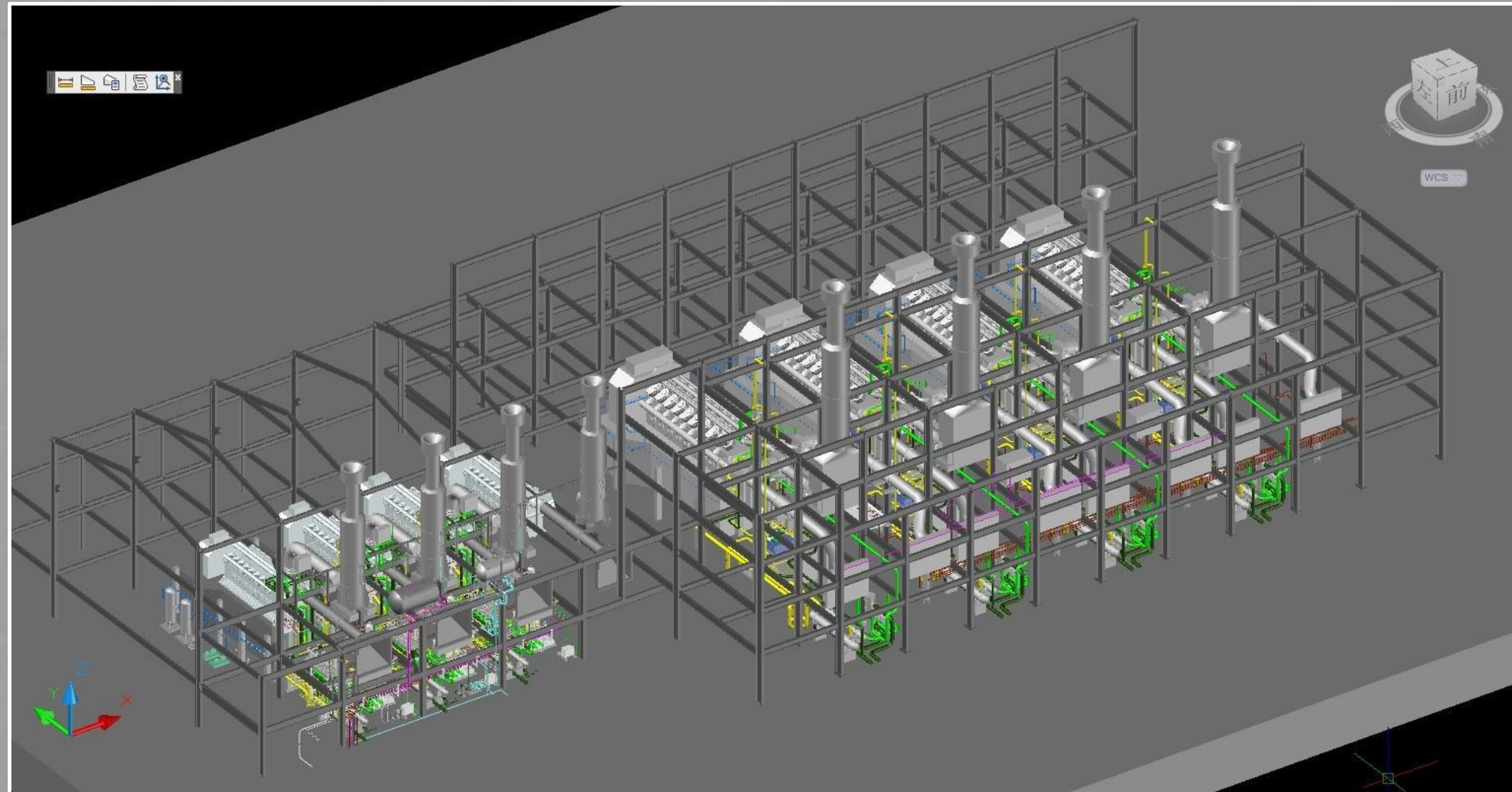


PDV positions itself on the high-end international power plant market as an enterprise offering only excellent products and impeccable service.



MAN-PIELSTICK 18PC4-2B 21,900KW
8 SETS
READYMADE



ENGINE DATA:		
□	Power Of The Engine (At Crankshaft)	22,500 kW _m
□	Cylinder Bore	570 mm
□	Piston Stroke	660 mm
□	Engine Speed	750 rpm
□	Piston Speed	9.42 m/s
□	Maximum Firing Pressure	15.0MPa
□	Power Per Cylinder	1,250 kW/cyl.
□	Suitable Fuel	180-700 cst/50°C
□	Fuel Consumption (5% tolerance)	176 g/kWh, ISO



The stator frame is a rigid, welded steel structure construction. The stator core is built of thin electric sheet steel laminations which are insulated on both sides with heat-resistant inorganic resin. The radial cooling ducts in the stator core insure uniform and effective cooling of the stator.

The rotor consists of a forged steel shaft, a hub and sheet steel poles fixed on the hub. The pole laminations are pressed together with steel bars fixed to the end plates.

The windings, epoxy resin impregnated, are provided with very strong bracing which withstands all expected mechanical and electrical shocks and vibrations.

Engine-independent, self lubricated bearing design, to avoid possible lube oil contamination by the engine.

The alternator is self-ventilated and needs no external forced air flow. The surrounding air is used for cooling. The cooling air is drawn in through air filters and blown out to the surrounding environment.

AC GENERATOR DATA:	
□ Brand	ALSTOM
□ Description	Synchronous Generator
□ Duty Type	Continuous
□ Applicable Standard	IEC
□ Rated Output	27,350 kVA
□ Rated Voltage	11 kV
□ Frequency	50 Hz
□ Power Factor	0.8
□ Number Of Identical Units	8
□ Protection	IP23
□ Cooling Method	IC0A1
□ Number Of Bearings	1
□ Temperature Rise	Class F
□ Insulation	Class F

PC4.2B

Colt-Pielstick PA4.2B Data

Configuration	Vee Only
Bore	570 mm
Stroke	660 mm

Engine Version		60 Hz	Propulsion
Cylinder	nos	10-12-16-18	
Output Range	kW	12,500-22,500	13,250-23,850
Speed	rpm	400	400/430
Mean Eff. Pressure	bar	22.3	22.3/22.0
Mean Piston Speed	m/s	8.8	8.8/9.5
Output/cyl	kW (hp)	1250 (1676)	1250 (1676)/ 1325 (1777)

Continuous Rating (MCR)

Engine Type Cyl.	400 rpm		430 rpm	
	Eng. kW	Gen. kW*	kW	hp
10V	12,500	12,125	13,250	17,761
12V	15,000	14,550	15,900	21,313
16V	20,000	19,400	21,200	28,418
18V	22,500	21,825	23,850	31,970

*Based on nominal generator efficiencies of 97%.

Engine Dimensions (mm)

Cyl.	A	B	C	D	E	F	Tons** (metric)
10V*	9517	6580	5350	5475	2290	750	207
12V	9599	7560	5350	6476	2290	750	239
16V	11,795	9520	5690	6396	2290	750	302
18V	13,370	10,500	5690	6396	2290	750	330

*Engine depicted is a single turbocharger equipped 10 cylinder. Overall lengths vary with each turbocharger configuration. All ratings subject to factory approved application.

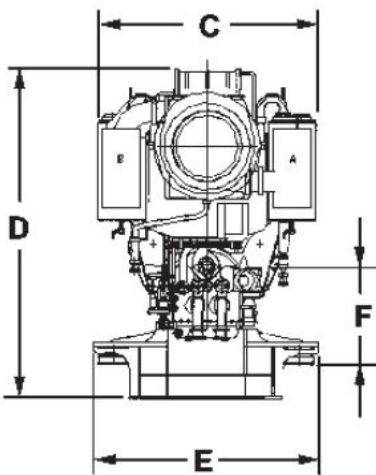
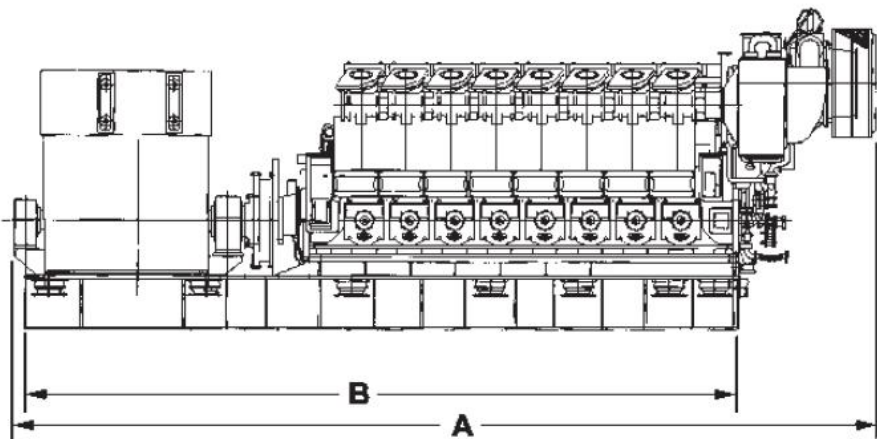
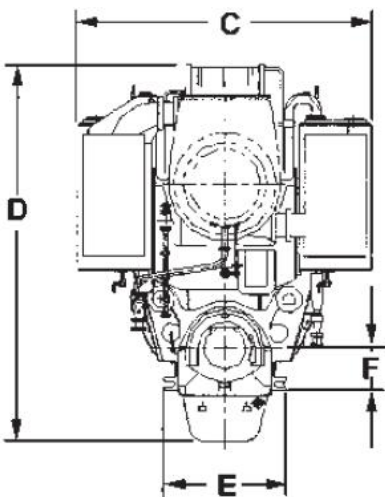
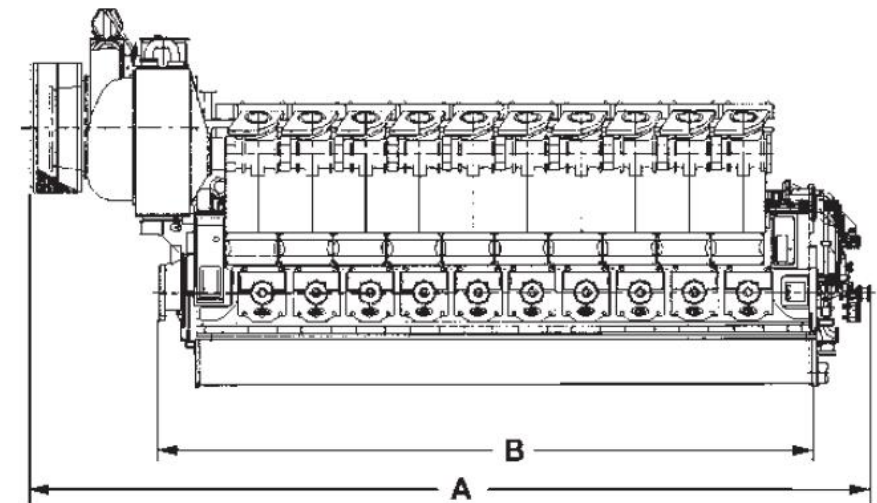
**Weight (dry) without flywheel.

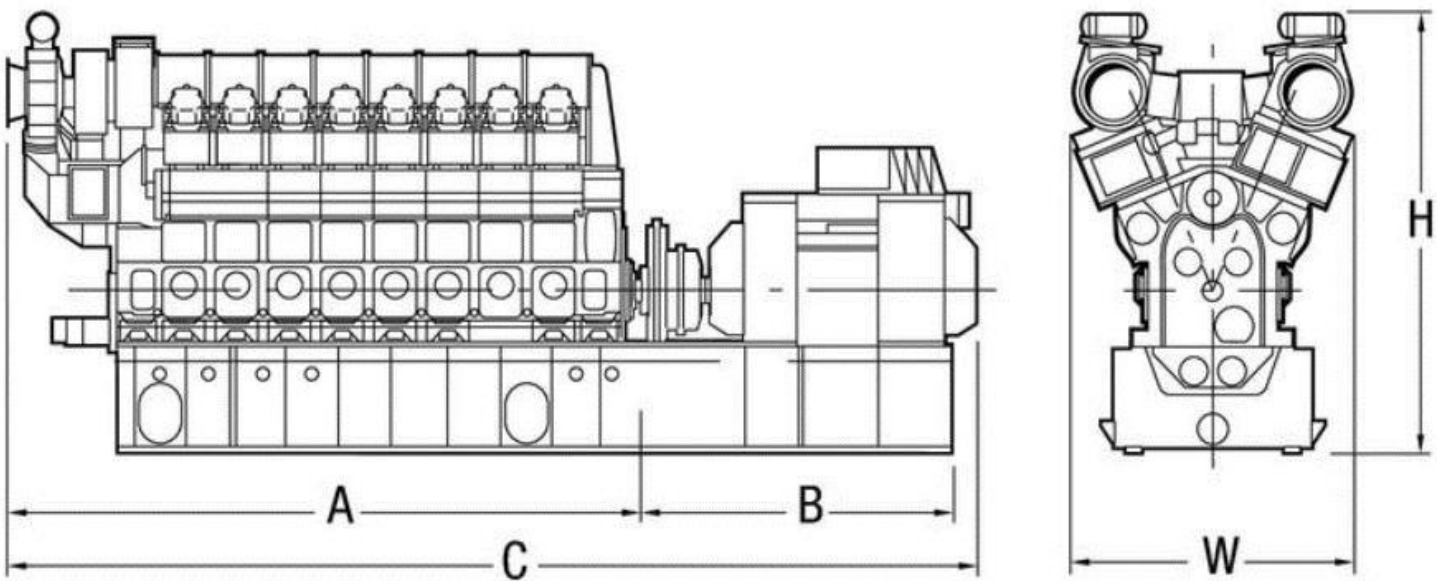
Generator Set Dimensions (mm)

Cyl.	A	B	C	D	E	F	Tons** (metric)
10V	13,615	6580	5350	5436	3962	1651	265
12V	14,910	7560	5350	5436	3962	1651	307
16V	16,990	9520	5690	5436	3962	1651	381
18V	18,650	10,500	5690	5436	3962	1651	416

*Dimensions and weights vary depending on generator applied, and are subject to changes without prior notice.

**Weight (dry).





The generating sets are designed for power generation in continuous, durable and safe operation. The area of application comprises ranges from supplies of basic loads in public mains or coverage of peak loads to isolated applications for industrial consumers.

Engine and alternator are mounted on two separate steel foundation frame. The engine is resiliently mounted on the frame by rubber elements, whereas the alternator is rigidly mounted. Engine and alternator are coupled placed rigidly. The steel foundation frame is placed rigidly and grouted on a simple concrete foundation plate.

ENGINE AND GENERATOR SET:	
□ Rated Capacity	21,900 kW
□ Engine Speed	428 rpm
□ Frequency	50 Hz
□ Rated Voltage	11 kV
□ Rated Current	1504 A
□ Dimensions	
Overall Length (L)	18,650 mm
Overall Width without Platform (B)	3,962 mm
Overall Height (H)	5,436 mm
□ Weight (dry condition)	390,000 kg+5%

It is the unit with the highest output, the most stable operation and the lowest fuel consumption in the medium-stroke diesel engine, which is widely used in military and Marine.

These eight units have only been in operation for 20,000-30,000 hours and have been overhauled and upgraded to improve performance indicators.



