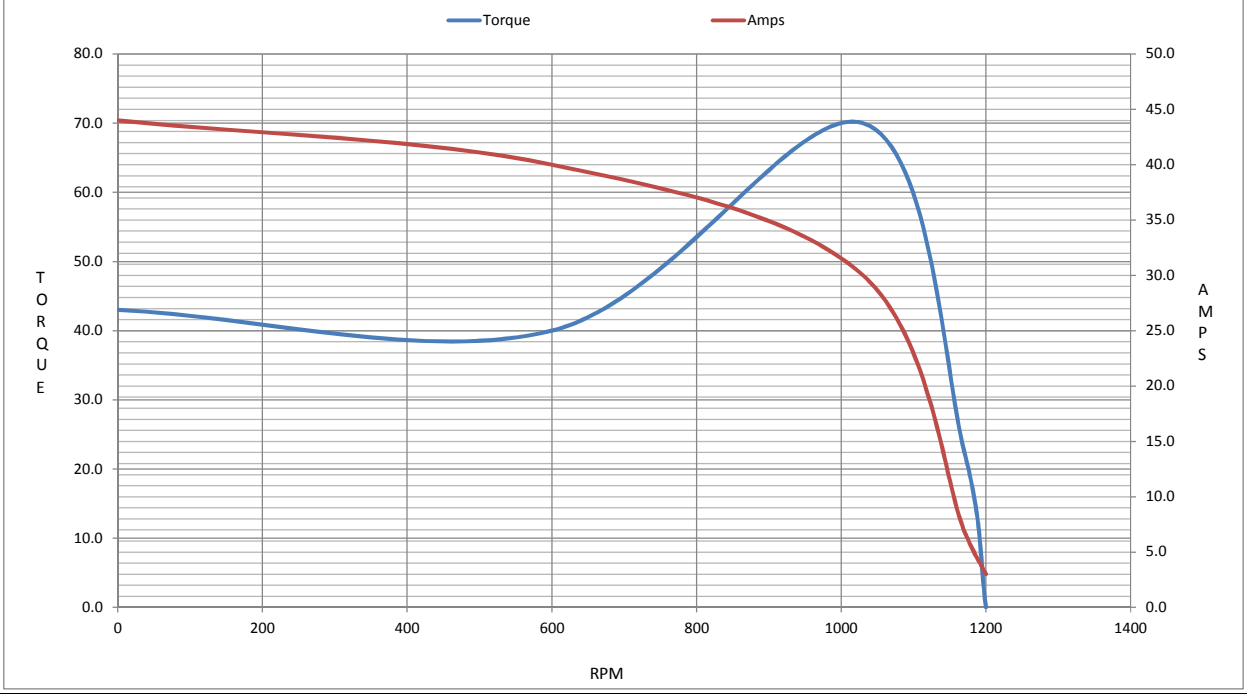
Information Block

HP	5.0
Sync. RPM	1200
Frame	215
Enclosure	TEAO
Construction	TTN
Voltage	460 V
Frequency	60 Hz
Design	B
LR Code letter	H
Service Factor	1.15
Temp Rise @ FL	45 ° C
Duty	CONT AOM
Ambient	40 ° C
Elevation	1,000 feet
Rotor/Shaft wk²	0.95 Lb-Ft²
Ref Wdg	K2156100 R12
Sound Pressure @ 1M	0 dBA
VFD Rating	VARIABLE 20:1
Outline Dwg	B-SS85995-875
Conn. Diag	A-EE7300T
Additional Specifications:	
0	
0	

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
1.1360	1.1810	4.7880	5.2260	69.2960

Speed -Torque Curve



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CERTIFICATION DATA SHEET

Model#:	215TTTS17077 BR	**WINDING#:**	K2156100 R12 7
CONN. DIAGRAM:	A-EE7300T	**ASSEMBLY:**	F1/F2 CAPABLE
OUTLINE:	B-SS85995-875		

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
5	3.7	1200	1170	215T	TEAO	H	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	6.9	LINE OR INVERTER	CONTINUOUS	H4	1.15	90	3300

FULL LOAD EFF: 87.5	3/4 LOAD EFF: 87.5	1/2 LOAD EFF: 87.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 77	3/4 LOAD PF: 70.5	1/2 LOAD PF: 59.5	85.5	SQ CAGE INV RATED	3

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
22.5 LB-FT	44	43 LB-FT 191	70 LB-FT 311	999

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
0 dBA	10 dBA	0.95 LB-FT^2	0 LB-FT^2	20 SEC.	0	205 LBS.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	PREMIUM SEVERE DUTY	NONE	FALSE	NONE	BLUE (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL / HEAT STABILIZED 6307	BALL / HEAT STABILIZED 6206	DC 44M	T	NONE	NONE	1144 STRESSPROOF (C-223)	CAST IRON

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
TSTATS CLH (N/C)	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

INVERTER TORQUE: VARIABLE 20:1
INV. HP SPEED RANGE: NONE

ENCODER: NONE
NONE NONE
NONE NONE PPR

BRAKE: NONE NONE
NONE P/N NONE
NONE NONE
- FT-LB NONE V NONE Hz

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