



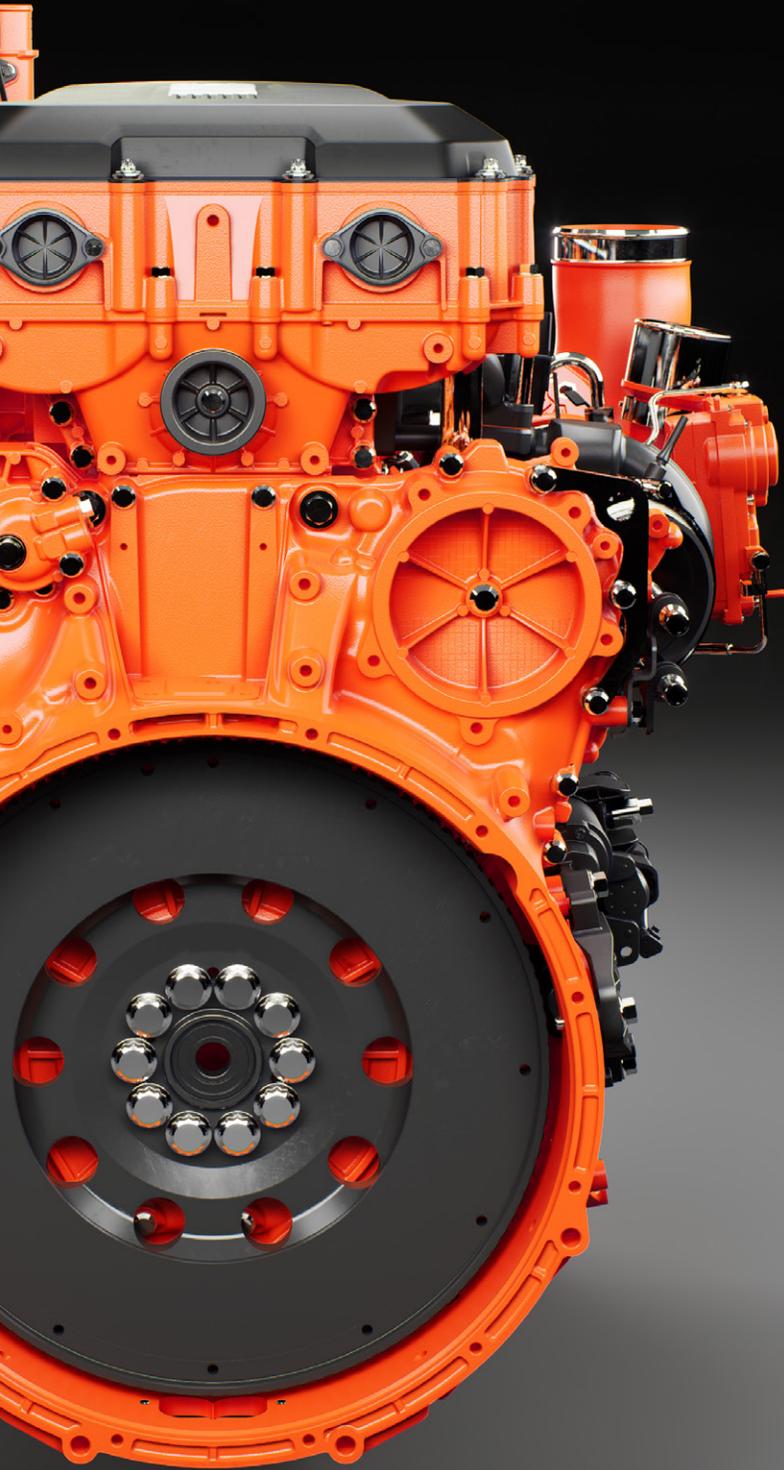
NEXT GENERATION

# SCANIA POWER SOLUTIONS PRODUCT RANGE

For industrial, power generation  
and marine applications



# SCANIA



# RELIABLE AND EFFICIENT POWER

Wherever there are substantial demands on reliability, efficiency, and environmental consideration, a Scania engine is just what you need.

Scania has manufactured engines for more than a century. Today we produce around 100,000 engines a year for trucks and buses, as well as for marine, industrial and power generation applications. Our experience and competence form the base of our state-of-the-art product range, combining excellent performance and low total cost of ownership.

To meet the needs of the future we are also continuously adding both fully electrified and hybrid-electric powertrain options to more applications – providing choices with even lower emissions and even more performance. All with road-proven reliability, and using the world's greenest heavy duty commercial transport batteries.

With outstanding parts availability and close to 2,000 dealers worldwide, assistance is always close at hand. We maximise your uptime so that you can focus on what matters – your operation.

# INDUSTRIAL ENGINE RANGE



## Engine data 11-series

### EU Stage V and Korean Tier 5 compliant engines

Engine type	ICFN 2,100 rpm		IFN 1,900 rpm	
	kW	hp	kW	hp
DC11 501A	202	275	-	-
DC11 501A	232	315	-	-
DC11 501A	257	350	-	-
DC11 501A	283	385	-	-
DC11 501A	294	400	-	-
DC11 504A	331	450	-	-
DC11 504A	-	-	368	500

### China Stage IV compliant engines

Engine type	ICFN 2,100 rpm		IFN 1,900 rpm	
	kW	hp	kW	hp
DC11 502A	202	275	-	-
DC11 502A	232	315	-	-
DC11 502A	257	350	-	-
DC11 502A	283	385	-	-
DC11 502A	294	400	-	-
DC11 503A	331	450	-	-
DC11 503A	-	-	368	500

### US Tier 4f and EU Stage V compliant engines

Engine type	ICFN 2,100 rpm		IFN 1,900 rpm	
	kW	hp	kW	hp
DC11 541A	202	275	-	-
DC11 541A	232	315	-	-
DC11 541A	257	350	-	-
DC11 541A	283	385	-	-
DC11 541A	294	400	-	-
DC11 542A	331	450	-	-
DC11 542A	-	-	368	500

### EU Stage II equivalent engines

Engine type	ICFN 2,100 rpm		IFN 1,900 rpm	
	kW	hp	kW	hp
DC11 505A	202	275	-	-
DC11 505A	232	315	-	-
DC11 505A	257	350	-	-
DC11 505A	283	385	-	-
DC11 505A	294	400	-	-
DC11 505A	331	450	-	-
DC11 505A	-	-	368	500

### Dimensions and weights of 11-litre industrial engines

Engine type	L mm (in)	W mm (in)	H mm (in)	Weight* kg (lb)
DC11A (all)	1,235 (48.6)	932 (36.7)	1,171 (46.1)	approx. 970 (2,138)

\* Excluding oil and coolant.

# Engine data 13-series

## EU Stage V and Korean Tier 5 compliant engines

Engine type	ICFN 1,800 rpm		ICFN 2,100 rpm		IFN 1,900 rpm	
	kW	hp	kW	hp	kW	hp
DC13 501A	-	-	202	275	-	-
DC13 501A	257	350	-	-	-	-
DC13 501A	283	385	283	385	-	-
DC13 501A	294	400	294	400	-	-
DC13 501A	331	450	331	450	-	-
DC13 501A	-	-	368	500	-	-
DC13 501A	-	-	405	550	-	-
DC13 501A	-	-	-	-	450	612

## China Stage IV compliant engines

Engine type	ICFN 1,800 rpm		ICFN 2,100 rpm		IFN 1,900 rpm	
	kW	hp	kW	hp	kW	hp
DC13 502A	257	350	257	350	-	-
DC13 502A	283	385	-	-	-	-
DC13 502A	294	400	294	400	-	-
DC13 502A	331	450	331	450	-	-
DC13 502A	-	-	368	500	-	-
DC13 502A	-	-	405	550	-	-
DC13 502A	-	-	-	-	450	612

## US Tier 4f and EU Stage V compliant engines

Engine type	ICFN 1,800 rpm		ICFN 2,100 rpm		IFN 1,900 rpm	
	kW	hp	kW	hp	kW	hp
DC13 541A	-	-	202	275	-	-
DC13 541A	257	350	-	-	-	-
DC13 541A	283	385	283	385	-	-
DC13 541A	294	400	294	400	-	-
DC13 541A	331	450	331	450	-	-
DC13 541A	-	-	368	500	-	-
DC13 541A	-	-	405	550	-	-
DC13 541A	-	-	-	-	450	612

## EU Stage II equivalent engines

Engine type	ICFN 2,100 rpm		IFN 1,900 rpm	
	kW	hp	kW	hp
DC13 503A	257	350	-	-
DC13 503A	283	385	-	-
DC13 503A	294	400	-	-
DC13 503A	331	450	-	-
DC13 503A	368	500	-	-
DC13 503A	405	550	-	-
DC13 503A	-	-	450	612

## Dimensions and weights of 13-litre industrial engines

Engine type	L mm (in)	W mm (in)	H mm (in)	Weight* kg (lb)
DC13A (all)	1,397 (55.0)	920 (36.2)	1,131 (44.5)	approx. 1,053 (2,321)

\* Excluding oil and coolant.

## Ratings

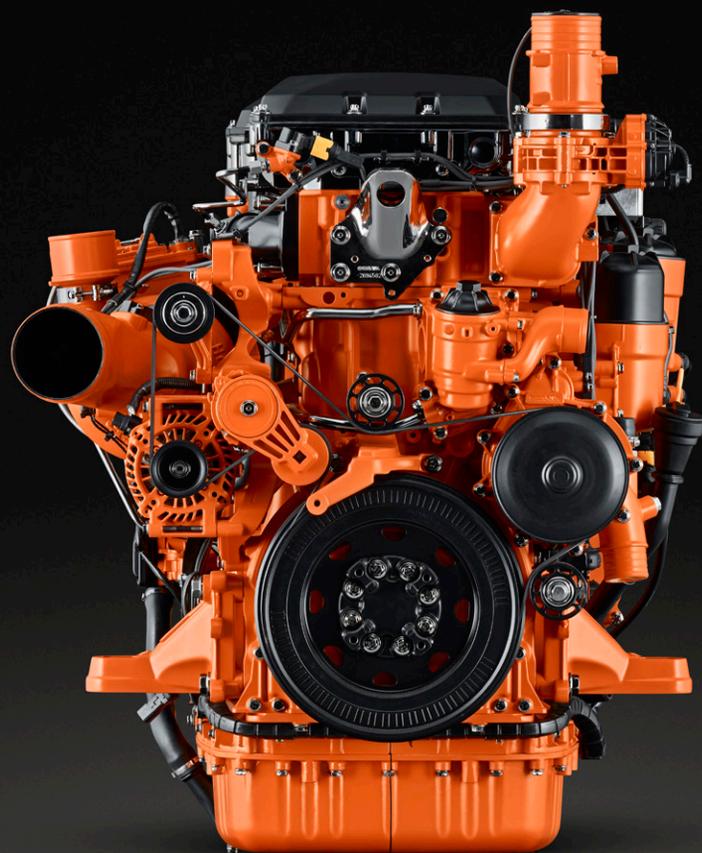
### ICFN: Continuous service

Engine speeds at 85% of rated speed or above: 100% output available for 1 h/1 h period with an average load factor of 100%.  
Engine speeds below 85% of rated speed: 100% output available for 1 h/6 h period with a max average load factor of 80%.

### IFN: Intermittent service

Rated output is available for 1 h/6 h period.  
Unlimited h/year service time at a load factor of 80%.

\* Excluding oil and coolant.



# POWER GENERATION ENGINE RANGE

## Engine data 13-series

### EU Stage V compliant engines

Engine type	1,500 rpm (50 Hz) PRP		1,800 rpm (60 Hz) PRP	
	kVA	kW	kVA	kW
DC13 505A	300	269	300	275
DC13 505A	350	312	350	318
DC13 505A	400	355	400	361
DC13 505A	450	398	450	404
DC13 505A	500	437	500	443

### China Stage IV compliant engines

Engine type	1,500 rpm (50 Hz) PRP		1,800 rpm (60 Hz) PRP	
	kVA	kW	kVA	kW
DC13 506A	300	269	300	275
DC13 506A	350	312	350	318
DC13 506A	400	355	400	361
DC13 506A	450	398	450	404
DC13 506A	500	437	500	443

### CO<sub>2</sub> optimised, non-compliant engines

Engine type	1,500 rpm (50 Hz)				1,800 rpm (60 Hz)			
	PRP		ESP		PRP		ESP	
	kVA	kW	kVA	kW	kVA	kW	kVA	kW
DC13 507A	300	269	330	295	300	275	330	301
DC13 507A	350	312	385	342	350	318	385	348
DC13 507A	400	355	440	389	400	361	440	395
DC13 507A	450	398	495	437	450	404	495	443
DC13 507A	500	437	550	479	500	443	550	485
DC13 507A	550	479	605	526	550	485	605	532
DC13 507A	600	522	660	573	600	528	660	579

### Dimensions and weights of 13-litre power generation engines

Engine type	L mm (in)	W mm (in)	H mm (in)	Weight* kg (lb)
DC13 505/506A	1,401 (55.2)	1,011 (39.8)	1,061 (41.8)	approx. 1,074 (2,368)
DC13 507A	1,400 (55.1)	1,021 (40.2)	1,200 (47.2)	approx. 1,069 (2,357)

\* Excluding oil and coolant.

### Ratings

#### PRP: Prime power

For continuous operation and unlimited yearly operating time at varying load. Max mean load factor of 70% of rated power over 24 h of operation. 1 h/12 h period of overload to 110% load. Max 25 h accumulated service time above 100% load per year.

#### ESP: Maximum stand-by power

For operation under normal varying load during a power outage. Not overloadable. Max mean load factor of 70% of rated power over 24 h of operation. Not for applications intended for more than 200 h/year.

# MARINE ENGINE RANGE

## Engine data 13-series

### Marine propulsion engines

#### IMO Tier 3 compliant engines

Engines with heat exchanger

Engine type	ICFN 1,800 rpm		ICFN 2,100 rpm	
	kW	hp	kW	hp
DI13 511M	257	350	-	-
DI13 511M	294	400	-	-
DI13 511M	331	450	-	-
DI13 511M	368	500	368	500
DI13 511M	405	550	405	550
DI13 511M	441	600	441	600

#### Engines with keel cooling

Engine type	ICFN 1,800 rpm		ICFN 2,100 rpm	
	kW	hp	kW	hp
DI13 512M	257	350	-	-
DI13 512M	294	400	-	-
DI13 512M	331	450	-	-
DI13 512M	368	500	368	500
DI13 512M	405	550	405	550
DI13 512M	441	600	441	600

#### EU RCD Stage II compliant engines

Engines with heat exchanger

Engine type	Pleasure craft 2,300 rpm	
	kW	hp
DI13 502M	588	800
DI13 502M	662	900
DI13 502M	699	950
DI13 510M	588	800
DI13 510M	699	950
DI13 510M	736	1,000
DI13 510M	772	1,050

## IMO Tier 2 compliant engines

Engines with heat exchanger

Engine type	ICFN 1,800 rpm		ICFN 2,100 rpm		IFN 2,100 rpm	
	kW	hp	kW	hp	kW	hp
DI13 501M	294	400	-	-	-	-
DI13 501M	331	450	-	-	-	-
DI13 501M	368	500	-	-	-	-
DI13 501M	405	550	-	-	-	-
DI13 501M	441	600	-	-	-	-
DI13 503M	-	-	331	450	-	-
DI13 503M	-	-	368	500	-	-
DI13 503M	-	-	405	550	-	-
DI13 503M	-	-	441	600	-	-
DI13 503M	-	-	-	-	478	650
DI13 506M	-	-	-	-	441	600
DI13 506M	-	-	-	-	478	650
DI13 506M	-	-	-	-	515	700
DI13 506M	-	-	-	-	552	750

Engine type	Patrol craft long 2,300 rpm		Patrol craft short 2,300 rpm		Pleasure craft 2,300 rpm	
	kW	hp	kW	hp	kW	hp
DI13 507M	552	750	-	-	-	-
DI13 507M	588	800	-	-	-	-
DI13 507M	625	850	-	-	-	-
DI13 508M	552	750	-	-	-	-
DI13 508M	625	850	-	-	-	-
DI13 508M	662	900	-	-	-	-
DI13 508M	699	950	-	-	-	-
DI13 509M	-	-	699	950	-	-
DI13 509M	-	-	736	1000	-	-
DI13 509M	-	-	772	1050	-	-
DI13 510M	-	-	-	-	588	800
DI13 510M	-	-	-	-	699	950
DI13 510M	-	-	-	-	736	1,000
DI13 510M	-	-	-	-	772	1,050

Engines with keel cooling

Engine type	IFN 2,100 rpm	
	kW	hp
DI13 516M	441	600
DI13 516M	478	650
DI13 516M	515	700
DI13 516M	552	750

## US Tier 3 compliant engines

Engines with heat exchanger

Engine type	ICFN 1,800 rpm		ICFN 2,100 rpm		IFN 2,100 rpm	
	kW	hp	kW	hp	kW	hp
DI13 501M	294	400	-	-	-	-
DI13 501M	331	450	-	-	-	-
DI13 501M	368	500	-	-	-	-
DI13 501M	405	550	-	-	-	-
DI13 501M	441	600	-	-	-	-
DI13 503M	-	-	331	450	-	-
DI13 503M	-	-	368	500	-	-
DI13 503M	-	-	405	550	-	-
DI13 503M	-	-	441	600	-	-
DI13 503M	-	-	-	-	478	650
DI13 504M	-	-	-	-	460	625
DI13 504M	-	-	-	-	478	650
DI13 504M	-	-	-	-	515	700
DI13 504M	-	-	-	-	552	750

Engine type	Patrol craft long 2,300 rpm		Pleasure craft 2,300 rpm	
	kW	hp	kW	hp
DI13 502M	-	-	588	800
DI13 502M	-	-	662	900
DI13 502M	-	-	699	950
DI13 505M	552	750	-	-
DI13 505M	588	800	-	-



## Ratings

### ICFN: Continuous service

Rated output is available 1 h/1 h. Unlimited h/year service time at a load factor of 100%.

### IFN: Intermittent service

Intended for intermittent use where rated power is available for 1 h/3 h period. Accumulated load factor must not exceed 80% of rated power. Unlimited h/year service time.

### Patrol craft long

Intended for intermittent use where rated power is available for 1 h/6 h period. Between full load operations, the engine rpm must be reduced by at least 10% from the max obtained rpm. Accumulated total service time max 2,000 h/year.

### Patrol craft short

Intended for intermittent use where rated power is available for 1 h/12 h period. Between full load operations, the engine rpm must be reduced by at least 10% from the max obtained rpm. Accumulated total service time max 1,200 h/year.

### Pleasure craft

Intended for intermittent use where rated power is available 1 h/20 h period. Accumulated load factor must not exceed 50% of rated power. Accumulated total service time max 500 h/year.



## Marine auxiliary engines

### IMO Tier 3 compliant engines

Engines with heat exchanger

Engine type	1,500 rpm PRP	1,800 rpm PRP
	kW	kW
DI13 521M	301	344
DI13 521M	344	387
DI13 521M	373	373
DI13 521M	426	426
DI13 521M	468	468

### Engines with keel cooling

Engine type	1,500 rpm PRP	1,800 rpm PRP
	kW	kW
DI13 522M	301	344
DI13 522M	344	387
DI13 522M	373	373
DI13 522M	426	426

### IMO Tier 2 compliant engines

Engines with heat exchanger / with keel cooling

Engine type	1,500 rpm PRP	1,800 rpm PRP
	kW	kW
DI13 520M	301	344
DI13 520M	344	387
DI13 520M	373	373
DI13 520M	426	468
DI13 520M	511	511
DI13 520M	511	553

## Ratings

### PRP: Prime power

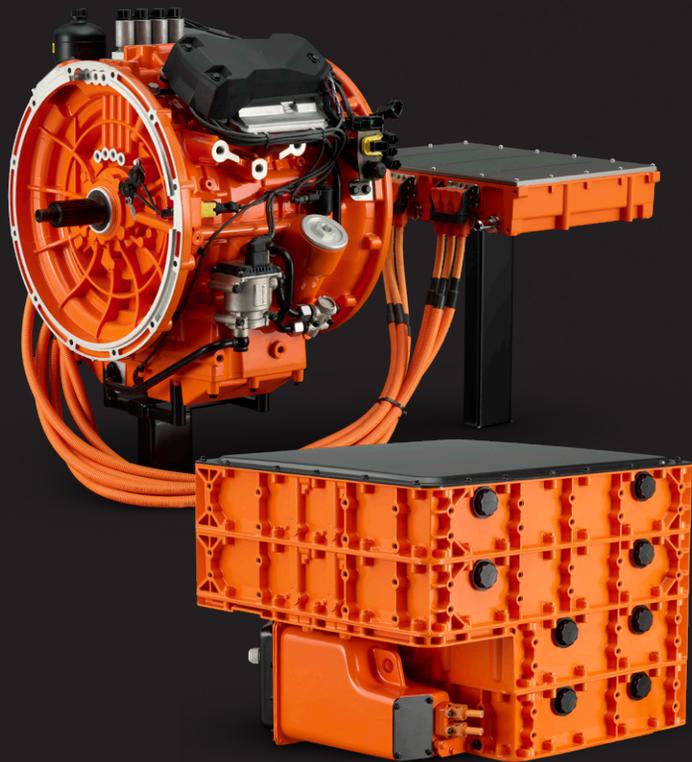
For continuous operation and unlimited yearly operating time at varying load. Max mean load factor of 70% of rated power over 24 h of operation. 1 h/12 h period of overload to 110% load. Max 25 h accumulated service time above 100% load per year.

### Dimensions and weights of 13-litre marine engines

Engine type	L mm (in)	W mm (in)	H mm (in)	Weight* kg (lb)
All	1,489 (58.6)	994 (39.1)	1,041 (41.0)	approx. 1,295 (2,855)

\* Excluding oil and coolant.

# ELECTRIFIED POWER SYSTEMS



## Electric machine

For hybrid or fully electric use

Type designation	kW continuous*	
	2100 rpm	1400 rpm
EM 501A (industrial)	150 kW	210 kW
EM 502A (industrial)	180 kW	240 kW
EM 503A (industrial)	200 kW	270 kW
EM 505A (industrial)	230 kW	295 kW
EM 501M (marine)	150 kW	210 kW
EM 502M (marine)	180 kW	240 kW
EM 503M (marine)	200 kW	270kW
EM 505M (marine)	230 kW	295 kW

\* At nominal voltage (650 V).

## Dimensions and weight of electric machine

Type designation	L mm (in)	W mm (in)	H mm (in)	Weight kg (lb)
All	495 (19.5)	660 (26.0)	705 (27.8)	approx. 250 (551)

## Battery packs

Lithium ion NMC/graphite technology including Scania in-house Battery Management System. The electric performance specifications apply at nominal voltage 650 V DC and upper limits based on beginning of life @SOH 100%. Total values depend on usable energy factor and SOC.

Type designation	Installed energy	Capacity	C-Rate
	kWh	Ah	Discharge/Charge
B8 408	100	157	up to 1.6/1.3
B8 413	200	314	up to 1.6/1.3

## Dimensions and weights of battery packs

Type designation	L mm (in)	W mm (in)	H mm (in)	Weight kg (lb)
B8 408	897 (35.3)	775 (30.5)	636 (25.0)	620 (1,367)
B8 413	1,597 (62.9)	775 (30.5)	636 (25.0)	1,150 (2,535)



SCANIA POWER SOLUTIONS PRODUCT RANGE

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