PRODUCT CATALOG













GENERATOR AUTOMATION

WATER PUMP AUTOMATION

STREET LIGHT AUTOMATION

Trusted Quality & High Performance



a solution provider...

Introduction

SUBTECH brand is famous in integrated electric automation with 23 years of experience. Our offered solutions are useful in industrial, domestic and agricultural sectors for intelligentized automation. Our high-class products are designed specially for generators, water pumps, street lights and other electrical purpose for pan India and abroad. The Company has always believed in being technically abreast and keeping focus on the design and development of every product. We have R&D team with qualified engineers for designing & developing modern products.

Our Policy

In this competitive era, maintaining customer loyalty is very challenging task. For this, we deeply understand the needs and sufferings of the customer and come up with a product that can be used for a long time and of reasonable price in comparison to others. Thus, resulted in a incomprehensible technology to our customers by using PMC contactor instead of ordinary contactor in our product.

Infrastructure

We have well-built infrastructure which is efficient in manufacturing maximum products out of the available resources. While the manufacturing units are operational with state of the art machinery, the storage units have every facility to manage the products safely before delivery.

Quality Assurance

The Electrical Products manufactured by us are thoroughly tested to assure the quality competitiveness. The raw materials used in production are checked and then further taken into process. Other quality assurance tests are performed on the final products to ensure complete faultlessness in every aspect.

Clientele

Quality, durability and flawless performance of our Electrical Products have helped us to build a huge clientele. Our customers are spread all over India as well as in other countries like South & East Africa, South Asia, Middle East, Latin America, etc. We are successfully catering to them through timely delivery of the electrical goods as per their needs.

Our Unique Technology

Pre-Magnetic Contactor

What is PMC?

PMC is a modified concept of contractor which is operate with DG voltage. A smart inventive technology specially for the switching purpose in various devices like ATS, AMF Panels, Motor starters, Street light Control Panel Etc.

- Zero probability for the burning of coil. (Temp. 55 degree Celsius)
- · Smooth & fast Switching.
- Works even well operated at high & low voltages.
- Wide voltage range to operate (130-280VAC).
- No chattering due to low voltage.
- 63 A., 100A., 140A. available



PRODUCTS

Automation for:

Motors / Water Pumps

Generators

Street Lights

Electricity Distribution

Implement

Prototype

Analyze

Research

Learn

Ideate

Define

Choose

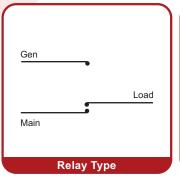
Automatic Changeover/Automatic Transfer Switch

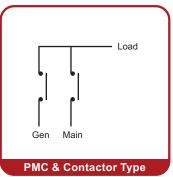
Auto changeover the need for continuous power supply and its reliability has increased rapidly over the years, especially in all those areas where continuous power supply is must. Their complexity has increased as continuous information and communications are needed to control automated process, be in industries, commercial complexes, hospitals, hotels or even modern residences. Automatic Changeover from main supply to stand by supply is vital for all the above kinds of load. In case of both DG Supply as well as mains supply, comes together then priority will be of mains because the automatic changeover will change DG supply to mains. In the event of power failure, the standby power is usually expected to take over automatically. Electrical starting equipment, battery bank and diesel generator are required for the automatic operation. The automatic transfer is achieved mostly by AMF Panels. The process of on-load transfer has to be monitored & controlled for a smooth Changeover and within safety limits of all elements of the system.



- Operating Voltage 130V to 280V.
- Inbuilt SMPS supply to operate the circuit.
- Simplifies electrical complexity with NFC System.
- LED Indication for MAINS ON & GENERATOR ON.
- Potential free contact for Start/stop of generators (optional)
- Genset Stop system is inbuilt, especially for Portable Generators
- Time Delay on generator mode in changeover in higher capacity.
- When main supply is resumed, the connected load is automatically shifted to mains.
- Powder Coated Box, Compact size Wall mounting, Temper proof and maintenance free.
- Microcontroller based technology with Pre-Program interlocking to prevent short circuit.
- Single Phasing does not affect the overall output: Only the absent phase of mains will fail in output, not all three phases will fail.
- Switch over time for genset to main is very minimum so that even sensitive equipment's do not get "OFF" during the switch over.
- Its unique circuit design enables the relay to be in 'ON' position only while the genset is in use. During main supply the relay remains in 'OFF' position. Due to this the life of changeover gets increase.
- No Time Delay for output on resumption of Mains Supply whenever DG's not working. In that time Interval as load remain connected to the mains only. (Even in the absence of one or two phase also)
- DG Supply can/cannot be used at the time of single phasing of Mains supply. (Because some users are satisfied even in single phase to save the diesel cost.)
- In the Presence of supply in all three phase, load automatically shifts from DG to Mains with a time delay of 5 Sec. But when there is one or two phase supply, Load will not shift from DG to Mains only.

| Types of Auto Changeover | Rating |
|--|------------------------------------|
| Single Phase to Single Phase All inputs & output will be single Phase. | 40A./63A./100A. (Relay base) |
| | 40A. to 100A. (Contactor base) |
| | 63A. & 100A. (PMC base) |
| Single Phase to Three Phase DG Input is Single Phase. Mains Input & output will be Three Phase. | 40A./63A./100A./150.A (Relay base) |
| | 40A. to 500A. (Contactor base) |
| | 63A. to 140A. (PMC base) |
| Three Phase to Three Phase All inputs & output will be Three Phase. | 40A./63A./100A./150.A (Relay base) |
| | 40A. to 500A. (Contactor base) |
| | 63A. to 140A. (PMC base) |







Changeover / ATS Panel 1 Ph.

Auto Mains Failure Panel

Auto main failure panel is used for the automatic operation of the Genset. It monitors the power availability of both "MAINS" and "GENERATOR" automatically, and delivers you the healthy power continuously; on the other hand it will monitor the operation state for Generator while the Generator is running. During abnormal or common faults of generators, AMF Panel will give you both the visual (by LED) and audio signal feedback.

SUBTECH AMID START, ATTO CHARACTORE A AUTO STOP Diesel Generators - 30 KV/A THREE PHASE, 100 A.

Features:

- Auto Start & Auto Stop the Genset when Mains fails & restores respectively.
- Cranking standard: three cranking attempts with 15 sec intervals.
- Low/high Voltage protection, Reverse phase protection (optional)
- Digital Volt, Amp., Hz. Meters & 5 Indication for Mains, DG and load in Display
- Auto / Manual mode selector available, automatically changes lines from Mains and Gen Line and vice versa.
- Mains restoration delay time: 10 sec, start delay time: 3-5 sec. cool down time: 30-40 sec, DG output delay time: 8-10 sec.
- Contactor Coil Voltage: 180-260 VAC & Pre Magnetic Contactor Coil Voltage- 130-280VAC

Availability: 40 Amp. to 500 Amp.

Source: Single to Single Phase

Single to Three Phase

Three to Three Phase

ACCL / CLD

SUBTECH make CLD cum auto changeover, which is a fully automatic high precision system for efficient distribution of individually rationed generator power, is an advantageous and cost effective alternative to conventional manual changeovers.

The auto changeover cum current limiting device (CLD) works as a changeover and also gives protection to generator due to overload and abnormal supply. It is a Microcontrolled Pre-Programed overload protection system for multiple operations, mostly used for generators and power backup multi storied societies, malls, apartments etc.

Automatic Circuit Broader Picer Gal. Pic

ACCL/CLD

- Settable voltage range for mains and genset.
- · Settable overload limit for genset.
- Auto trip on overload to prevent genset overloading.
- Overload trip time will decrease as overload increase.
- Once tripped, auto re-starts after 10 seconds (max) and so on upto 5 trials.
- Auto trip on under/over voltage on mains and genset to avoid damages to appliances.
- Continue glowing LEDs on healthy conditions & blinking LEDs on source waiting and faulty conditions.
- After 5 trials, tripped permanently for 3 minutes.
- Automatically tries again after 3 min or user can reset manually or wait for the mains.
- · Safeguards generator by gradual loading and precision monitoring.
- Assured availability of allotted current; no less, no more.
- Significant saving on wall space and wiring.

Digital Programmable Time Switch

Digital Time Switches are used where electrical equipment must be periodically switched on and off for pre-programmed daily or weekly times.

Digital time switches available with only 5 pin timer. The 5 pin model connection is an AC 220 is just like a switch. It can be used for switching to any application individually or with group of appliances.

Features:

- Digital programmable Daily, weekly timer basis.
- · Upto 16 programs daily
- Supply voltage DC 12V, 24V, AC110-260V Freq-50Hz
- Led power indicator, LCD on screen displays for on and off switching status.
- Contact single pole single throw, Contact capacity-16 Amp, 240 VAC.
- Running accuracy ± 1 second / day at 20°, Minimum time setting 1 minute.
- It can be used for street lights, motors, T.V., AC etc.
- Inbuilt rechargeable V80H battery for memory backup means no issue of replacing battery, Battery charge last for at least 1-2 months without charge. i.e. Without AC supply connectivity.

SUBTECH ON AUTO OFF ON AUTO O

Automatic Battery Charger

Automatic Battery Charger for charging generator battery automatically with LED indications and fault protections.

Features:

- Trickle and boost mode
- Reverse polarity protection
- · Auto cut-off on full charge

Availability:

Transformer Base Battery Charger -12/24 VDC SMPS Base Battery Charger -12/24 VDC



Battery Charger

Auto Phase Sequence Panel

It is used to overcome problems likes single phasing, reverse phasing and unbalance supply to protect the electrical/electronic appliances.

- Auto cut off on single phasing & unbalances supply.
- · Auto corrects in Reverse phasing
- Switching time is 10 second with an Operating Voltage 130V to 280V.
- Temper proof and maintenance free, powder coated box.
- Microcontroller based technology with Pre Program interlocking to prevent short circuit.
- Minimum heat dissipation & energy losses.
- · Remove problem of sparking & burning with the usage of Pre Magnetic Contactor.



Smart Digital Motor Starter Panels

Smart Digital Motor Starter Panel are very much suitable in domestic, agriculture for irrigation and industrial purposes. They can be operated in a voltage range from 170-470 VAC. 01 to 100 HP Starters developed with micro controller Digital overload relay for monitoring /controlling for more protection of motor and PMC (Pre Magnetic Contractor) for instant switching. PMC is a modified concept of contractor with benefits of cost effectiveness & free from problems of Chattering & Coil burning. In digital overload relay, you can program the voltage range as well as current range within which the motor has to be operated. Starter will trip the motor if supply parameters go out of range. It can be operated in AUTO or MANUAL modes. When the AUTO mode is once selected, it automatically starts the motor whenever the power resumes in all three phases in healthy condition. While in the manual mode, one can manually start and stop the motor instantly with the help of separate smooth push buttons. The starter is having smart digital ampere, volt and hour meter.

Features:

- Over load Protection (Programmable)
- Under Load Protection (Programmable)
- Under voltage protection (Programmable)
- Over voltage protection (Programmable)
- · Single phase preventer
- · Reverse phase protection
- Unbalance voltage protection
- Auto/manual mode selector switch
- Inbuilt MCB / MCCB to extra protection
- · Hour meter to show the total time of run
- Digital Amp. & volt meter inbuilt
- Auto switch inbuilt with Start delay time
- Wide Voltage range: 170-450 VAC
- Fabricated with powder coated G.I Sheet.
- Continuous running capacity: 100+ hrs.







Availability: 1 HP to 100 HP Capacity (Contactor based and PMC based)

Single Phase

Three Phase DOL

Three Phase Star Delta

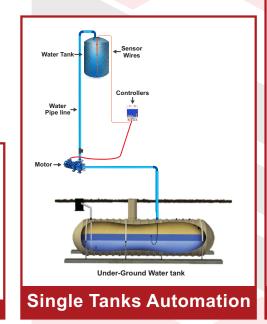
Source: Single / Three Phase Electric Motors for Agriculture, Residential, Commercial, Industrial etc.

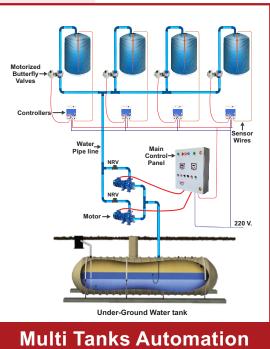
Water Level Control Management System

We are manufacturer of Semi/Fully Automatic Pump Controller or water level controller for your home and industry. It continuously monitors the liquid level of the overhead tank and reservoir. The Automatic pump controller controls the water pumps and turns it ON and OFF with respect to the level in the water tank. This auto-switching feature saves manpower. Hence no need to operate manually. There for no wastage of water, stop tank overflow, save water & electricity bill.

Features:

- Auto start & stop according the tank level.
- Digital display to show level (in percentage)
- Audio alarm on full tank
- Push button to reset buzzer
- Maintenance free, high quality magnetic float sensor
- It is suitable for 1/3 phase motor.





Magnetic Float Sensor

Motorized Butterfly Valve

Digital Meter

SUBTECH series UPVC plastic butterfly valve according to the different medium has a variety of optional material; corrosive resistance is strong, small volume, light weight, extremely non-toxic material. The Mid Stem Structure in this butterfly valve will protect the water leakage from butterfly valve to motor. It is used in industries, multi storied buildings, malls to control the flow of liquids.

- Can be operated automatically, manually or remotely
- Epoxy resin coating over mid stem structure prevents structure from corrosion.
- Operating Voltage 130V to 280V.
- Maintenance free
- Can be used for any type of liquid.



Street Light Control Panel

It is used to operate street lights automatically according to the set program to save huge amount of electricity and money and also to facilitate the people travelling on the roads

Features:

- Pre programmed Time switch as per season with Three Programs every month and for twelve months thirty six programs specially designed for Street Light Automation.
- No need of reprogramming & rewiring.
- User-friendly, Energy saving Efficient, Capable in Lowered CO₂ Emissions.
- Capable of Saving Energy 35-40 %.(Depend upon user usage).
- · Low running and maintenance cost.

Availability: Contactor based and PMC based



LT Distribution Panel

It is used in electricity supply systems to divide electrical power feed into other circuits. It has a key role in supplying power and protecting permanently installed equipment for building such as power and lighting facilities while providing a protective fuse or circuit breaker for each circuit, in a common enclosure.

Features:

- Manufactured for multiple operations with PMC Technology advantages without any problems like overheating & burning of coil.
- Manufactured in GI sheets to provide high strength, longer service life, corrosion free, low maintenance cost.
- Provided with hinges, fixings and locks & fully enclosed switchgear.



LT Panel

APFC Panel

It is used to maintain power factor by the use of capacitor bank to suit the variation in inductive/resistive loads. Specially in industrial sector, heavy inductive loads are very common to give low power factor, which results in higher demand charges and also low power factor penalties. APFC panel provides automatic switching operation of the suitable capacitor bank for fixing power factor from load fluctuation.

Features:

- User friendly microprocessor based APFC relay.
- Modular design with easier assembly, Installation & maintenance.
- Aesthetically designed dust proof cabinet with powder coating.
- Power factor correction done with help of power factor controller & power contactors by switching In/Out 6/8/12 steps of capacitor banks.
- Used for three phase loads.



Availability: Contactor based and PMC based

Other Electric Panels

Sump Pump Panel

Sump Pump Control Panel may be designed to control one pump or multiple pumps (Duty / Standby, Lead / Lag, etc.) as needed. Sump pump include power components to control the pump motor, motor and pump sensors to protect the motor and pump and field sensors to monitor the process and control pump operation.

Features:

- · Automation Sump Pump Control Panel.
- Automation of Sewage Pump, of Sewage Tank.
- Necessary safety features like Overload Protection Under Load Protection (Dry Run), Under/Over Voltage Protection, Single Phase Preventer & Reverse Phase Protection.
- Operate Two or Three Pump simultaneously or alternatively.



Fire Fighting Panel

Fire Fighting Panel is the controlling component of a fire alarm system. The panel receives information from devices designed to detect and report fires, monitors their operational integrity and provides for automatic control of equipment, and transmission of information necessary to prepare the facility for fire based on a predetermined sequence. The panel may also supply electrical energy to operate any associated initiating device, notification appliance, control, transmitter, or relay.

Features:

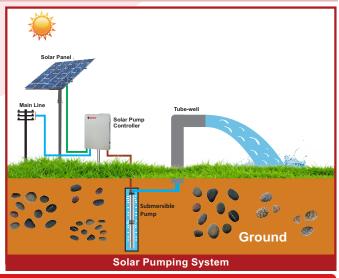
- Fire Fighting Pump control panel with necessary safety features for Hydrant Pump, Sprinkler Pump, Jockey Pump & Booster Pump.
- Suitable to work in Auto & Manual mode to maintain water pressure in hydrant & sprinkler water line.
- The Fire Panel receives signal from alarm devices like Pressure Switch and activates motor control devices to provide power to fire pumps and monitor its performance.



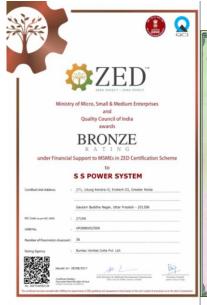
Solar Drive (Solar Pumping System)

Solar pumping system consists of four parts: solar panels, solar pump controller, single phase or three phase pump and water drives AC pump to pump water from borehole, river, lake etc. to the storage device. The inverter applies high efficiency MPPT algorithm to maximize power harvested from solar panels. Th will make the system to maximize efficiency to get the water as much as possible.

The solar pumping system fulfills concept of low carbon, energy conservation, environmental protection to improve the living standard in water-deficient area.



VALUATION

























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Manufacturer:

S. S. POWER SYSTEM

(An ISO 9001:2008 Certified Co.)

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