## ALMSC 450



## **Diesel Generating Sets**



#### **Prime Power**

Refers to the main power supply, working under 70% average load for unlimited time. 10% overloading is allowed.

**Stand-by Power**Refers to the back up power supplied to the varying load for a limited time. Overloading is not allowed.

#### Generator

H: External

			Prime		Stand-by
Power (kVA)	kVA		410		450
Power kW	kW		328		360
Generator Model:				ALMSC 450	
Engine Manufacturer Model:				Scania / DC13	072A 02-12
Fuel Type:				Diesel	
Frequency:				50 Hz	
Power Factor:				$Cos \Phi = 0.8$	
Voltage:				400/231 V	
Dimensions			With Ca	nopy	Open Skid
Length		mm	4100		3360
Height		mm	2550		2150
Width		mm	1600		1250
Weight		kg	4350		3250
Fuel Tank Capacity		lt	730		580



K: Container

TBA: To be added

# **Your Solution Partner in Energy**

## ALMSC 450



## Diesel Generating Sets

### Engine

Engine Manufacturer:		SCANIA
Engine Model:		DC13072A 02-12
Engine Type:		4 Stroke Diesel Engine
Engine Stand-by Power:	kWm	403
Engine Prime Power:	kWm	365
Cylinder Arrangement:		6L
Displacement:	lt	12,7
Cooling System:		Water Cooling
Bore x Stroke:	mm	130 x 160
Compression Ratio:		16,3:1
Aspiration:		Turbocharger, Intercooler
Governor Type:		Electronic
Electrical System:	VDC	24
Lubricant Oil Capacity:	lt	45
Coolant Capacity:	Lt	45
Frequency Lt:	Hz - rpm	50 - 1500
Jacket Water Heater:	Piece x W	
Battery:	Piece x AH	
Charge Alternator Current:	Α	100
Injection System:		Direct
Cooling Air Flow:	m³/min	330
Combustion Air Flow:	m³/min	30
Exhaust Gas Flow:	m³/min	32
Exhaust Gas Temperature:	°C	509
Fuel Consumption Under 100% Load:	lt/h	79,5
Fuel Consumption Under 75% Load:	lt/h	59
Fuel Consumption Under 50% Load:	lt/h	40

### Alternator

Phase / Pole Number:		3/4+
Excitation System:		Self Excited, Brushless
Voltage Regulator:		A.V.R. (Automatic)
Voltage Regulation:		±%1
Insulation Class:		Н
Protection Class:		IP23
Connection Type:		Star
Frequency:	Hz	50
Power Factor:		$Cos \Phi = 0.8$
Total Harmonic Distortion (No Load):		< % 3.5
Output Voltage:	VAC	231/400

TBA: To be added



# **Your Solution Partner in Energy**

## ALMSC 450

## iesel Generating Sets

## alimar'

#### Control Panel



ALM929



AMF9

#### Alimar ALM-929 Automatic Control Module

AMF function
ATS function
Remote start function
Manual start function
Engine control function
Suitable for remote monitoring

#### Mains and Genset LL- LN Voltages

Mains and generator frequency
Mains and genset phase currents
Mains and generator neutral currents
Grid and generator phase and total, kW, kVA,kVAr
Power factor, engine speed, battery voltage and more

#### Connections

3 phase 4 wire, stars & delta 3 phase 3 wire, 2 current transformer 2 phase 3 wire 1 phase 2 wire

#### Communication

RS232 – 485 connection with cable J1939-CANBUS GSM / GPRS connection Ethernet connection Modbus RTU

#### **Protection Functions**

- Overvoltage
- Low voltage
- Voltage asymmetry and phase sequence
- High frequency
- Low frequency
- Short-circuit current
- Overcurrent
- Power factor
- Coolant temperature
- Low oil pressure

#### **Auto Panel Features**

- Automatic generator, grid control and fault monitoring
- Easy control with a user-friendly interface from the panel screen
- Remote operation with optional communication cards
- Manual programming with password-protected service interface
- Manual control of generator and transfer panel with buttons on the front panel
- Front panel protection class IP65
- With an operating temperature of -20 C to +70 C and a storage temperature of -40 C to +80 C



# **Your Solution Partner in Energy**

## **ALMSC 450**

## iesel Generating Sets



#### Standard Features

#### **Engine**

Low fuel consumption and high performance latest technology diesel engines are used with electronic or mechanical governor, water-cooled radiator system, replaceable oil, fuel, air filters.

#### **Alternator**

With its robust and compact structure, steel body, maintenancefree single bearing system, brushless, self-excited system and electronic type AVR, alternators suitable for the special needs of different applications are used.

#### **Gen-Set Canopy**

Modular cabinets are used in accordance with 2000/14/EC directives, covered with sound and heat insulation flame-resistant sponge, corrosion and rust resistant paint, locks and hinges, large lockable doors on both sides for easy service and maintenance. Exhaust and silencer insulated according to engine suitability. Small and medium power fuel tank is designed as underchassis. Lifting ears on chassis. Vibration prevention wedges are used under the chassis.

#### **Standard Accessories**

Industrial silencer and stainless steel compensator Maintenance-free lead-acid starter battery, cable and stand Jacket water heater with thermostat

Automatic control module

SMPS battery charger

Relays and fuses

Emergency stop button

#### **Optionel Features**

Remote radiator

Coolant level sensor

Fuel level sensor

Winding dehumidifier heater

Winding and bearing temperature sensors

МССВ

PMG/AREP

#### Other Accessories

Electronic/Manual oil drain pump

Critical type silencer

Trailer

Main fuel tank stainless and insulated

Automatic transfer panel

Spring loaded seismic isolator

Oil and fuel tank heater

Maintenance tools and kits

**Cabin:** Alimar Generator cabins are user-friendly. It provides easy maintenance and repair. Cabin monitoring the control module from outside and emergency stop button can be accessed. The inner surface of the cabinets is sound and high intensity flame that provides heat insulation does not walk covered with sponge. Cabin paint is resistant to corrosion and rust. It is resistant to. Muffler hardware on certain models hidden inside the cabin.



