



江苏四达动力机械集团有限公司

JIANGSU SIDA POWER MACHANICAL GROUP CO.,LTD.



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中文网站



English Website



JIANGSU SIDA POWER MACHANICAL GROUP CO.,LTD.



四达智能车间，为您打造强劲的动力之“芯”

SIDA Intelligent Workshop, Creating a Strong Power “Heart” for You



智能车间
Intelligent workshop



机块翻转机器人
Cylinder block flipping robot



缸盖分装
Cylinder head assembly



活塞连杆分装线
Piston connecting rod assembly line



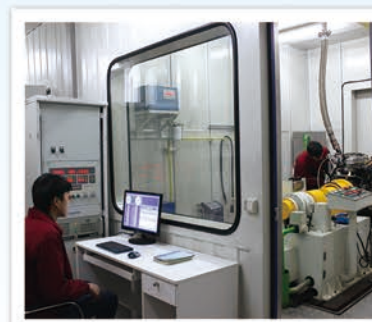
自动拧紧机
Automatic tightening machine



自动传送链
Automatic conveyor chain



信息采集平台
Information collection platform



产品测试平台
Product testing platform



测试台架
Test bench



总装线
assembly line



自动装配生产线
Automatic assembly production line



能量提升系统
Energy Boosting System

国内多缸小柴发动机专业制造商，致力于为客户提供高品质、高性价比产品

A professional manufacturer of multi cylinder diesel engines in China, committed to providing customers with high-quality and cost-effective products

- 历史沿革: 公司始建于1984年，脱胎于中国一汽无锡柴油机厂
- 地理位置: 座落于美丽的太湖之滨、民族工商业发祥地--江苏省无锡市
- 企业性质: 民营股份制企业，2008年4月完成国有企业股份制改革
- 产业规模: 集柴油机产业、农业/物流装备产业、汽车电商为一体的省级集团公司，具有年产20万台发动机。
公司占地400亩，员工近千人，工程技术人员百余名，拥有江苏省省级研究生工作站
- 公司概况: 发动机产业年产值10亿元，重工产业年产值2亿元
- 经营产值:
 - Historical evolution: The company was founded in 1984 and originated from FAW Wuxi Diesel Engine Factory in China
 - Location: Located in Wuxi, Jiangsu Province, the beautiful bank of the Taihu Lake and the birthplace of national industry and commerce
 - Enterprise nature: Private joint-stock enterprise, finished state-owned joint-stock reform in April 2008
 - Industry scale: A provincial-level group company integrating diesel engine industry, agriculture/logistics equipment industry, with annual production capacity of 200000 diesel engines
 - Company Overview: The company covers an area of 400 acres, with nearly a thousand employees and over a hundred engineering and technical staff. It has a provincial-level graduate workstation in Jiangsu Province
 - Operating output value: The annual output value of the engine industry is 1 billion CNY, and the annual output value of other industries is 200 million CNY



四达动力



四达重工



电商平台

四达动力产品型谱 SIDA product type spectrum

非道路 固定机组 Non road fixed unit

BW系列



适用12-35KW 发电机组/水泵机组配套动力
Suitable for supporting power of 12-35KW generator/water pump units

DE系列



适用25-75KW 发电机组/水泵机组配套动力
Suitable for supporting power of 25-75KW generator/water pump units

BM系列



适用50-100KW 发电机组/水泵机组配套动力
Suitable for supporting power of 50-100KW generator/water pump units

4JDE系列



适用12-75KW 发电机组/水泵机组配套动力
Suitable for supporting power of 12-75KW generator/water pump units

4FWZL系列



适用88-130KW 发电机组/水泵机组配套动力
Suitable for supporting power of 88-130KW generator/water pump units

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电控共轨、单体泵、VE泵、机械泵，四种技术路线，种类丰富，品系完善，全面满足车用国六、非道路国四排放要求。绿色环保，经济省油。

Here are four technical routes, including electronic control common rail, individual pump, VE pump, and mechanical pump, with a rich variety and complete product line, fully meeting the emission requirements of on-road National VI and non road National IV for vehicles. Green and environmentally friendly, economical and fuel-efficient.

四达动力 一汽技术
东风监制 品质卓越

Sida Power, FAW Technology
DFAC Supervision, Excellent Quality



四达发电机组参数

Generator set parameters



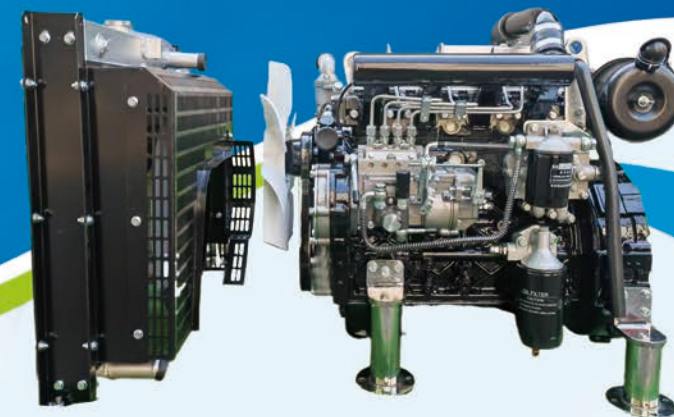
4BW Engine Main Technical Parameter

Item \ Model		490（4AW）		490（4BW）	
Type		Four stroke, Water-cooling, Line			
Combustion type		Direction			
Cylinder×Storke（mm）		90×100			
Displacement（L）		2.55			
Ratio		19.1:1			
Fire order		1-3-4-2（First cylinder beside the fan）			
Inlet		Nature			
Rated power/Speed（kW/r/min）		17/1500	21/1500	22/1500	25/1800
Max torque（Nm/r/min）		—			
Max no-load speed（r/min）		≤1575			≤1890
Min no-load speed（r/min）		≤750			
Rated	Indicated mean effective（kPa）	/			
	Fuel consumption（g/(kWh)）	≤185			≤195
	Oil consumption（g/(kWh)）	≤1.6			
	Exhaust temperature（℃）	≤540			
Crankshaft rotation direction		Anti-clock			
Method of lubrication		Pressure & Splash			
Start type		Electric			
L*W*H（Including water tank）		1002×558×748			
Weight(Kg)		250			
Flywheel interface		4#7.5			



四达发电机组参数

Generator set parameters



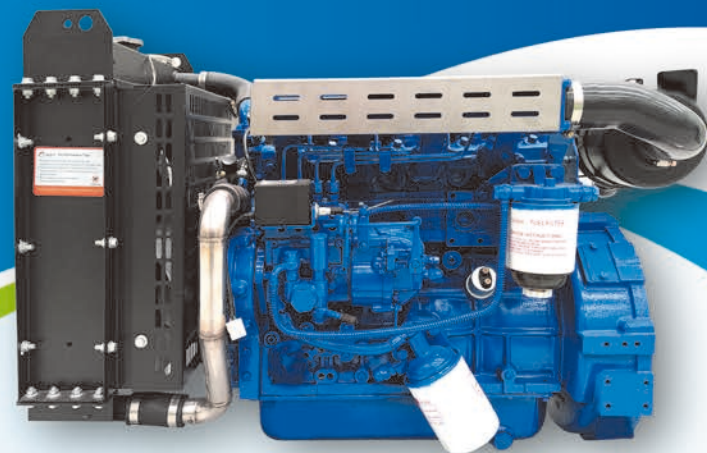
4BWZ Engine Main Technical Parameter

Item \ Model		490Z(4BWZ)	
Type		Four stroke, Water-cooling, Line	
Combustion type		Direction	
Cylinder×Storke (mm)		90×100	
Displacement (L)		2.55	
Ratio		19.1:1	
Fire order		1-3-4-2 (First cylinder beside the fan)	
Inlet		Turbo	
Rated power/Speed (kW/r/min)		30/1500	35/1800
Max torque (Nm/r/min)		—	
Max no-load speed (r/min)		≤1575	≤1890
Min no-load speed (r/min)		≤750	
Rated	Indicated mean effective (kPa)	/	
	Fuel consumption (g/(kWh))	≤210	≤220
	Oil consumption (g/(kWh))	≤1.6	
	Exhaust temperature (°C)	≤470	
Crankshaft rotation direction		Anti-clock	
Method of lubrication		Pressure & Splash	
Start type		Electric	
L*W*H (Including water tank)		1061×558×781	
Weight(Kg)		310	
Flywheel interface		4#7.5	



四达发电机组参数

Generator set parameters



4DW Engine Main Technical Parameter

Item		Model			493(4DW)
Type					Four stroke, Water-cooling, Line
Combustion type					Direction
Cylinder×Storke (mm)					93×102
Displacement (L)					2.77
Ratio					19.1:1
Fire order					1-3-4-2 (First cylinder beside the fan)
Inlet					Nature
Rated power/Speed (kW/r/min)		25/1500	28/1500	30/1800	
Max torque (Nm/r/min)					—
Max no-load speed (r/min)		≤1575	≤1575	≤1890	
Min no-load speed (r/min)					≤750
Rated	Indicated mean effective (kPa)				/
	Fuel consumption (g/(kWh))	≤210	≤210	≤220	
	Oil consumption (g/(kWh))				≤1.6
	Exhaust temperature (°C)				≤540
Crankshaft rotation direction					Anti-clock
Method of lubrication					Pressure & Splash
Start type					Electric
L*W*H (Including water tank)					1002×558×748
Weight(Kg)					250
Flywheel interface					4#7.5



四达发电机组参数

Generator set parameters



4DEZ Engine Main Technical Parameter

Item		Model		493Z (4DEZ)
Type				Four stroke, Water-cooling, Line
Combustion type				Direction
Cylinder×Storke (mm)				93×102
Displacement (L)				2.77
Ratio				19.1:1
Fire order				1-3-4-2 (First cylinder beside the fan)
Inlet		Turbo	Turbo	
Rated power/Speed (kW/r/min)		38/1500	44/1800	
Max torque (Nm/r/min)				—
Max no-load speed (r/min)		≤1575	≤1890	
Min no-load speed (r/min)				≤750
Rated	Indicated mean effective (kPa)			/
	Fuel consumption (g/(kWh))	≤235	≤240	
	Oil consumption (g/(kWh))			≤1.6
	Exhaust temperature (°C)			≤470
Crankshaft rotation direction				Anti-clock
Method of lubrication				Pressure & Splash
Start type				Electric
L*W*H (Including water tank)				1061×558×781
Weight(Kg)				310
Flywheel interface				4#7.5



四达发电机组参数

Generator set parameters

4BMZ Engine Main Technical Parameter

Item \ Model		4BMZ(4102Z)		4BMZ1(4102Z1)		4BMZL(4102ZL)	
Type		Four stroke, Water-cooling, Line					
Combustion type		Direction					
Cylinder×Storke		102×115					
Displacement		3.717					
Ratio		17.5					
Fire order		1-3-4-2 (First cylinder beside the fan)					
Inlet		Turbo				Turbocharged inter-cooling	
Rated		50/1500	55/1800	65/1500	75/1800	80/1500	85/1800
Max torque		—					
Max no-load speed		≤1575	≤1890	≤1575	≤1890	≤1575	≤1890
Min no-load speed		≤750					
Rated	Indicated mean effective (kPa)	/					
	Fuel consumption (g/(kWh))	≤245					
	Oil consumption (g/(kWh))	≤1.6					
	Exhaust temperature (°C)	≤540					
Crankshaft		Anti-clock					
Method of		Pressure & Splash					
Start type		Electric					
L*W*H (Including water tank)		1130×580×808					
Weight (Kg)		390				400	
Flywheel interface		3#11.5					



四达发电机组参数

Generator set parameters

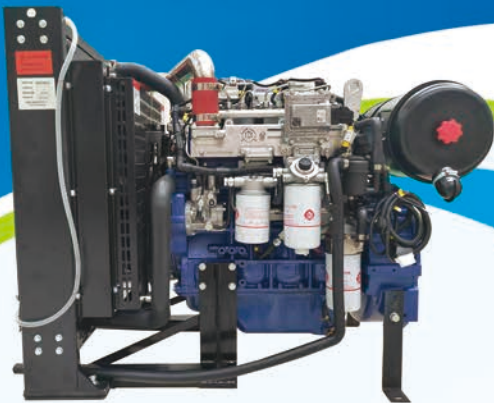
4JDE Engine Main Technical Parameter

Item		Model	4JDE17/20A	4JDE21/25A	4JDE22	4JDE25/30A	4JDE28	4JDE30/35A	4JDE38/44A	4JDE48/55A
Type			Four stroke, Water-cooling, Line							
Combustion type			Direction							
Cylinder×Storke			90×100			93×102				
Displacement (L)			2.55			2.77				
Ratio			19.1:1							
Fire order			1-3-4-2 (First cylinder beside the fan)							
Inlet			Nature	Nature	Nature	Nature	Nature	Turbo	Turbo	Turbo charged inter-cooler
Rated power/Speed (kW/r/min)			17/1500 20/1800	21/1500 25/1800	22/1500	25/1500 30/1800	28/1500	30/1500 35/1800	38/1500 44/1800	48/1500 55/1800
Max torque (Nm/r/min)			—							
Max no-load speed (r/min)			≤1575							
Min no-load speed (r/min)			≤750							
Rated	Indicated mean effective (kPa)	/								
	Fuel consumption (g/(kWh))	≤195			≤210			≤235		
	Oil consumption (g/(kWh))	≤1.6								
	Exhaust temperature (°C)	≤540			≤540			≤470		
Crankshaft rotation			Anti-clock							
Method of lubrication			Pressure & Splash							
Start type			Electric							
L*W*H			1002×558×748			1002×558×748		1061×558×781		
Weight (Including water tank)			250kg			250kg		310kg		320kg
Flywheel interface			4#7.5							



四达发电机组参数

Generator set parameters



4FWZ Engine Main Technical Parameter

Item \ Model		4FWZL		4FWZL1	
Type		Four stroke, Water-cooling, Line , Common rail			
Combustion type		Direction			
Cylinder×Storke (mm)		100×125			
Displacement (L)		3.6			
Ratio		17.5: 1			
Fire order		1-3-4-2 (First cylinder beside the fan)			
Inlet		Turbo			
Rated power/Speed (kW/r/min)		88/1500	110/1800	110/1500	120/1800
Max torque (Nm/r/min)		—			
Max no-load speed (r/min)		≤1575	≤1890	≤1575	≤1890
Min no-load speed (r/min)		≤750			
Rated	Indicated mean effective (kPa)	/			
	Fuel consumption (g/(kWh))	≤210			
	Oil consumption (g/(kWh))	≤1.6			
	Exhaust temperature (°C)	≤540			
Crankshaft rotation direction		Anti-clock			
Method of lubrication		Pressure & Splash			
Start type		Electric			
L*W*H (Including water tank)		1018×687×871			
Weight (Kg)		370			
Flywheel interface		3#11.5			



四达水泵机组参数

Water pump units parameters



SIDA Power For Water Pump
Engine Main Technical Parameter

Mod Ite	4BW(490)				4DW (493)		4DWZ (493Z)		4DWZ (493Z)		4BMZ (4102Z)				4BMZL (4102ZL)		4FWZL
Type	Four stroke, Water-cooling, Line																
Cylinder× Storke (mm)	90×100				93×102						102×118						
Displacement (L)	2.55				2.77						3.717						
Ratio	18:1									17.5:1							
Fire order	1-3-4-2 (First cylinder beside the fan)																
Inlet	Nature	Nature	Nature	Nature	Nature	Nature	Turbo	Turbo	TurboInt ercooling	Turbo	Turbo	Turbo	Turbo	TurboInt ercooling	TurboInt ercooling		
Rated power/ Speed (kW/r/min)	24/3000	25/3000	33/3000	35/3000	42/3000	45/3000	58/3000	66/3000	75/3000	70/3000	85/3000	90/3000	92/3000	100/3000	135/3000		
Max torque (Nm/r/min)	170/2000				190/2000		260/2000			320/2000						430/2000	
Max no-load speed (r/min)	≤3250																
Min no-load speed (r/min)	≤800																
Fuel consumption (g/(kWh))	≤260						≤240			≤245						≤230	
Oil consumption (g/(kWh))	≤0.3									≤0.4							
Exhaust temperature (°C)	≤500						≤570		≤530		≤580				≤550		
Crankshaft rotation direction (View from power layout)	Anti-clock																
Method of lubrication	Pressure & Splash																
Start type	Electric																



服务理念 Service idea

新四达“心”服务
New SIDA “Heart” service

工作方针 Work policy

创新、务实、规范、提升
Innovation、Pragmatism、Standardization、Improvement

服务工作准则 Service Work Guidelines

服务响应时间：一般地区12小时服务到位，偏远地区24小时服务到位

Service response time: 12 hours of service in general areas and 24 hours of service in remote areas

站内服务：1小时内安排处理，并及时向客户反馈情况

On site service: Arrange for processing within 1 hour and provide timely feedback to customers on the situation

外出服务：客户报修后10分钟内完成派工

Outgoing service: Complete the dispatch within 10 minutes after the customer reports the repair and provide timely feedback to the customer on the situation

完工时间：一般故障不超过4小时，严重故障不超过48小时

Completion time: General faults shall not exceed 4 hours, and serious faults shall not exceed 48 hours

服务跟踪：完工后24小时内

Service tracking: Within 24 hours after completion

技术服务：大客户上门技术培训和指导

Technical services: Provide on-site technical training and guidance for major clients

服务保障机制 Service guarantee mechanism

首问负责制：谁受理，谁落实

First inquiry responsibility system: who accepts and who implements it

维修负责制：谁服务，谁跟踪

Maintenance responsibility system: whoever serves, who tracks

柴油机保养小贴士 Diesel engine maintenance tips

一、起动前检查Pre start inspection

每天开始工作前不要直接起动，检查机油和水箱中冷却液的液面高度符合要求后再起动。标准机油高度为机油标尺上下刻度线中间偏上。标准冷却液高度为水箱加注口底部，与水箱箱体上平面齐平。机油和冷却液缺失会导致发动机出现报瓦和高温拉缸的严重故障。

Do not start directly before starting work every day. Check that the oil and coolant levels in the water tank meet the requirements before starting. The standard oil height is above the middle of the upper and lower markings on the oil dipstick. The standard coolant height is at the bottom of the water tank filling port, flush with the upper plane of the water tank body. Lack of oil and coolant can lead to serious engine malfunctions such as engine failure and high-temperature cylinder pulling.

二、使用正确的机油、冷却液及柴油Use the correct engine oil, coolant, and diesel fuel

自然吸气发动机使用CF-4以上机油、带涡轮增压发动机必须使用CH-4级别以上机油。加注的冷却水一般要求使用防冻液，如非防冻液一定要加软化水，比如纯净水或者烧开冷却后的水。河水、井水、自来水等硬水绝对不能使用，长期使用将导致水箱或机体水道形成水垢，影响冷却效果。

Natural aspirated engines must use CF-4 or above engine oil, and turbocharged engines must use CH-4 or above engine oil. The added cooling water generally requires the use of antifreeze. If it is not antifreeze, softened water, such as purified water or boiled and cooled water, must be added. Hard water such as river water, well water, and tap water should never be used. Long term use will cause scale to form in the water tank or body waterway, affecting the cooling effect.

需使用正规符合排放法规的柴油，并需保证燃油加注过程的清洁度。如特殊情况可将购买后的柴油晾放一夜，加注时将上部柴油进行加注，底部柴油均不能使用。否则将造成油泵、喷油器卡死或者无力、冒烟故障。

Regular diesel that complies with emission regulations must be used, and the cleanliness of the fuel filling process must be ensured. If there are special circumstances, the purchased diesel can be left to air overnight, and the upper diesel can be added during refueling. The bottom diesel cannot be used. Otherwise, it will cause the oil pump and injector to jam or become weak, or smoke.

三、常规使用及保养Routine use and maintenance

1、请勿长时间不带负载运转磨合，发动机在出厂时已进行磨合和性能调试，建议使用前50小时带80%左右负载进行磨合使用。

Do not run the engine without load for a long time. The engine has been run in and performance tested before leaving the factory. It is recommended to run in with about 80% load for the first 50 hours of use.

2、冷机起动后，建议低负载运转1-2分钟，保证发动机的润滑系统有效运转。如带涡轮增压发动机，建议低负载时间延长至3-5分钟。

After starting the cold engine, it is recommended to run it at low load for 1-2 minutes to ensure the effective operation of the engine's lubrication system. If equipped with a turbocharged engine, it is recommended to extend the low load time to 3-5 minutes.

3、避免全速全负荷运转后突然停车，建议逐步降低负载后3-5分钟再停车，以免温度过高损坏增压器等零部件。

To avoid sudden stopping after full speed and full load operation, it is recommended to gradually reduce the load for 3-5 minutes before stopping to avoid damage to components such as the turbocharger due to high temperature.

4、对于恶劣环境使用，建议每天多次清理水箱和空滤，防止水箱堵塞造成散热不良或者空滤堵塞进灰。风沙较大环境，建议增加沙尘过滤装置。

For harsh environmental use, it is recommended to clean the water tank and air filter multiple times a day to prevent clogging of the water tank causing poor heat dissipation or clogging of the air filter leading to ash ingress. In environments with strong sandstorms, it is recommended to add sand and dust filtration devices.

5、首次保养：50小时更换机油、机油滤清器、燃油滤清器，以后每200-500小时更换；每50-100小时检查空气滤清器；每50小时-100小时检查冷却水和水箱，冷却水不足给与补充。水箱表面有异物进行清理。

First maintenance: replace the engine oil, oil filter, and fuel filter every 50 hours, and then every 200-500 hours thereafter; Check the air filter every 50-100 hours; Check and inspect the cooling water and water tank every 50-100 hours. If the cooling water is insufficient, make up for it. Clean up any foreign objects on the surface of the water tank.