



# Calamba Water District

Lakeview Subdivision, Halang, Calamba, Laguna  
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## 100hp VARIABLE FREQUENCY DRIVE.

WITH BOX ENCLOSURE AND CONTROL BY THE FOLLOWING STUFF

- 1) 250 AT Main circuit breaker
- 2) Direct on-line stop and start
- 3) BW control for liquid water level indicator
- 4) Selector switch for Auto and manual
- 5) Terminal connector from VFD and submersible cable
- 6) light indicator for running and stop
- 7) Start and running contactor
- 8) Lightning arrester
- 9) Terminal block for submersible motor/3-Leads

### MAINS SUPPLY (L1, L2, L3)

Supply Voltage	1 or 3 x 380 -480 Volts $\pm 10\%$
Supply Frequency	50/60Hz
True power factor	$\geq 0.9$
Switching on input supply L1, L2, L3	1 - 2 times/min.

### OUTPUT DATA (U,V, W)

Output Voltage	0 - 100% of supply voltage
Switching on output	Unlimited
Ramp times	1 -3600 sec.
Close loop	1 - 132 Hz

### DIGITAL INPUTS

Programmable digital inputs	6 ( can be use as digital outputs )
Logic	PNP or NPN
Voltage level	0 - 24 V
Thermistor input	1

### ANALOG INPUT

Analog inputs	2
Modes	Voltage or current
Voltage level	0 - 10V ( Scaleable )
Current level	0/4 - 20 mA ( Scaleable )

### PULSE INPUT

Programmable pulse input	2
Voltage level	0 - 24 VDC (PNP positive logic)
Pulse input accuracy	(0.1 - 110 kHz)
Utilize some of the digital inputs	

### ANALOG OUTPUT

Programmable analog outputs	1
Current range at analog output	0/4 - 20 mA
Max. load (24 V)	130 mA

### RELAY OUTPUTS

Programmable relay outputs (240VAC, 2 A and 400VAC, 2 A)	2
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### FIELDBUS COMMUNICATION

Standard built in: FC Protocol Modbus RTU	Optional:
	PROFIBUS
	DeviceNet
	EtherNet/IP
	Modbus TCT IP
	ProfiNet

### TEMPERATURE

Ambient temperature	Up to 55° C
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ENCLOSURE	IP55 or IP66
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### APPLICATION

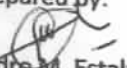
- a) Real time clock with battery back-up
- b) General purpose I/O option:
  - 3 digital inputs, 2 digital outputs, 1 analog current output,
  - 2 analog voltage inputs.
- c) Relay option/cascade controller option:
  - 3 relay outputs
- d) External 24VDC supply option:
  - 24 VDC external supply can be connected to supply control
  - and option cards.

- e) Brake chopper option:  
Connected to an external brake resistor, the brake chopper limits the load on the intermediate circuit in case the motor acts as generator
- f) Analog sensor input option with up to 3 temperature sensor inputs

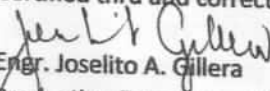
**POWER OPTION**

- a) Advance harmonic filters: for application where reducing harmonic distortion is critical.
- b) dU/dt filters for providing motor isolation protection.
- c) Sine filters (LC filters): for noise less motor

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Certified thru and correct

  
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