



# Aquavar<sup>®</sup> CPC

VARIABLE SPEED CENTRIFUGAL PUMP CONTROLLER

BRAQCPC

 **GOULDS**  
WATER TECHNOLOGY  
a xylem brand

# Variable Speed Control – Aquavar® CPC

## Introduction

The **Aquavar® CPC** (Centrifugal Pump Controller) from Goulds Water Technology incorporates the latest state-of-the-art Aquavar technology. The Aquavar CPC is a variable frequency drive and pump specific PLC in one compact unit, that will vary the speed of the motor to maintain a consistent pressure, flow, temperature or level. Here are just a few of the features and benefits of this innovative product:

- Start-up “wizards” expedite the programming process.
- Removable control panel/display.
- Fully backlit display with large text makes the control pad easy to read.
- Transducer assembly (0-300 psi) included for constant pressure.
- Protect the pump from cavitation, dead head and blocked suction.
- Protect the motor from short circuit, phase loss, overload, undervoltage, overvoltage.
- Input choke reduces harmonics and provides 3-5% impedance line reactor.
- EMC/RFI filters reduce drive noise emissions and interference.
- Fieldbus compatible, standard Modbus® Protocol (SCADA).
- Capable of controlling up to 3 fixed speed pumps, with one drive.
- Multipump control for up to 4 pumps, without additional PLC's or control panels.
- Auto lead/lag and switching control built in.
- Digital and analog control inputs.
- Relay outputs for pump run, fault and other warnings.



*Wall Mounted Version*



### Product Chart

INPUT VOLTAGE	INPUT PHASE	NEMA 1 BASE MODEL	CONTINUED OUTPUT AMPS NORMAL DUTY ①	NORMAL DUTY HORSEPOWER ②	FRAME SIZE
230	1	CPC20071	3.5	1	R1
		CPC20171	8.5	2	R1
		CPC20241	12	3	R2
		CPC20311	15.5	5	R2
		CPC20461	23	7.5	R3
		CPC20591	29.5	10	R3
		CPC20881	44.0	15	R4
		CPC21141	57.0	20	R4
		CPC21431	71.5	25	R6
		CPC21781	89.0	30	R6
	CPC22211	110.5	40	R6	
	CPC22481	124.0	50	R6	
	CPC20041	3	4.6	1	R1
	CPC20071		7.5	2	R1
	CPC20121		11.8	3	R1
	CPC20171		16.7	5	R1
	CPC20241		24.2	7.5	R2
	CPC20311		30.8	10	R2
	CPC20461		46.2	15	R3
	CPC20591		59.4	20	R3
CPC20751	74.8		25	R4	
CPC20881	88.0		30	R4	
CPC21141	114.0	40	R4		
CPC21431	143.0	50	R6		
CPC21781	178.0	60	R6		
CPC22211	221.0	75	R6		
CPC22481	248.0	100	R6		
460	3	CPC40061	6.9	3	R1
		CPC40081	8.8	5	R1
		CPC40121	11.9	7.5	R1
		CPC40151	15.4	10	R2
		CPC40231	23	15	R2
		CPC40311	31	20	R3
		CPC40381	38	25	R3
		CPC40451	45	30	R3
		CPC40591	59	40	R4
		CPC40721	72	50	R4
		CPC40781	78	60	R4
		CPC40971	97	75	R4
		CPC41251	125	100	R5
		CPC41571	157	125	R6
		CPC41801	180	150	R6
		CPC42451	246	200	R6
		CPC43161	316	250	R7
		CPC43681	368	300	R8
		CPC44141	414	350	R8
		CPC44861	486	400	R8
CPC45261	526	450	R8		
CPC46021	602	500	R8		
CPC46451	645	550	R8		
575	3	CPC50031	2.7	2	R2
		CPC50041	3.9	3	R2
		CPC50061	6.1	5	R2
		CPC50091	9	7.5	R2
		CPC50111	11	10	R2
		CPC50171	17	15	R2
		CPC50221	22	20	R2
		CPC50271	27	25	R3
		CPC50321	32	30	R4
		CPC50411	41	40	R4
		CPC50521	52	50	R4
		CPC50621	62	60	R4
		CPC50771	77	75	R6
		CPC50991	99	100	R6
		CPC51251	125	125	R6
CPC51441	144	150	R6		

① **NOTE:** Drive output is 3 phase voltage.

② **ALWAYS** consult motor maximum amp rating before selecting drive.



# Specifications

## Ratings and Enclosures

- NEMA 1 (indoor use) standard; other enclosures are available upon request.
- 1 - 200 HP (frame R1 - R6) wall mounted.  
250 - 550 HP (frame R7 and R8) floor mounted.
- Ambient temperature 5° F - 104° F. Higher temperatures can be achieved using optional enclosure upgrades and derating factor for up to 122° F.
- At altitudes from 0 to 3300 feet rated current is available, for every 328 feet above 3300 feet the current must be derated 1%. Maximum 6600 feet (consult factory above 6600 feet).
- Relative humidity lower than 95% without condensation.
- UL 508C compliant. UL approved.

## Electrical Characteristics

- Input Power**
- 3 phase 380 V to 480 V +10%/-15%
  - 1 phase 208 V to 240 V +10%/-15%
  - 3 phase 208 V to 240 V +10%/-15%
  - 3 phase 575 V +10%/-15%
  - Frequency 48 to 63 Hz
  - .98 power factor
  - 3 phase from 0 to  $V_{\text{supply}}$  (All motors must be 3 phase.)
  - 0 to 60 Hz frequency



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