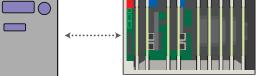


Coupling with the new SMS-55 Alarm and Monitoring Systems (AMS) Ease of usability is UP!

The new JRCS SMS-55 AMS now has the function of connecting with J-S/Eco so while you are in the Control Room you can change settings for optimum efficiency and monitor high levels of energy saving.

J-SEco





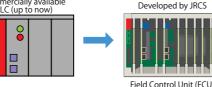
Field Control Unit (FCU)

Optior



service with strong support by using our own components and not having to rely on commercially available PLCs.

Commercially available PLC (up to now)



POINT

On the SMS-55 LCD screen energy saving can be monitored.

SMS-55

Reliability UP!

LCD monitor

Field Control Unit (FCU

The SMS-55 controller Field Control Unit (FCU) has been developed in-house to withstand the rigors of the marine industry with improved serviceability.

PLC



■JRCS Shimonoseki (headquarters): 1-2-14 Higashiyamato-machi, Shimonoseki Yamaguchi, 750-8515 Japan Tel: +81 83 261 0200 Fax: +81 83 261 0360 E-mail : jrcs@jrcs.co.jp URL: www.jrcs.co.jp

■JRCS Tokyo (headquarters): CIRCLES Shimbashi 11F, 2-11-13 Nishishimbashi, Minato-ku, Tokyo, 105-0003 Japan Tel: +81 3 5948 5952 Fax: +81 3 5948 5953

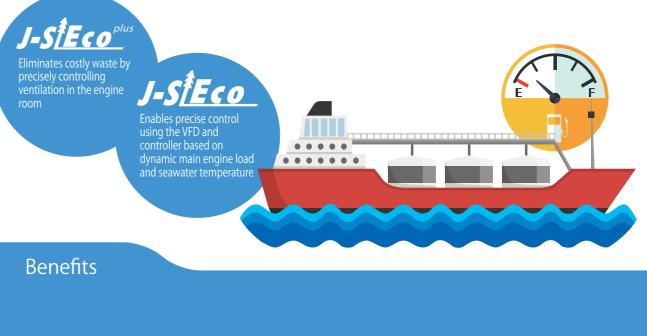
■JRCS Toyoura: 2155 Kawatana, Toyoura-cho, Shimonoseki, Yamaguchi, 759-6301 Japan Tel: +81 83 775 1100 Fax: +81 83 775 1105 ■The Netherlands Subsidiary: JRCS Euro Marine Service B.V. Prof. J.H. Bavincklaan 7, Unit 202, 1183 AT Amstelveen, The Netherlands Tel:+31 20 2996583

■Singapore Subsidiary: JRCS Engineering Singapore Pte. Ltd. 26 Boon Lay Way #01-82 TradeHub 21, 609970 Singapore Tel:+65 6515 8286 Fax:+65 6515 9334

Shanghai Subsidiary: JRCS (Shanghai) Co.,Ltd. Rm #1223, Cimic Tower, #1090 Century Blvd Road, Pudong New Area, Shanghai, 200120, China Tel: +86 21 2022 0052 Fax: +86 21 2022 0053

Reduce running costs with a more efficient system! Guaranteed to return your investment, and more!





Power Approx 2 Power Saving 3 esults proven by actual operation test





J-S/Eco is a JRCS registered trademark.

Energy-saving Variable Frequency Drive for Pumps and Fans

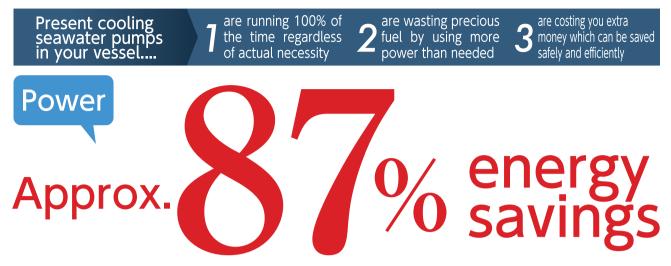
A quick, safe and smart investment! Substantial energy savings guarantee a guick return of investment

Produced by a marine industry veteran! JRCS is a proven expert in safe and efficient electrical design

Good for the environment! Pumps and fans which use less energy generate less pollution

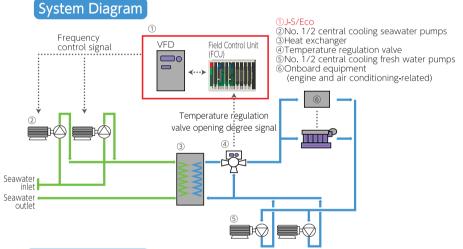
J-S/Eco·Eco"

Energy-saving Variable Frequency Drive for Pumps



Amazing results, proven by an actual operation test onboard a large container vessel.

○Max.seawater temp:26.2° ○Input power to motor with J-S/Eco:12 kW; without J-S/Eco:98kW OAnnual fuel consumption per kW:1.95t/kW 98kW-12kW=86kW 86kW x 1.95t/kW=167t/yr *The above figures show the trial results; however the actual energy-saving rate may vary according to each vessel.



Utilizing the Variable **Frequency Drive** enables fine control over motors and seawater temp. Giving you optimum flow of cooling seawater.

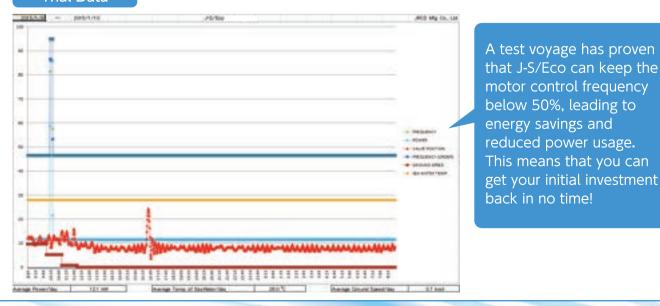
below 50%, leading to

reduced power usage. This means that you can

get your initial investment

J-SEco

Trial Data

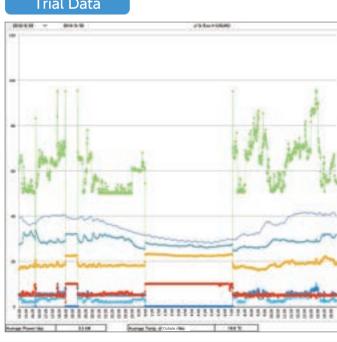


Energy-saving Variable Frequency Drive for Fans



Proven results of an actual onboard test on a 20.000 ton tanker.

OInput power to motor with J-S/Eco plus:10kW; without J-S/Eco plus:27.5kW OAnnual fuel consumption per kW;1.95t/kW 27.5kW-10kW=17.5kW 17.5kW x 1.95t/kW=34.2t/yr *The above figures show the trial results; however the actual energy-saving rate may vary according to each vessel. System Diagram ①J-S/Eco plus J-S/Eco plus gives you full control ②Temperature sensor ③Differential pressure sensor over the volume of engine room ventilation. Maintaining an atmospheric pressure of 50Pa is a great save in energy. While at dock a vast reduction in STEP CONTROL STEP CONTROL noise has also been demonstrated. Field Control Unit (FCU) engine room Trial Data ##10 - #111 and the state of the M/E LOAD As this data confirms, J-S/Eco plus results in the optimum volume of ventilation from engine output.







Engine Room ventilation fan capacity is defined by ISO8861. Capacity is defined as the amount of air necessary for fuel combustion plus the amount of air necessary for heat exhaust when the main and auxiliary equipment is running at 100%. However, since the equipment does not run at full power 24/7, the fans are working harder than necessary.