

DATA of HIGHER HARMONICS

Tested on : 1994-3-3

Ship's name : m/S "AZAREA"

Made by : IHI

User : Messers Shin Nihonkai Ferry Co., Ltd.

SNo. 3039

Application : 1200kw STERN THRUSTER

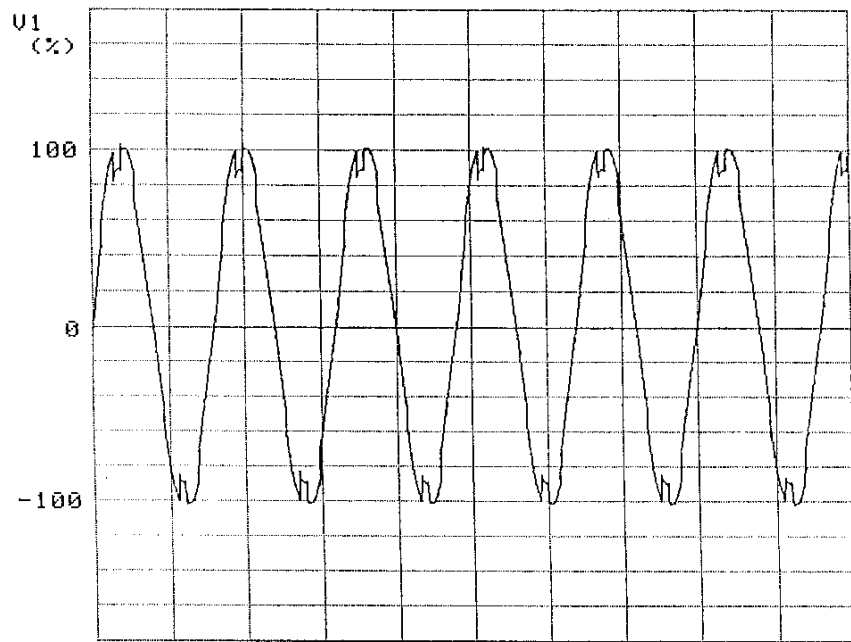
DURING RATED OPERATION (AFTER RUNNING IS STABILIZED)

Line voltage (Primary side)

Wave form V1

Line current (Primary side)

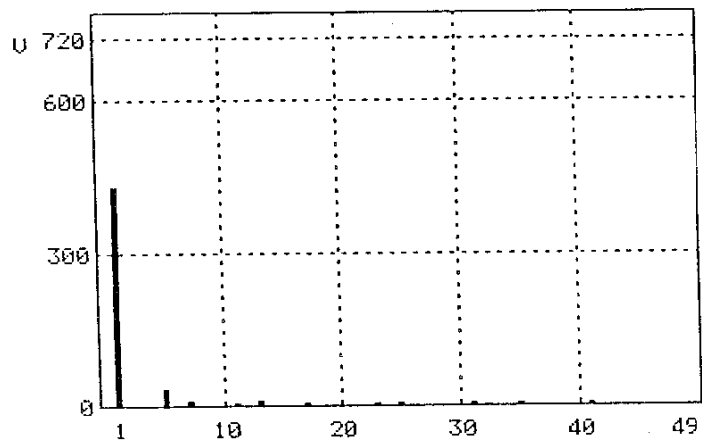
Wave form A1



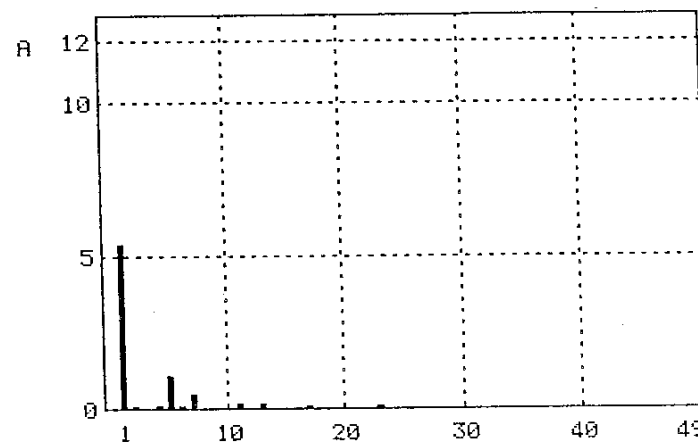
ライン電圧 (一時側)
BAR GRAPH V1

ライン電流 (一時側)
BAR GRAPH A1

BAR GRAPH U1



BAR GRAPH A1



STARTING ON:

Higher Harmonic Rate

94-03-03 10:00:49

Storage Harm PLL(V1) f:59.60 Hz
-- *C 1/ 1)<TOTAL> 393W2M
VALUE WAVE U1 600U
THD (2-49th) 94-03-03 09:59:08 A1 10A

THD				
V1	8.7%	THD	22.9%	
		A1		
THD	641.4%	THD	213.0%	
V2		A2		

VALUE ALL ORD GRAPH -----

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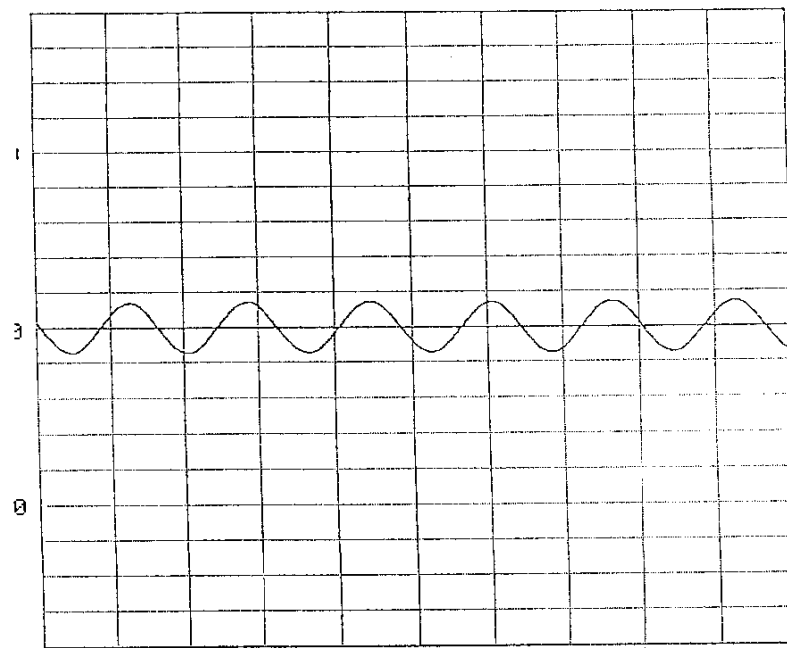
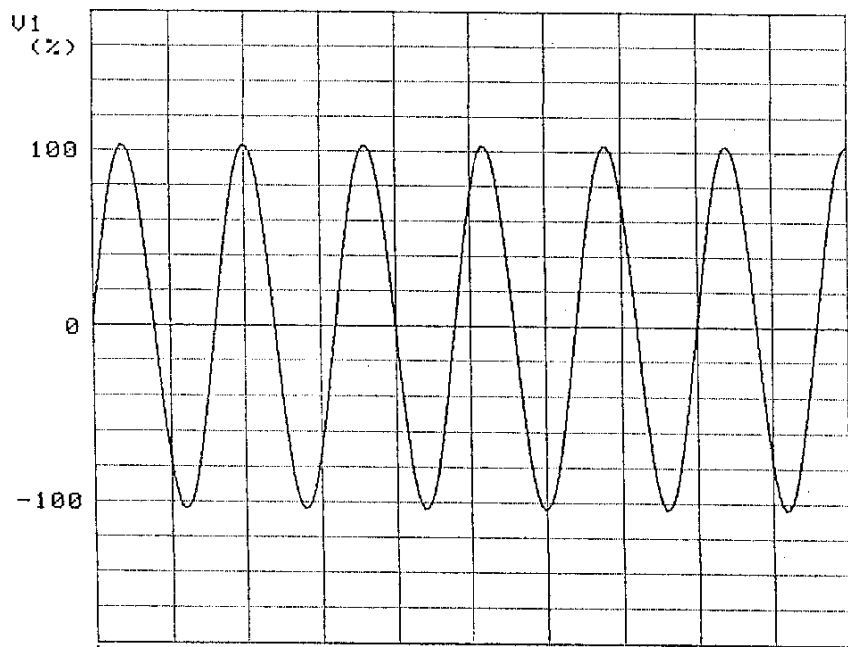
WHEN STARTING

Line voltage (Primary side)

Wave form V1

Line current (Primary side)

Wave form A1



ライン電圧 (一時側)

BAR GRAPH V 1

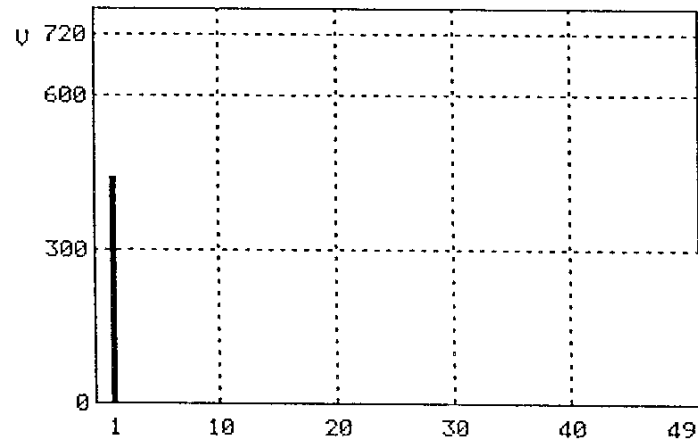
DURING RATED OPERATION (AFTER RUNNING IS STABLIZED)

Higher Harmonics

Voltage

BAR GRAPH V 1

BAR GRAPH V1



ライン電流 (一時側)

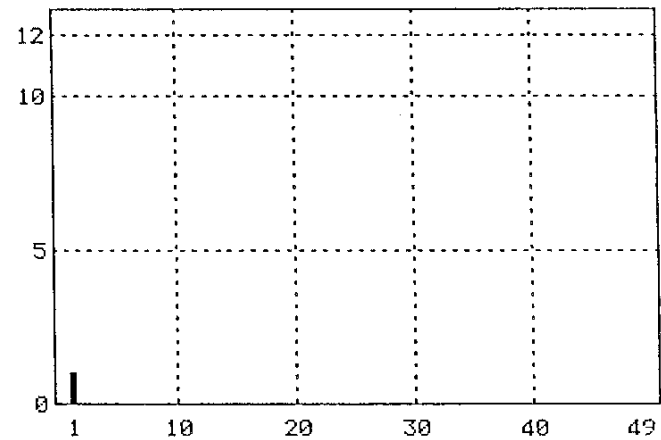
BAR GRAPH A 1

Higher Harmonics

Current

BAR GRAPH A 1

BAR GRAPH A1



DURING RATED OPERATION:

Higher Harmonic Rate

94-03-03 10:04:24

Storage Harm PLL(U1) f:60.09 Hz
--*(1/ 1)<TOTAL> 303W2M
VALUE WAVE U1 600V
THD 94-03-03 10:01:03 A1 10A

THD		THD	
U1	0.4%	A1	1.6%
U2	over	A2	469.8%

VALUE ALL ORD GRAPH -----

STERN THRUSTER

H.643A3B

VR2:12
VR3:60

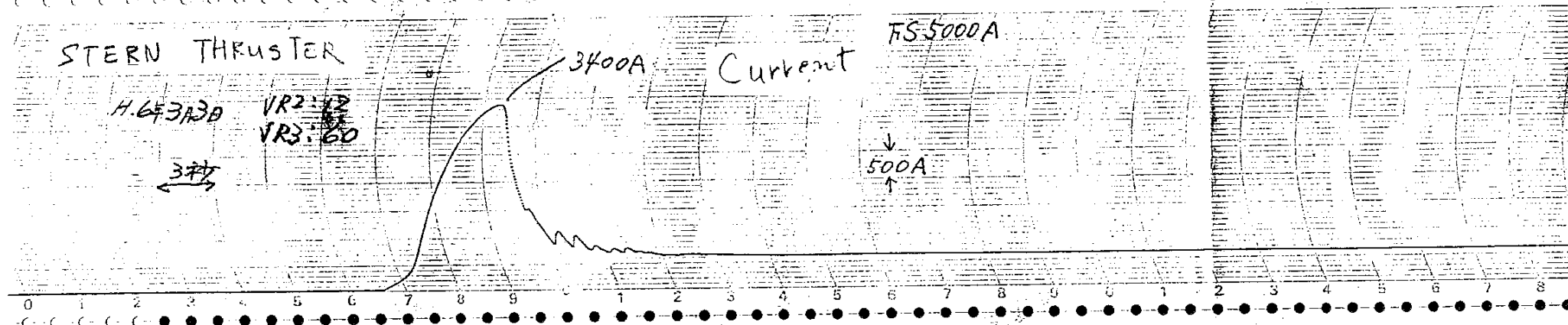
37%

3400A

Current

FS 5000A

500A



STERN THRUSTER

H.643A3A

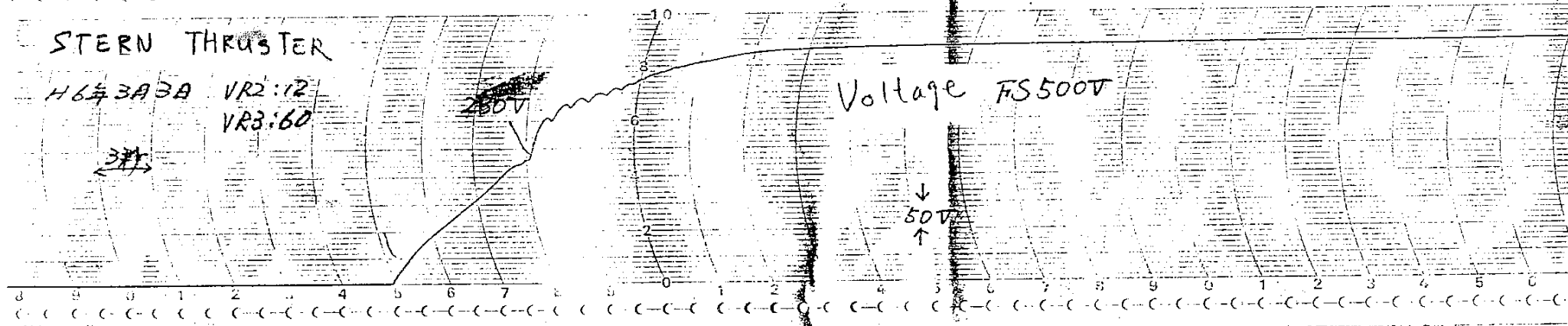
VR2:12
VR3:60

37%

260V

Voltage FS 500V

50V



NO. 507