

brand



In global competition of the brands, rather than aiming to be a winner, Cukurova aims customer satisfaction first with its product quality & performance, complemented by the highest standard of aftersales support.

Since 1923, over than 80 years, Cukurova maintained its traditional brand reputation always arising by providing excellent services and establishing long-term relationships with the Customers.

capacity



Cukurova is one of the leading Turkish genset manufacturers, and it consistently captures approximately half or more of all orders for the gensets ranging over 1000kVA in its mother country.

In early 1970s Cukurova Group, following the developments in the country, started to import generators. This was the first step of Group in PG business. During nearly 40 years the Group also established its own brand; The Cukurova Power Generators launched in 1983 in Izmir Factory.



Cukurova Jenerator A.S. was established in 2007 to be able to achieve well set growth plans in the global market of the diesel generator sector. With an investment of over than 20,000,000.-USD, Cukurova Jenerator A.S. constructed its new facility in the Izmir Aegean Free Zone which is located on a 33,500 m² site with an area of which 10,600 m² is allocated for assembling operations. The production capacity has been planned to be 5000 units annually for the product range including 15-2250 kVA indoor/outdoor diesel generator sets with 50 Hz/60 Hz frequencies with standard 380 V-415 V and alternative voltages available depending on the application.



Cukurova Jenerator A.S. designs, manufactures and installs environmentally friendly solutions for residential, commercial and industrial uses. It offers technology-based innovative solutions reaching beyond the specifications and expectations of its customers. The Company's production line supplies the need for emergency and continuous use of generators. The standard Cukurova diesel generators ranging between 15-2250 kVA for instance, are designed for more than 2,000 different customised applications in construction, agriculture, general industry, telecommunication and defense sectors as well as other miscellaneous market sectors with provisions of the mass production.





configurable core products



Cukurova assembling line has comprehensive product range in 2 groups with; PN-PC and VN-VL series' providing one-source responsibility and low life-cycle costs for the generating systems.

Cukurova, assigns its business partners with utmost care and diligence with its experience and technical know-how. Prime mover engines and alternators are supplied from the worldwide leading manufacturers.

The ready to run sets are factory-built, production tested and complies with the relevant requirements of the standards.

The assembled gensets are the core of our power systems that should deliver dependable power to a wide range of output requirements.

	PN_series	PC_series	VN_series	VL_series
<i>no of models</i>	27	12	16	20
<i>stby range</i>	15-2250kVA	15-275kVA	90-700kVA	90-700kVA
<i>engine</i>	Perkins	Perkins	Volvo	Volvo
<i>alternator</i>	Stamford	MeccAlte	Stamford	Leroy Somer



PN-PC series with Perkins engines

For about 20 years Cukurova have manufactured P-series, Perkins driven sets ranging between 15-2250kVA, with the highest levels of performance and reliability. The engine manufacturer's global distributors&dealers network has always kept the parts and support close to our customers in cooperation with us which played major role in P-series achievements throughout the world. For our genset applications Perkins has a comprehensive range of Elektropak™ specifications complete and ready to run. We trust in their dedicated production volume, more than 90,000 diesel and gas engines specifically for electrical power generation.

PN_series

Gen. Model	Engine Brand & Model	Alternator Brand &	cont.baseload	prime	Standby
		Model	kVA	kVA	kVA
CUKUROVA CJ15PN	Perkins 403D-15G	Stamford BCI164C	NA	12	13
CUKUROVA CJ22PN	Perkins 404D-22G	Stamford BCI184E	NA	19	21
CUKUROVA CJ33PN	Perkins 1103A-33G	Stamford BCI184G	NA	30	33
CUKUROVA CJ50PN	Perkins 1103A-33TG1	Stamford UCI224D	NA	46	50
CUKUROVA CJ70PN	Perkins 1104A-44TG1	Stamford UCI224F	NA	66	72
CUKUROVA CJ90PN	Perkins 1104A-44TG2	Stamford UCI224G	NA	81	89
CUKUROVA CJ110PN	Perkins 1104C-44TAG2	Stamford UCI274C	NA	100	110
CUKUROVA CJ150PN	Perkins 1006TAG	Stamford UCI274E	NA	139	150
CUKUROVA CJ165PN	Perkins 1006TAG2	Stamford UCI274F	NA	149	165
CUKUROVA CJ200PN	Perkins 1106C-E66TAG4	Stamford UCI274G	NA	180	194
CUKUROVA CJ250PN	Perkins 1306C-E87TAG4	Stamford UCDI274J	208	229	250
CUKUROVA CJ275PN	Perkins 1306C-E87TAG6	Stamford UCDI274K	230	250	275
CUKUROVA CJ400PN	Perkins 2206C-E13TAG2	Stamford HCI444E	281	350	400
CUKUROVA CJ450PN	Perkins 2206C-E13TAG3	Stamford HCI444F	306	400	450
CUKUROVA CJ500PN	Perkins 2506A-E15TAG1	Stamford HCI544C	358	464	508
CUKUROVA CJ550PN	Perkins 2506A-E15TAG2	Stamford HCI544D	412	513	562
CUKUROVA CJ670PN	Perkins 2806A-E18TAG1A	Stamford HCI544E	465	610	665
CUKUROVA CJ720PN	Perkins 2806A-E18TAG2	Stamford HCI544F	518	670	720
CUKUROVA CJ800PN	Perkins 4006-23TAG2A	Stamford HCI634G	587	732	807
CUKUROVA CJ900PN	Perkins 4006-23TAG3A	Stamford HCI634H	646	811	904
CUKUROVA CJ1100PN	Perkins 4008TAG2A	Stamford HCI634J	812	1024	1110
CUKUROVA CJ1400PN	Perkins 4012-46TWG2A	Stamford PI734B	995	1258	1385
CUKUROVA CJ1500PN	Perkins 4012-46TWG3A	Stamford PI734B	1084	1364	1500
CUKUROVA CJ1650PN	Perkins 4012-46TAG2A	Stamford PI734C	1203	1511	1658
CUKUROVA CJ1900PN	Perkins 4012-46TAG3A	Stamford PI734E	1441	1725	1893
CUKUROVA CJ2020PN	Perkins 4016TAG1A	Stamford PI734E	1464	1844	2020
CUKUROVA CJ2250PN	Perkins 4016TAG2A	Stamford PI734F	1638	2058	2250



PN-PC series with Perkins engines

PC_series

Gen. Model	Engine Brand & Model	Alternator Brand &	cont.baseload	prime	standby
		Model	kVA	kVA	kVA
CUKUROVA CJ15PC	Perkins 403D-15G	Mecc Alte ECO 3-2LN/4	NA	13	14
CUKUROVA CJ22PC	Perkins 404D-22G	Mecc Alte ECO 28-1LN/4	NA	20	22
CUKUROVA CJ33PC	Perkins 1103A-33G	Mecc Alte ECO 28-VL/4	NA	30	32
CUKUROVA CJ50PC	Perkins 1103A-33TG1	Mecc Alte ECO 32-1L/4	NA	46	51
CUKUROVA CJ70PC	Perkins 1104A-44TG1	Mecc Alte ECO 32-3L/4	NA	66	73
CUKUROVA CJ90PC	Perkins 1104A-44TG2	Mecc Alte ECP 34-1S/4	NA	82	90
CUKUROVA CJ110PC	Perkins 1006TG2A	Mecc Alte ECP 34-2S/4	NA	105	115
CUKUROVA CJ150PC	Perkins 1006TAG	Mecc Alte ECP 34-2L/4	NA	141	156
CUKUROVA CJ165PC	Perkins 1006TAG2	Mecc Alte ECP 34-2L/4	NA	150	164
CUKUROVA CJ200PC	Perkins 1106C-E66TAG4	Mecc Alte ECO38-1SN/4	NA	180	196
CUKUROVA CJ250PC	Perkins 1306C-E87TAG4	Mecc Alte ECO38-3SN/4	209	225	250
CUKUROVA CJ275PC	Perkins 1306C-E87TAG6	Mecc Alte ECO38-1LN/4	232	250	275

VN-VL series with Volvo engines

Volvo Penta has one of the strongest engine brands and the largest dealer networks with more than 5,000 dealers globally. Technical quality, reliability and worldwide support are the key factors why Cukurova has selected Volvo Penta engines for V-series' 90-700kVA generators for more than 10 years.

Volvo Penta's are well balanced to produce smooth and vibration-free operation with low noise level, featured with high torque. To maintain a controlled working temperature in cylinders and combustion chambers, the engine is equipped with piston cooling. The engine is also fitted with replaceable cylinder liners and valve seats/guides to ensure maximum durability and service life of the engine.



VN-VL series with Volvo engines

VN_series

Gen. Model		Engine Brand & Model		Alternator Brand &		cont.baseload	prime	standby
				Model		kVA	kVA	kVA
CUKUROVA	CJ90VN	Volvo	TAD530GE	Stamford	UCI224G	NA	83	91
CUKUROVA	CJ110VN	Volvo	TAD531GE	Stamford	UCI274C	NA	99	110
CUKUROVA	CJ150VN	Volvo	TAD532GE	Stamford	UCI274E	NA	128	143
CUKUROVA	CJ170VN	Volvo	TAD731GE	Stamford	UCI274F	NA	154	170
CUKUROVA	CJ200VN	Volvo	TAD732GE	Stamford	UCI274G	NA	182	200
CUKUROVA	CJ220VN	Volvo	TAD733GE	Stamford	UCI274H	NA	200	220
CUKUROVA	CJ275VN	Volvo	TAD734GE	Stamford	UCDI274K	NA	247	275
CUKUROVA	CJ300VN	Volvo	TAD940GE	Stamford	HCI444D	NA	281	309
CUKUROVA	CJ330VN	Volvo	TAD941GE	Stamford	HCI444D	NA	300	330
CUKUROVA	CJ350VN	Volvo	TAD941GE	Stamford	HCI444E	NA	328	360
CUKUROVA	CJ400VN	Volvo	TAD1343GE	Stamford	HCI444E	NA	350	400
CUKUROVA	CJ450VN	Volvo	TAD1344GE	Stamford	HCI444F	NA	400	450
CUKUROVA	CJ500VN	Volvo	TAD1345GE	Stamford	HCI544C	NA	455	504
CUKUROVA	CJ550VN	Volvo	TAD1641GE	Stamford	HCI544D	NA	507	556
CUKUROVA	CJ630VN	Volvo	TAD1642GE	Stamford	HCI544E	NA	575	633
CUKUROVA	CJ700VN	Volvo	TWD1643GE	Stamford	HCI544F	NA	637	705

VL_series

Gen. Model		Engine Brand & Model		Alternator Brand &		cont.baseload	prime	standby
				Model		kVA	kVA	kVA
CUKUROVA	CJ90VL	Volvo	TAD530GE	Leroy Somer	LSA 43.2 L8	NA	80	88
CUKUROVA	CJ90VL	Volvo	TAD530GE	Leroy Somer	LSA 44.2 VS3	NA	85	94
CUKUROVA	CJ110VL	Volvo	TAD531GE	Leroy Somer	LSA 44.2 VS45	NA	100	111
CUKUROVA	CJ150VL	Volvo	TAD532GE	Leroy Somer	LSA 44.2 S75	NA	128	142
CUKUROVA	CJ165VL	Volvo	TAD731GE	Leroy Somer	LSA 44.2 M95	NA	150	165
CUKUROVA	CJ165VL	Volvo	TAD731GE	Leroy Somer	LSA 44.2 L12	NA	154	171
CUKUROVA	CJ200VL	Volvo	TAD732GE	Leroy Somer	LSA 46.2 M3	NA	181	201
CUKUROVA	CJ220VL	Volvo	TAD733GE	Leroy Somer	LSA 46.2 M5	NA	200	223
CUKUROVA	CJ275VL	Volvo	TAD734GE	Leroy Somer	LSA 46.2 L6	NA	246	274
CUKUROVA	CJ300VL	Volvo	TAD940GE	Leroy Somer	LSA 46.2 L9	NA	280	300
CUKUROVA	CJ300VL	Volvo	TAD940GE	Leroy Somer	LSA 46.2 VL12	NA	283	312
CUKUROVA	CJ340VL	Volvo	TAD941GE	Leroy Somer	LSA 46.2 VL12	NA	315	341
CUKUROVA	CJ350VL	Volvo	TAD941GE	Leroy Somer	LSA 47.2 VS2	NA	328	360
CUKUROVA	CJ385VL	Volvo	TAD1342GE	Leroy Somer	LSA 47.2 VS2	NA	353	387
CUKUROVA	CJ400VL	Volvo	TAD1343GE	Leroy Somer	LSA 47.2 VS2	NA	379	414
CUKUROVA	CJ450VL	Volvo	TAD1344GE	Leroy Somer	LSA 47.2 S4	NA	410	450
CUKUROVA	CJ500VL	Volvo	TAD1345GE	Leroy Somer	LSA 47.2 S5	NA	455	500
CUKUROVA	CJ550VL	Volvo	TAD1641GE	Leroy Somer	LSA 47.2 M7	NA	500	558
CUKUROVA	CJ630VL	Volvo	TAD1642GE	Leroy Somer	LSA 47.2 L9	NA	573	632
CUKUROVA	CJ700VL	Volvo	TWD1643GE	Leroy Somer	LSA 49.1 S4	NA	629	698

standard features & equipments

- Diesel Engine – Industrial type
 - Cooling Radiator – Tropical type
 - Radiator Fan Cage
 - Starter Motor
 - Mechanical or electronic speed governor
 - Battery charging alternator
- Alternator – Brushless, Single Bearing,
 - Class H Insulation System
 - Automatic Voltage Regulator
- Automatic Control Panel
 - Digital automatic control module
 - Runhourmeter, emergency stop button
- Industrial type silencer
- Flexible Exhaust Connection
- Block water heater
- Lubrication oil drain valve
- Starter Battery – Lead Acid Type
- Heavy duty fabricated steel base frame
- Lifting points on the base frame
- Anti-vibration mountings
- Engine lubrication oil
- Antifreeze
- Replacable air, oil and fuel filters
- Documents supplied with each genset
 - Function and load test reports
 - Operating and maintenance manuals
 - Spare parts book
 - Electrical installation drawings
 - Room layout drawings



optional features & equipments

- Generator
 - Anti-condensation heater
 - Excitation System
 - Permanent Magnet Generator
 - Digital Voltage Regulator
- Enclosures
 - Weatherproof Enclosure
 - Sound attenuated enclosure
 - Container type enclosure
- Fuel tanks
 - External fuel tank
 - Sub-base fuel tank
 - Automatic and manual fuel transfer systems
 - Electronic fuel level indicator
- Residential type silencer
- Seismic vibration isolator
- Automatic load transfer panel
- Load distribution panel
- Protection circuit breaker
- Manual and fully automatic synchronization systems
- Remote monitoring and control
- Remote annunciator
- Static battery charger
- Air starter
- Remote radiator
- Heater
 - Battery heater
 - Coolant heater
 - Control and alternator space heaters
- Lube oil drain pump
- Circuit breakers
- Job-site trailer
- Step-up transformer
- Catalysts

PCS-i^{3S}

integration



Cukurova's power control systems are designed to achieve reliable, secure, efficient, user-friendly, cost-effective operation of the power generation systems.

Offering the optimum solution suiting perfectly to any system demand; for single or multiple uses, for standby, emergency or continuous applications with easy-to-use basic instrumentation, all necessary protection devices, indications of operational status, all are completely integrated to secure the operation. Each control system is customizable to the customer specifications for safe, secure and simple functionality.

Cukurova's Customers operate around the world and their demand for individually customised power products with particular project solutions have been increasing. Although the major components of our systems; engine, alternator, control module, etc. are mostly similar components of our projects, Cukurova's systems mainly differentiate from each other in the Control Design having vast varieties to meet our Customers' needs.

Unlike trying to manufacture basic components with one brand name, Cukurova has focused on comprehensive control design engineering with innovative solutions for the ultimate integration of components. These integrated components are the reputable products of world-wide well known manufacturers and this approach has set Cukurova design engineers free to select the most suitable component for a particular project design. Cukurova engineers have numerous alternatives with wide variety of the component specifications.

Unlike enforcing to fit the vast variety of customer needs to one brand's limited components provisions, Cukurova's Control Philosophy is to provide the ultimate power solution with the provisions of different components having low cost multi-source worldwide availability during the entire life-cycle.

Furthermore, unlike having one source's limited aftersales network, Cukurova integrates also the service teams of global component manufacturers with our supply contracts having strict commitments of them to act as a dedicated member of Cukurova team. Cukurova Power Control Systems enable Cukurova Customer to have low cost uninterrupted availability of parts and services worldwide.

Our Customers in the extremes of location have to ensure the health and safety of employees and other people affected by their business activities. Today new regulations' complexity is increasing and Cukurova consistently implements safety technologies in Power Control systems. With improved diagnostics this offers reduced downtimes and thus increased system availability which are vital for embedded profitability of our Customer's facilities.

The latest developments of information and communications technologies and the expansion of global networks have made the data exchange between the systems as much as between people. Unlike on-site aggregation of subsystems, Cukurova Power Control Systems; PCS-i^{3S}, integrates the customised product to the life in a simple, safe and secure manner by the use of latest information and communications technologies. Through modern communications technology, our Control Systems are melded into an integrated intelligent networking providing the Customer remote services and preventive maintenances as well.

CBC



Cukurova's basic control panels are designed to provide advanced automatic control of diesel sets, that include non-electronic and electronic engines.

The panel design provides also intelligent functionality giving the user advanced engine monitoring and protection features.

The microprocessor control allows accessing critical performance data to communicate with building managements systems.

The basic control panels have the capability to monitor:

- under speed,
- over speed,
- charge alternator failure,
- emergency stop,
- low oil pressure,
- high engine temperature,
- fail to start,
- fail to stop,
- loss of speed sensing signal,
- low fuel,
- over current,
- under/over generator frequency,
- under/over generator volts
- low/high DC
- battery volts.

Engine faults are indicated via LED indicators, LCD displays and audible alarms. Upon detection the modules shut down the engine, only allowing a re-start once the fault condition has been removed.

FEATURES

- Automatic start
- Automatic load transfer
- Automatic mains failure
- Electronic engine connection
- RS232 & RS485 remote communications
- Modbus RTU
- Analogue inputs
- Audible alarm indication
- Back-lit character & 4-line text LCD display
- Configurable alarms & timers
- Configurable auxiliary inputs
- Digital inputs
- Emergency stop functions
- Engine history event log
- Engine exercise mode
- Engine parameter warning
- Engine protection
- Front panel mounting
- Front panel programming
- Full engine diagnostics
- Generator operating status warning
- Hid till lit alarm icons
- LCD alarm indication
- LED alarm indication
- Manual start
- Multiple language options
- PC configurable
- PIN protected programming
- Power save mode
- Remote monitoring
- SMS messaging



CSP



Cukurova's Synchronisation Systems are designed and developed to meet complex power system requirements with simple and flexible operational performance.

The use of new technology controllers for both single and multiple gen-sets operating in standby or parallel modes with various HW modifications allow the Customer to select the optimum type for a particular application.

Built-in synchronizer and digital isochronous load sharer offer total integrated solution for gen-sets in standby, island parallel or mains parallel with native cooperation of up to 32 gen-sets.

Powerful graphic display with user-friendly control allows even new users to find quickly the required information.

Integrated fixed and configurable protections;

- 3 phase integrated generator protections (U + f)
- IDMT overcurrent + Shortcurrent protection
- Overload protection
- Reverse power protection
- Earth fault protection
- 3 phase integrated mains protections (U + f)
- Vector shift protection
- All binary/analogue inputs free configurable for various protection types:
 - HistRecOnly
 - Alarm Only
 - Warning
 - Off load
 - Slow stop
 - BreakerOpen&Cooldown
 - Shutdown
 - Mains protect
 - Sensor fail
- Additional 160 programmable protections configurable for any measured value to create customer-specific protections

Features

- Support of engines with ECU (J1939, ModBus and other proprietary interfaces); alarm codes displayed in text form
- AMF function
- Automatic synchronizing and power control (via speed governor or ECU)
- Baseload, Import/Export
- Peak shaving
- Voltage and PF control (AVR)
- Generator measurement: U, I, Hz, kW, kVAr, kVA, PF, kWh, kVAhr
- Mains measurement: U, I, Hz, kW, kVAr, PF
- Inputs and outputs configurable for various customer needs
- RS232/RS485 interface with ModBus support; Analog/GSM/ISDN/CDMA modem support; SMS messages; ECU ModBus interface
- Event-based history (up to 500 records) with customer-selectable list of stored values; RTC; statistic values
- Integrated PLC programmable functions
- Interface to remote display unit (IG-Display)