

Model :

PLC-1, single pump control

PLC-2, dual pump control

PLC-3, triple pump control



Main introduction: PLC-1/2/3 (Pump Logic Controller) is an easy to use, programmable controlling & protection device for pump factory, pump dealer, pump distributor etc to assemble the duplex pump control cabinet by using PLC, MCB, AC contactor, CT board (current transformer), proportional CT and other electronic components.

Main technical data

- . Start type: DOL (Direct on line)
Star Delta(Y/Δ)
Soft Start
- . Qty of controlled pump: Single pump (PLC-1)
Dual pump (PLC-2)
Triple pump (PLC-3)
- . Support external sensing devices: float switch (ON/OFF)
pressure switch(ON/OFF)
liquid probe
4-20mA transmitter
PT100 temperature sensor
- . Rated input voltage & output power

Rated input voltage	Rated output power(KW)	Motor rated Current (A)
AC220V-240V 50HZ/60HZ, Single phase	0.37-10kw	100A/1pump
AC380V-415V 50HZ/60HZ, Three phase	0.75-250KW(single pump)	100A/1pump
	0.75-190KW(dual pump)	475A/1pump
	0.75-120KW(triple pump)	160A/1pump

*user can choose the input voltage according to local power grid

* customization input voltage, please contact the manufacturer

Output power and CT board /Proportional CT configuration

Rated input voltage	Max Motor Output		Applicable Rated Ampere (A)	CT board & Proportional CT configuration
	KW	HP		
AC220V-240V Single phase	0.37-2.2	0.5-3	1-25	A typeCT board103E
AC220V-240V Single phase	1.1-4	1.5-5.5	2-50	B typeCT board123E
AC380V-415V Three phase	0.75-11	1-15	1-25	A type CT board 103E
	1.1-22	1.5-30	2-50	B type CT board 123E
	30	40	2-75	C type CT board + Proportional CT 150/5
	40	55	2-100	C type CT board + Proportional CT 200/5
	50	70	25-125	C type CT board + Proportional CT 250/5
AC380V-415V Three phase	55	75	25-150	C type CT board + Proportional CT 300/5
	65	90	25-175	C type CT board + Proportional CT 350/5
	75	100	25-200	C type CT board + Proportional CT 400/5
	90	120	25-225	C type CT board + Proportional CT 450/5
	100	135	25-250	C type CT board + Proportional CT 500/5
	110	150	25-275	C type CT board + Proportional CT 550/5
	115	155	30-300	C type CT board + Proportional CT 600/5
	125	170	50-325	C type CT board + Proportional CT 650/5
	135	180	50-350	C type CT board + Proportional CT 700/5
	150	200	50-375	C type CT board + Proportional CT 750/5
	165	220	50-400	C type CT board + Proportional CT 800/5
	175	235	100-425	C type CT board + Proportional CT 850/5
	180	240	100-450	C type CT board + Proportional CT 900/5
190	255	100-475	C type CT board + Proportional CT 950/5	

Protection function

- . Dry run protection with sensor free
- . Pump stalled protection
- . Overload protection
- . Under voltage protection
- . Over voltage protection
- . Pump repeat start protection
- . Open phase protection for input & output power (three phase)
- . Phase reversal protection for input power (three phase)
- . Phase unbalance protection for output power (three phase)
- . Over temperature protection (itrequires pump with built in over temperature sensor or PT100 sensor)
- . Pump leakage protection (itrequires pump with leakage sensor)
- . Pump shaft anti-rust protection

Control characteristic

- . Auto /Manual mode mixing or Auto mode only
- . Main pump /standby pump automatically alternate
- . Main pump /standby pump overtime alternating

- . Main pump / standby pump automatically switch against malfunction
- . Standby pump participates running if required
- . Each pump can be set disable for maintenance

Application

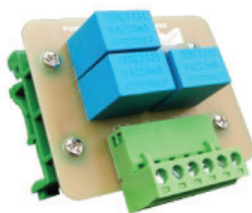
- . Applied for water transfer from low tank to upper tank by liquid probe or float switch
- . Applied for booster by pressure switch & pressure tank.
- . Applied for sewage lifting by liquid probe or float switch
- . Applied for drainage pump with piggy-back float switch
- . Applied for water transfer from low tank to upper tank by 4-20mA level transmitter
- . Applied for booster by 4-20mA pressure transmitter
- . Applied for sewage lifting by 4-20mA level transmitter

Other features:

- . High precision control current; control accuracy of A type CT board is 0.1A, control accuracy of B/C type CT board is 1A
- . All protection function can be enable or disable independently
- . Pump last five fault record displaying
- . Pump accumulative running time displaying
- . Key press button lock and unlock (settable)
- . Dynamic LCD displays pump running information
- . Memory Function when Power Off & Power Recovery
- . A/B/C pump operation enable or disable function
- . Pump start time delay (Time settable)
- . Pump stop time delay (Time settable)
- . Long signal transmission distance (1500meters max)
- . RS485 communication port available
- . 5 Xdry (passive) contact points available
- . DC24V & DC5V output terminal available
- . DC24V external visual alarm terminal available
- . Standby lithium battery terminal available
- . Super, expert and user parameter menu available to maintain the pump and controller in best working condition
- . A friendly human-machine interface is provided by LCD module
- . All electronic components with good stability, product quality is stable and reliable
- . A/B/C type CT board support standard rail mounting, user can assemble the control cabinet easily



A/B type CT board

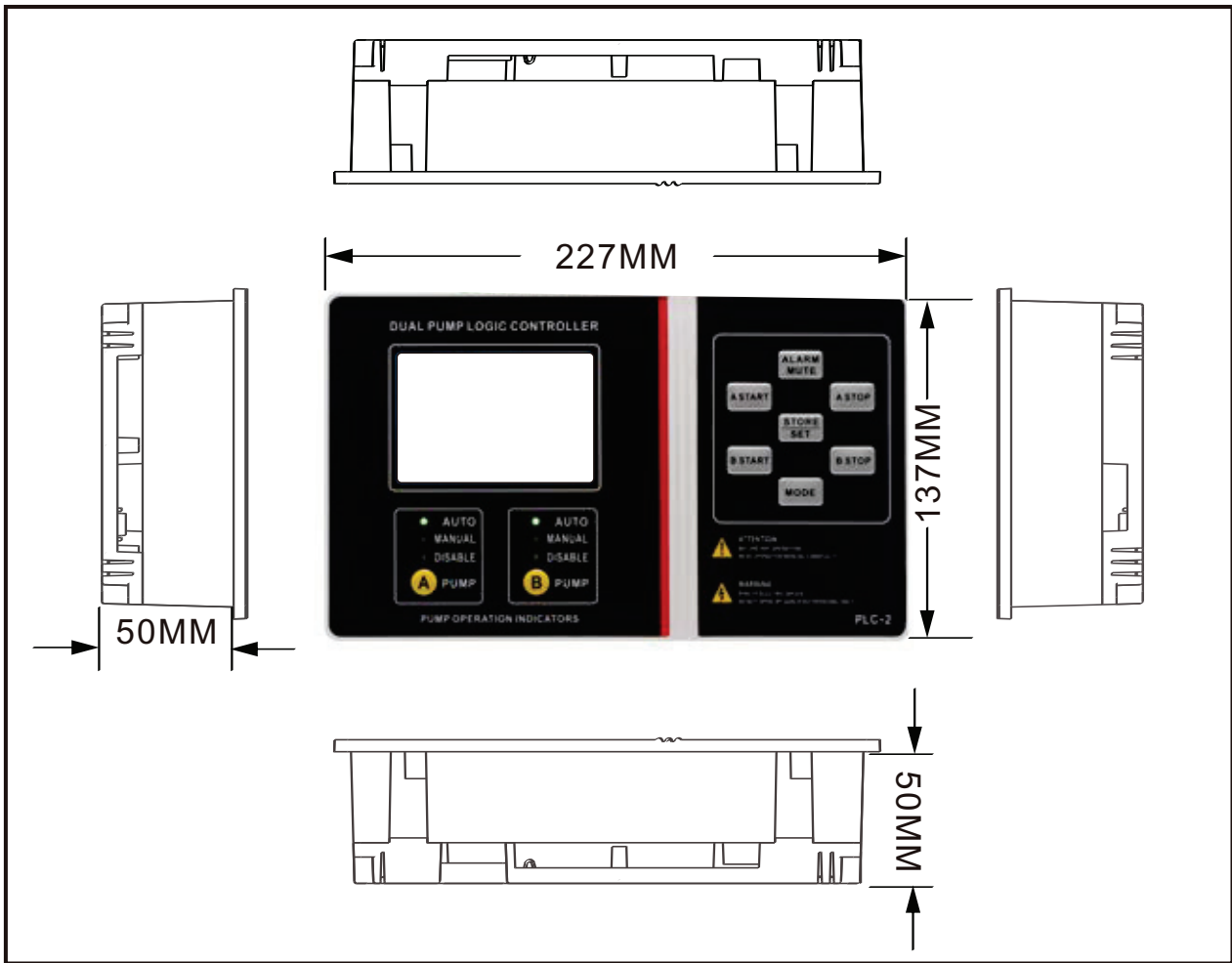


C type CT board



Proportional CT

PLC-1/2/3 layout & dimension



PLC-1/2/3 wiring terminal/port layout

