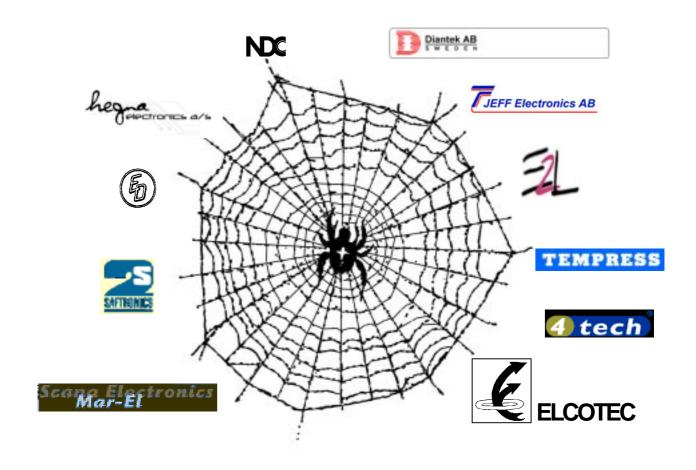
# **IMSAB COMPONENT GUIDE** for industry and shipping



# Electronic start/monitoring unit for diesel engine **DS 12 -24**

## DS 12 -24

### Electronic start/monitoring unit for diesel engine



- Pre connected cables
- Reduced purchasing cost
- Compact unit for installation in diesel engine control cabinet.
- Remote operation with DSR 12-24
- Indication: Running, Power, Local, Remote, Oil press, Over speed, Cooling water temperature and one free trip input.
- Operation: Start, Stop/Reset, Local, Remote.
- IP55 front
- Certificated in CE-standards EN 50 081-1 and EN 50 082-2

#### DESIGN

DS 12-24 is a compact unit for installation in diesel engine starter cabinet.

- To the DS 12-24 a remote unit DSR 12-24 can be connected. The remote DSR 12-24 can not operating the engine if the local DS 12-24 is at Local mode. In the other hand are all indicators status shown at the remote unit.

Press the start button at the panel, and the engine will start. The internal relays will then make the starting motor /start solenoid. The oil pressure switch is blocked during the start for 10 seconds. Button for starting the engine is blocked when the engine are running.

- Stop signal are on at max 15 seconds after that the engines running signal was de activate.

 When an engine is stand still, a heater can been connect.
 The heater will be automatically switched on 15 minutes after that the engine has been stopped.

DS12-24 controls diesel engine oil pressure switch, cooling water temperature and over speeding relay.

Indication trips:

Running, Local/Remote and Control Power ON.

Indication, alarm:

Low oil pressure, High temperature cooling water, Over speed relay and Fault (Free input for stopping of diesel engine) Control unit:

DS12-24 (Local unit): Start, Stop, Local/Remote DSR12-24 (Remote unit): Start, Stop.

Input signal from diesel engine:

Low oil pressure, High temperature cooling water, Over speed relay and Fault (Free input for stopping of diesel engine) Running, Emergency shutdown, One free input for tripping the diesel engine.

Output signal from DS12-24

Start solenoid, Stop solenoid, Engine stand still heater, Fault alarm.

These output are from internal relays in DS12-24. Output contacts are potential free change-over relay contacts. Connection of DS 12-24 and DSR 12-24:

Cable 5 x 1,0mm2 with overall screen. Maximum cable length

#### SECURITY

As all IMSAB-products DS12-24/DSR12-24 are fitted with various protection devices against wrong electrical connection and electric interference. The panel is powered directly from

the LC supply, without requiring stabilization.
The unit is in accordance with CE-standards: EN 50 082-2; EN 50 081-1; Test lab: NEMKO -Oslo

#### INSTALLATION

Wiring - only 10 to 15 wires are to be connected in one end. Pre-wired wires are 1,5m and gives reduced purchasing and documen-tation cost. Same unit can bee used regardless of motor size. Less commisning and start up costs.

#### **SPECIFICATION**

Supply voltage: 12 & 24VDC; max 30mA

Output contacts (K1-K4):

Weight:

Protection:

30VAC/DC max 10A. 550g incl. wires. Front IP55, RearIP20

Wires: length 1,5m

min -5°C max 60°C. Ambient temperature: max 80% not condensed. Hygroscopic moisture: Main dimension: 48x96x85 mm (hxbxd)

Panel recess: 44x92 mm

### **IMSAB**

Text: English text, other text on request

Indicator: Twin LED

Red LED for unacknowledged alarm, Green LED for Running,

Yellow LED for status mode.

#### **ORDERING INSTRUCTIONS**

DS 12 DS 24 DSR 12

Diesel start 12V- power supply
Diesel start 24V- power supply
Diesel start 12V- power supply, remote unit
Diesel start 24V- power supply, remote unit **DSR 24** 

## **DS 12-24** CONNECTION

Pre-wired wires fron DS 12-24

12VDC White 0,5mm<sup>2</sup> Black 0,75mm<sup>2</sup>

