

SOLAS AND OTHER COMMERCIAL APPLICATIONS **MARINE DIESEL ENGINES** BUKH 24-75HP / 75-500HP / 500-800HP



www.bukh.dk

nore than 1000 CCC Startes of experience with diesel engines

"Our goal is not short-term profit but long-term success"

Søren Christiansen, CEO/Owner of BUKH A/S



BUKH – the most reliable marine engines in the world.

With more than **100 years of experience** BUKH A/S is one of the world's leading OEM manufacturers of Marine Diesel Engines for lifeboats, fast rescue boats and work boats.

Dedication to life and safety at sea is our number one priority

In 1995 we decided to merge our two companies Motorfabriken Bukh A/S and Aabenraa Motorfabrik Heinrich Callesen A/S. At first into the name of Aabenraa Motorfabrik – a name we changed to BUKH A/S in 2010.

Lifeboat engines are our main product range. But the selection of engines has been extended to cover other power ranges and segments through close co-operation with acknowledged global partners who all share our vision of commitment and quality. The quality of our products is ensured by type approval of the engines and ISO certification of BUKH A/S.

From tractors and generators to lifeboat engines

Founded in 1899, Aabenraa Motorfabrik launched their **first marine engine in 1904**, the same year as Motorfabriken Bukh was founded. While Aabenraa Motorfabrik focused entirely on supplying fishing boats and freighters worldwide with heavyduty Callesen engines, Motorfabriken Bukh engaged successfully in the tractor and emergency power generating segments and developed engines for small work boats and pleasure boats.

This kind of engine turned out to be very suitable for lifeboats, so Motorfabriken Bukh phased out the production of tractors and generators to focus on lifeboat engines.

Today we continue to improve our engines and extend our range to meet the markets' demands.

BUKH LIFEBOAT ENGINES

and Other Commercial Applications

- Lifeboats/Work Boats/Small Fishing Vessels and Other commercial applications
- Up to 6 different starting systems
- Hand start
- Cold Start certified down to minus 40° C
- 24-48HP

- SOLAS approved
- Heavy Duty Continuous rating
- 100,000+ manufactured



BUKH DV24 / DV29 / DV32 / DV36 / DV48

2 or 3 cylinders - 24/29/32/48 HP at 3600 rpm

The classic SOLAS approved BUKH DV is a genuine marine engine designed for a rough life at sea. It is a robust heavy-duty engine that meets the authorities' – and users' – uncompromising demands for operational reliability. The engine withstands idle life in the lifeboat under extreme weather conditions. All these features establish the BUKH DV engines as the first choice of many lifeboat builders.

SOLAS approved starting systems

The traditional electric start can be combined with

- Hand start
- Hydraulic start
- Spring start

For working in polar environments, we can install DNV certified cold starting system that operates down to -40°Celcius/-40°Fahrenheit.

More than 100,000 BUKH DV engines have been manufactured since the model was introduced. A solid proof of durability and simplicity for any work environment!

BUKH EPA LIFEBOAT ENGINES

BUKH EPA 28 / EPA 36 / EPA 48

3 or 4 cylinders - 28/36/48 HP at 2800-3600 rpm

The BUKH EPA engine sets new standards for low exhaust emissions. It features precombustion chamber injection with glow plugs, which eliminates the need for vulnerable electronic devices for control of fuel volumes. The design meets the Tier 3 standards and all models have obtained US Coast Guard approval for use in lifeboats.

EPA 48

SOLAS approved starting systems

The traditional electric start can be combined with

- Hydraulic start
- Spring start

DV24

Standard and optional equipment for DV and EPA engines

There is a wide range of standard and optional equipment for DV and EPA engines. Reverse-reduction gear, wet sump lubrication system, operating remote panel and other kinds of features are standard on both types.

You can choose among different optional equipment such as spray pump, instrument panel, remote control, propeller or waterjet system and other accessories. For more details, see the leaflet on each model or **www.bukh.dk**.

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FAST RESCUE BOAT ENGINES

and Other Commercial Applications

- Wide power range to suit all customer demand
- Light, quiet and fuel efficient
- Compliant with strictest exhaust emission standards
- Cold start available down to minus 30°C
- SOLAS approved/other commercial applications

BUKH D6







BUKH POWER RANGE 75–500 HP

BUKH is your number one marine diesel engine supplier

BUKH offers an extensive range of tailor-made engines for fast rescue craft and a wide range of engines for other commercial applications, giving you the benefit of the experience that comes from being a high quality engine supplier since 1899.

With our range of modern marine diesel engines and our focus on high power, fuel efficiency and compliant with strictest exhaust emission standards. We give our clients the perfect platform to make the right decision for the right engine from one supplier.

Emissions / Ratings

All models are with the newest injection and optimized combustion system ensuring that the engines satisfy the world's strictest exhaust emission standards.

The power range offers ratings from High Speed Craft rating to Medium Continuous Commercial rating, giving you a choice of engines suitable for <300 hours/year up to <3000 hours/year. See chart for more information.

For more details, see the leaflet for each model or **www.bukh.dk**.

The best choice for your fast rescue boat application!





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BUKH NEXT GENERATION 500-800HP Heavy Duty SOLAS Engines

- Compliant with strictest exhaust emission standards
- In-line 6 cylinder

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- Light Duty to Continuous
 Duty ratings
- Unit injectors for efficient combustion
- Designed for a rough life at sea
- Low fuel consumption

BUKH D-13

BUKH D13

With the next generation BUKH SOLAS engines, BUKH meets the rising demand for more HP within the SOLAS segment with the brand new series from 500 to 800 HP. The engines are specially designed for commercial use and adapted to marine applications. The engine is solid built, with one full cast cylinder head, replaceable wet cylinder liners, lower stiffening frame to reduce vibrations/noise and the long life timing gears that ensure the commercial endurance of these engines.

For more details, see the leaflet for each model or **www.bukh.dk**.









ACCESSORIES AVAILABLE

Advanced Technology Equipment



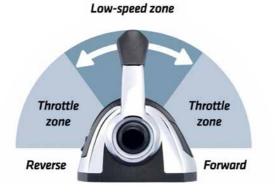
EVC - ELECTRONIC VESSEL CONTROL

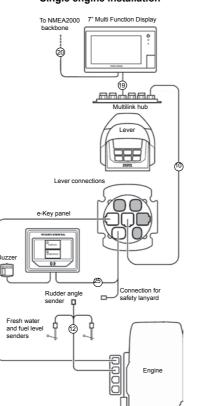
- Single Lever Mode
- Cruise Control
- Trip Computer
- 7" Color Display
- E-key

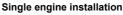
LOW-SPEED MODE

Reduces boat speed at idling by 50%, ideal while performing person recovery/rescue operation or maneuvering in narrow spaces.

With this function the operator controls the boat speed with the throttle/gear lever. In the first 12 degrees of the lever movement after engaging the gear, the engine will remain at idle and the boat speed is reduced by a slip in the transmission.











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CRUISE CONTROL

• Fingertip control Fine tune the speed Optimize fuel-efficiency Deactivates on throttle movement Perfect match with EVC Low Speed

Bukh engine model	kW	H	Rated speed RPM	Cyl No.	kg Dry bobtail	Rating Max Hours	WOT use in %	Rating	Rating Max Hours per year	Solas	Other commercial application	Multi Fuel
Bukh DV24	18	24	3600	2	210	24 of 24	100%	C1	Unlimited	0	0	
Bukh EPA 28	21	28	3600	3	139	24 of 24	100%	C1	Unlimited	0	0	
Bukh DV29	21	29	3600	2	210	24 of 24	100%	C1	Unlimited	0		
Bukh DV32	24	32	3600	2	210	24 of 24	100%	C1	Unlimited	0	0	
Bukh EPA 36	26	36	3600	4	168	24 of 24	100%	C1	Unlimited	0	0	
Bukh DV36	26	36	3600	3	265	24 of 24	100%	C1	Unlimited	0	0	
Bukh DV48	35	48	3600	3	275	24 of 24	100%	C1	Unlimited	0	0	
Bukh EPA 48	35	48	2800	4	260	24 of 24	100%	C1	Unlimited	S	0	
Bukh D3-110	81	110	3000	5	260	1 of 12	8%	C11	300	s	0	
Bukh U125	93	125	4000	4	220	1 of 12	10%	C6	1000	S	0	
Bukh D3-150	110	150	3000	5	260	1 of 12	8%	C11	300	S	0	
Bukh D3-170	125	170	4000	5	260	1 of 12	8%	C12	300	S	0	
Bukh D4-180	132	180	2800	4	483	1 of 12	8%	C9	800	S	0	
Bukh R210	154	210	3800	4	280	1 of 12	10%	C6	1000	S	0	
Bukh D3-200	147	200	4000	5	260	1 of 12	8%	C12	300	S	0	
Bukh D3-220	162	220	4000	5	260	1 of 12	8%	C12	300	S	0	
Bukh D4-225	165	224	3500	4	483	1 of 12	8%	C9	800	s	0	
Bukh D4-260	191	260	3500	4	483	1 of 12	8%	C12	300	s	0	
Bukh S270	199	270	3800	6	334	1 of 12	10%	C6	1000	s	0	
Bukh D4-300	221	300	3500	4	483	1 of 12	8%	C12	300	S	0	
Bukh D6-300	221	300	3500	6	580	1 of 12	8%	C9	800	S	0	
Bukh VGT300	221	300	3500	8	515	4 of 12	33%	C3	2000	0	0	0
Bukh D6-330	243	330	3500	6	580	1 of 12	8%	C9	800	S	0	
Bukh VGT 350	257	350	3500	8	500	4 of 12	33%	C3	2000	0	0	0
Bukh D6-370	272	370	3500	6	580	1 of 12	8%	C12	300	S	0	
Bukh VGT400	294	400	3500	8	500	2 of 12	16%	C7	1000	0	0	0
Bukh D13-400	294	400	1800	6	1520	24 of 24	100%	C1	Unlimited	S	0	
Bukh D6-435	320	435	3500	6	584	1 of 12	8%	C12	300	S	0	
Bukh VGT450	331	450	3500	8	515	2 of 12	16%	C7	1000	0	0	0
Bukh D13-450	331	450	1800	6	1520	24 of 24	100%	C1	Unlimited	S	0	
Bukh D13-500	368	500	1800	6	1520	24 of 24	100%	C1	Unlimited	S	0	
Bukh VGT500	368	500	3600	8	515	0,5 of 10	5%	C10	700	0	0	0
Bukh D13-550	404	550	1900	6	1520	24 of 24	100%	C1	Unlimited	S	0	
Bukh D13-600	411	600	1900	6	1520	8 of 12	66%	C2	5000	S	0	
Bukh D13-700	515	700	2300	6	1450	2 of 12	16%	C4	2000	S	0	
Bukh D13-800	588	800	2300	6	1560	1 of 12	8%	C9	800	S	0	

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2-Pole system	Spraypump	Double starter (2 x electrical)	Coolant heater	Ekstra Alternator (12 / 24 V)	Aircon pump	Keel cooling	Spring start	Hydraulic Start	Handstart	EPA Tier	IMO Tier	Combat mode	Front Mounted PTO	Minus 30 degrees	Minus 40 degrees
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Rating type	Rating definition	Rated power [Hour]	Hours per year	WOT use in %	
C1	Continuous Duty Commercial_1	24/24	Unlimited	100%	
C2	Continuous Duty Commercial_2	8/12	<5000	66%	
C3	Medium Continuous Commercial_1	3/12	<3000	25%	
C4	Light Duty Commercial_1	2/12	<2000	16%	
C5	Light Duty Commercial_2	2/12	<1500	20%	
C6	Special Light Duty Commercial_1	1/12	<1000	10%	
C7	Special Light Duty Commercial_2	2/12	<1000	16%	
C8	Special Light Duty Commercial_3	1/12	<1000	8%	
C9	Special Light Duty Commercial_4	1/12	<800	8%	
C10	High Speed Craft Commercial_1	0,5/10	<700	5%	
C11	High Speed Craft Commercial_2	1/12	<400	10%	
C12	High Speed Craft Commercial_3	1/12	<300	8%	

S=Standard / O=Option / C=Certified



As BUKH is always endeavoring to improve the engines, specifications mentioned in this brochure are subject to alterations without previous notice.



"Building on more than a century of experience and dedication to life and safety at sea."

Why choose a BUKH engine?

- High quality
- Robust and reliable
- SOLAS approved
- World wide service network
- Compliant with strictest exhaust emission standards
- Marine engines designed for a rough life at sea
- More than 100 years of experience with diesel engines

Certificates and approvals

Det Norske Veritas Management System Certificate DS/EN ISO 9001:2008 Det Norske Veritas EC Type-Examination Certificate Det Norske Veritas QS Certificate of Assessment - EC Det Norske Veritas Cold Start Test at Minus 40°C Certificate Det Norske Veritas Double Start Application United States Coast Guard Accepted Lifeboat/Rescue Boat Engines meeting US EPA emission requirements Russian Maritime Register of Shipping Type Approval Certificate



SOLAS approved by Det Norske Veritas Notified Body: No. 0575

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LIFEBOATS & Other Commercial Applications





FAST RESCUE BOATS & Other Commercial Applications



500-800 HP

HEAVY DUTY SOLAS & Commercial Applica

BUKH PRODUCT RANGE

BUKH A/S 6340 Krusaa, Denmark

BUKH ASIA - Sales and Service Jiangyin City 214400, China

www.bukh.dk

Please find your local distributor on our website.



YOUR CONNECTION TO THE RIGHT MACHINE BUKH 009Å5020 - R02

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BUKH powering marine safety