



Product Features

1. The UP(UB) is a complete, all-in-one booster pump set, consisted of duplex pumps, pressure tank, pipe, inverter panel, and baseplate.
2. Constant water pressure for all fixture outlets. Pressure setting is adjustable according to construction sites.
3. No water hammer, soft start/shut-off extend pump life.
4. Low noise and smooth operation. Inverter function, the system will change motor speed automatically, according to demand of capacity. It can save energy resources (electricity cost).
5. Appropriate diaphragm pressure tank size to match types of water pumps, quantities of inverter, and operation approach.
6. Dry-running shutdown protection for extending pump life.
7. Overhead water storage tank is not essential for UP(UB) pump system, easy to install, reduce the cost of maintenance.
8. Alternative and Parallel operations to reduce pump size and cheaper operating cost.

Applications

1. Auto boost water pressure for IC Manufacture industries, industrial pressure boosting systems.
2. Auto boost water pressure for hotels, apartments, factories, hospitals, schools, parks, gymnasiums, shopping malls, villas, railway stations, airports, military camps, expo center, buildings.

Operating Conditions

1. Ambient Temperature: 0~50°C.
2. Liquid Temperature: 0~60°C.
(If transfer liquid temperature is over 60°C, We strongly recommend the pump needs to be changed into heat-resistant mechanical seal and bearing).
3. Transfer clean or potable water or no corrosive chemicals liquids without abrasives.
4. Working pressure: Max. 5~20bar (Depending on pump types).

Pressure Tank Selections

Diaphragm pressure tanks

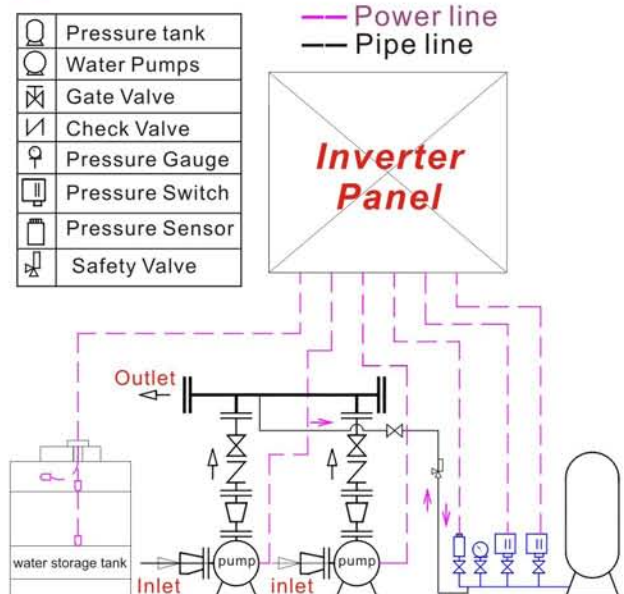
Vertical Type

Horizontal Type

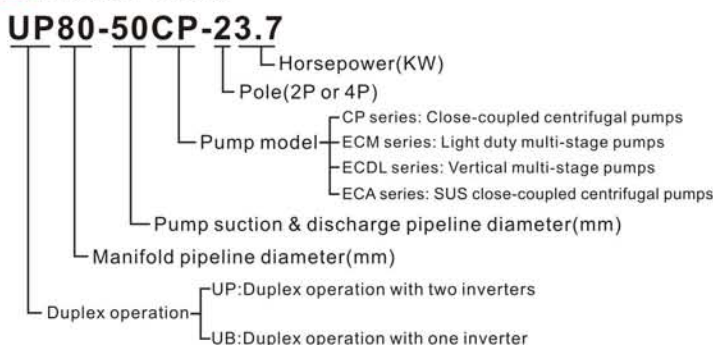
Standard shell material: SS400 (SUS304 is available upon request)
Working pressure: Max. 10kg/cm²
Volume: 8L~100L.
Joint: 3/4"~1".
Type: Horizontal, Vertical.



System Diagram



Model Code



▲ Duplex operation inverter control panel Introduction

Standard Panel

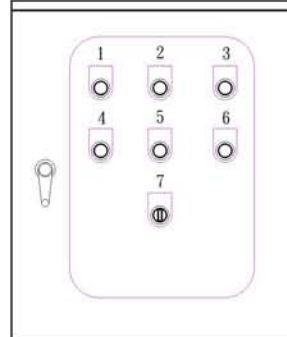
● **Panel Outline**



Standard Inverter pump panel



Dual gates Inverter pump panel



NO.	Name
1	No.1 running(Red)
2	Power(White)
3	No.2 running(Red)
4	No.1 failure(Yellow)
5	No.1 Auto/Stop/Man.
6	No. 2 failure
7	No.2 Auto/Stop/Man.

● **Inside configuration**



NO.	Name
1	Inverter
2	Fan
3	No fuse breaker
4	Fuse
5	Transformer
6	Double timer relay
7	Timer relay
8	Auxiliary relay
9	Terminal block
10	Ground wire base

Remarks:

- Standard type: Single gate, outdoor type panel. The panel casing is made of SS400.
- Stainless steel SUS304 panel casing, dual gates panel are available upon customer's request.
- Earth leakage circuit breaker, PID controller and PLC are optional upon request.



Human machine interface inverter Panel

● **Panel outline**



● **Inside configuration**



NO.	Name
1	Fan
2	Inverter
3	PLC
4	Terminal block
5	Auxiliary relay
6	Fuse
7	Magnetic switch
8	Switch
9	Ground wire base
10	Transformer
11	No fuse breaker
12	H.M.I.

- Remarks:
Standard type: Dual gates, outdoor type panel. The panel casing is made of SS400.
Stainless steel SUS304 panel casing is available upon request.

▲ Pump Selections

ECM-series Light duty Multi-stage Centrifugal Pump



Low operation noise, less power consumption, stainless steel pump construction, multi-stage impellers design, compact for saving space.
Output(HP):1~5.5HP
Frequency/Pole: 60HZ /2P
Head(M): Max.78M
Rated capacity ranges: 4~24M³/hr
Inverter pressure setting: 2.0~6.0 bar.
Pump inlet/outlet: 1"~2"

CP-series ;CPS-series Close-coupled Centrifugal Pump



Low operation noise, close-coupled design saves space and minimizes fluctuation. Optimal performance and diverse pump material choice.
Output(HP):0.5~20HP
Frequency/Pole: 50HZ /2P
Head(M): Max.84M
Rated capacity ranges: 3.6~39M³/hr
Inverter pressure setting: 1.0~7.6 bar.
Pump inlet/outlet: 1"~3"

ECDL-series Vertical Multi-stage Centrifugal Pump



Low operation noise, vertical design is for space saving and easy maintenance. Main pump components and impellers are made of stainless steel SUS304.
Output(HP):0.5~20HP
Frequency/Pole: 50HZ /2P
Head(M): Max.130M
Std.Capacity ranges: 2~64M³/hr
Inverter pressure setting: 2.0~9.0 bar.
Pump inlet/outlet: 1 1/4"~3"

ECA-series Stainless Steel Close-coupled Centrifugal Pump

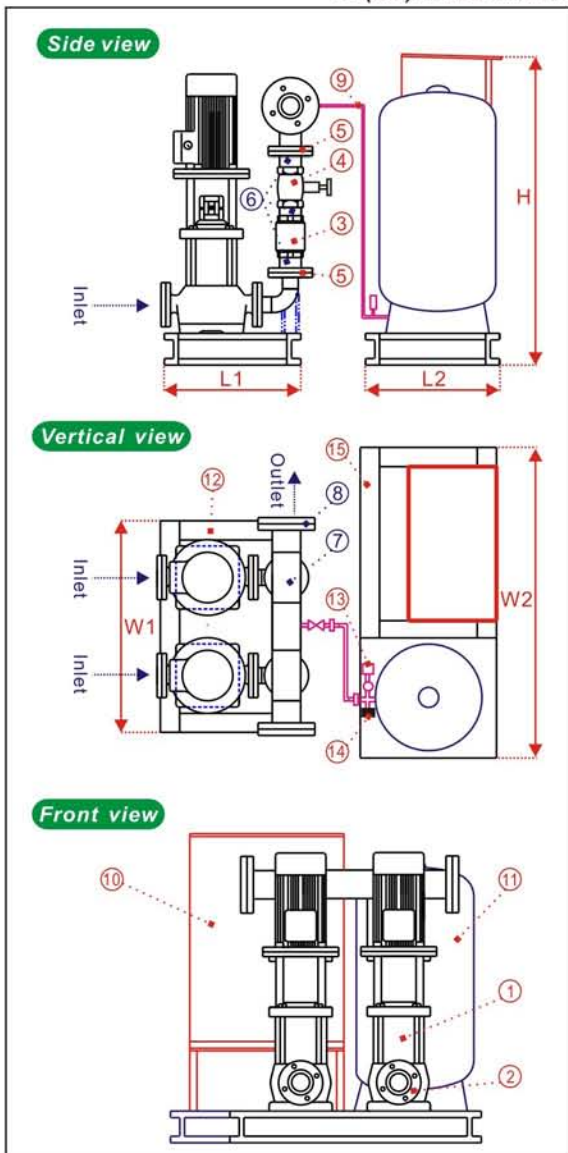


Low operation noise, close-coupled design is for space saving and minimizes fluctuation. Pump construction and wet parts are made of stainless steel SUS304 or SUS316.
Output(HP):0.5~20HP
Frequency/Pole: 50HZ /2P
Head(M): Max.58M
Std. Capacity ranges: 5~84M³/hr
Inverter pressure setting: 1.0~5.0 bar.
Pump inlet/outlet: 1"~3"

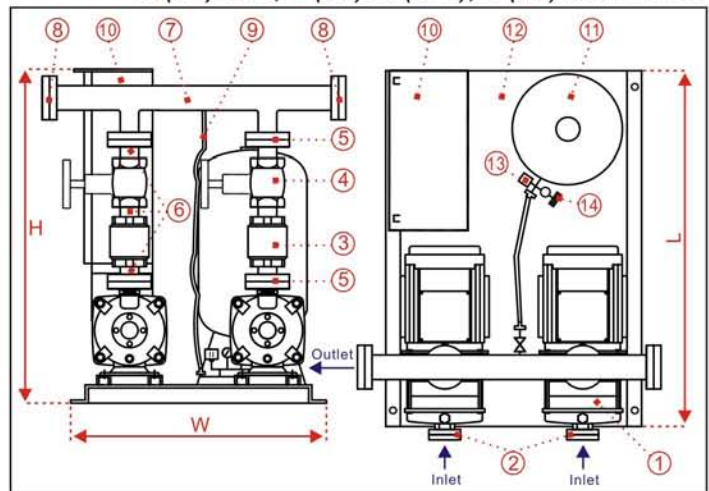
● Special pump type, above 20HP motor specification and performance requirement are available upon request.

▲ Construction

UP(UB)-ECDL SERIES



UP(UB)-ECM;UP(UB)-CP(CPS);UP(UB)-ECA SERIES

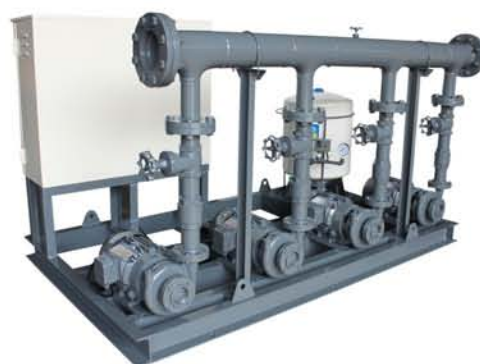


NO.	Name	Std. Material	Sub. Material
1	main pumps	ECDL: SUS304 ECM: SUS304	CP: FC200 CPS: SUS304
2	inlet flanges	SS400	SUS304
3	check valve	BC	SUS304
4	gate valve	BC	SUS304
5	outlet flanges	SS400	SUS304
6	outlet pipe	SS400	SUS304
7	manifold pipe	SS400	SUS304
8	manifold flanges	SS400	SUS304
9	high pressure hose	Rubber	SUS304
10	control panel	SS400	SUS304
11	pressure tank	SS400	SUS304
12	baseplate	SS400	SUS304
13	pressure switch	-----	-----
14	pressure transmitter	SUS304	-----
15	baseplate for panel	SS400	SUS304

UP-CP(CPS); UB-CP(CPS) SERIES



Optional: triplex or quadruple pumps operation



Specifications

(1 bar= 14.5psi ; 1GPM=3.785LPM) (2P;3500rpm)

MODEL	Output (P2)		Pump Inlet/ outlet inch	Manifold pipeline dia. inch	Pressure setting bar	Rated Capacity		Max. head M	Pressure tank size Liter	Dimensions (unit:mm) (Refer to page.61)			Around Weight KG
	KW	HP				single pump running LPM	dual pumps running LPM			L	W	H	
UP(UB)40-25CP-2.4	0.37	0.5	1"	1.5"	1.0~1.5	85~60	170~120	20	20(60)	930	910	920	125
UP(UB)50-40CP-2.75	0.75	1	1.5"	2"	1.2~1.6	150~100	300~200	20	20(60)	930	910	920	135
UP(UB)50(65)-50CP-21.5	1.5	2	2"	2"(2.5")	1.8~2.0	270~240	540~480	25.5	20(60)	930	910	940	168
UP(UB)65(80)-50CP-22.2	2.2	3	2"	2.5"(3")	2.5~3.0	280~230	560~460	38	20(60)	930	910	940	188
UP(UB)80(100)-80CP-22.2	2.2	3	3"	3"(4")	1.1~1.7	500~400	1000~800	23	20(60)	930	910	940	198
UP(UB)80(100)-80CP-23.7H	3.7	5	3"	3"(4")	2.0~2.6	500~400	1000~800	40	20(60)	1060	900	1150	245
UP(UB)80(100)-80CP-23.7	3.7	5	3"	3"(4")	1.3~1.9	650~450	1300~900	25	20(60)	1060	900	1150	263
UP(UB)80(100)-80CP-25.5	5.5	7.5	3"	3"(4")	2.9~3.4	650~450	1300~900	39	60	1200	1060	1180	318
UP(UB)80(100)-80CP-27.5	7.5	10	3"	3"(4")	3.7~4.5	500~400	1000~800	56	60	1200	1060	1320	365
UP(UB)80(100)-80CP-211	11	15	3"	3"(4")	5.8~6.8	600~500	1200~1000	76	60	1200	1060	1320	460
UP(UB)80(100)-80CP-215	15	20	3"	3"(4")	7.0~7.6	600~500	1200~1000	84	60	1200	1060	1420	510
UP(UB)40-25CPS-2.4	0.37	0.5	1"	1.5"	1.0~1.5	85~60	170~120	20	20(60)	930	910	920	125
UP(UB)50-40CPS-2.75	0.75	1	1.5"	2"	1.2~1.6	150~100	300~200	20	20(60)	930	910	920	135
UP(UB)50(65)-50CPS-21.5	1.5	2	2"	2"(2.5")	1.8~2.0	270~240	540~480	25.5	20(60)	930	910	940	168
UP(UB)65(80)-50CPS-22.2	2.2	3	2"	2.5"(3")	2.5~3.0	280~230	560~460	38	20(60)	930	910	940	188
UP(UB)80(100)-80CPS-22.2	2.2	3	3"	3"(4")	1.1~1.7	500~400	1000~800	23	20(60)	930	910	940	198
UP(UB)65(80)-50CPS-23.7	3.7	5	2"	2.5"(3")	2.0~2.6	500~400	1000~800	40	20(60)	1060	900	1150	245
UP(UB)80(100)-80CPS-23.7	3.7	5	3"	3"(4")	1.3~1.9	650~450	1300~900	25	20(60)	1060	900	1150	263
UP(UB)80(100)-80CPS-25.5	5.5	7.5	3"	3"(4")	2.9~3.4	650~450	1300~900	39	60	1200	1060	1180	318
UP(UB)80(100)-80CPS-27.5	7.5	10	3"	3"(4")	3.7~4.5	500~400	1000~800	56	60	1200	1060	1320	365
UP(UB)80(100)-80CPS-211	11	15	3"	3"(4")	5.8~6.8	600~500	1200~1000	76	60	1200	1060	1320	460
UP(UB)80(100)-80CPS-215	15	20	3"	3"(4")	7.0~7.6	600~500	1200~1000	84	60	1200	1060	1420	510

Remarks: ● UP: Duplex pumps with two inverters ; (UB): Duplex pumps with one inverter.

● CP: Cast iron close-coupled centrifugal pump ; CPS: Stainless steel close-coupled centrifugal pump.

● Over 20HP specifications or multi-pumps operation system are available upon request.

UP-ECDL; UB-ECDL SERIES

Optional: triplex or quadruple pumps operation



Specifications

(1 bar = 14.5psi ; 1GPM=3.785LPM) (2P;3500rpm)

MODEL	Output (P2)		Pump Inlet/ outlet inch	Manifold pipeline dia. inch	Pressure setting bar	Rated Capacity		Max. head M	Pressure tank size Liter	Dimensions (unit:cm) (Refer to page.29)					Around Weight KG
	KW	HP				single pump running M ³ /hr	dual pump running M ³ /hr			L1	L2	W1	W2	H	
UP(UB)50-40ECDL4-2-2.75	1	1	1.5"	2"	1.9~2.3	6~4	12~8	29	20(60)	50	50	60	118	68	280
UP(UB)50-40ECDL4-4-21.5	2	2	1.5"	2"	3.1~3.8	8~6	16~12	58	20(60)	50	50	60	118	68	290
UP(UB)50-40ECDL4-5-22.2	3	3	1.5"	2"	3.9~4.9	8~6	16~12	70	20(60)	50	50	60	118	68	312
UP(UB)50-40ECDL4-7-23.7	5	5	1.5"	2"	5.5~6.9	8~6	16~12	96	60(80)	50	50	60	118	72	325
UP(UB)50(65)-40ECDL10-2-21.5	2	2	1.5"	2"(2.5")	2.0~2.5	14~10	28~20	35	20(60)	50	50	60	118	71	312
UP(UB)50(65)-40ECDL10-3-22.2	3	3	1.5"	2"(2.5")	3.0~3.8	14~10	28~20	52	20(60)	50	50	60	118	78	322
UP(UB)50(65)-40ECDL10-4-23.7	5	5	1.5"	2"(2.5")	4.0~5.1	14~10	28~20	65	60(80)	50	50	60	118	88	337
UP(UB)50(65)-40ECDL10-6-24	5.5	5.5	1.5"	2"(2.5")	5.6~6.6	15~13	30~26	92	60(80)	50	50	60	118	92	368
UP(UB)50(65)-40ECDL10-7-25.5	7.5	7.5	1.5"	2"(2.5")	6.5~7.7	15~13	30~26	106	60(80)	60	50	90	128	105	410
UP(UB)65(80)-65ECDL15-2-23.7	5	5	2.5"	2.5"(3")	3.0~3.5	20~14	40~28	41	60(80)	50	50	60	118	88	345
UP(UB)65(80)-65ECDL15-3-24	5.5	5.5	2.5"	2.5"(3")	4.1~5.2	22~14	44~28	61	60(80)	50	50	60	118	88	381
UP(UB)65(80)-65ECDL15-4-25.5	7.5	7.5	2.5"	2.5"(3")	5.5~6.9	22~15	44~30	85	60(80)	60	50	90	128	101	424
UP(UB)65(80)-65ECDL15-5-27.5	10	10	2.5"	2.5"(3")	6.9~8.6	22~15	44~30	106	60(80)	60	50	90	128	88	440
UP(UB)65(80)-65ECDL20-2-24	5.5	5.5	2.5"	2.5"(3")	2.6~3.4	28~20	56~40	45	60(80)	50	50	60	118	95	373
UP(UB)65(80)-65ECDL20-3-25.5	7.5	7.5	2.5"	2.5"(3")	3.8~4.5	28~24	56~48	67	60(80)	60	50	90	128	96	422
UP(UB)65(80)-65ECDL20-4-27.5	10	10	2.5"	2.5"(3")	4.2~6.0	32~24	64~48	87	60(80)	60	50	90	128	101	432
UP(UB)65(80)-65ECDL20-5-211	15	15	2.5"	2.5"(3")	5.2~7.5	32~24	64~48	107	60(80)	70	50	108	128	122	502
UP(UB)80(100)-80ECDL32-1-23.7	5	5	3"	3"(4")	1.9~2.4	40~28	80~56	30	60(80)	60	50	60	118	83	415
UP(UB)80(100)-80ECDL32-2-2-25.5	7.5	7.5	3"	3"(4")	2.8~3.4	40~32	80~64	45	60(80)	60	50	90	128	106	460
UP(UB)80(100)-80ECDL32-2-1-25.5	7.5	7.5	3"	3"(4")	3.4~4.0	40~32	80~64	51	60(80)	60	50	90	128	106	460
UP(UB)80(100)-80ECDL32-2-27.5	10	10	3"	3"(4")	3.9~4.5	40~32	80~64	58	60(80)	60	50	90	128	106	473
UP(UB)80(100)-80ECDL32-3-2-211	15	15	3"	3"(4")	4.5~5.3	40~32	80~64	72	60(80)	70	50	108	128	136	565
UP(UB)80(100)-80ECDL32-3-211	15	15	3"	3"(4")	5.1~6.2	40~32	80~64	82	60(80)	70	50	108	128	136	565
UP(UB)80(100)-80ECDL32-4-215	20	20	3"	3"(4")	5.7~7.5	44~36	88~72	107	60(80)	70	50	108	150	143	650
UP(UB)80(100)-80ECDL45-1-1-25.5	7.5	7.5	3"	3"(4")	2.3~2.6	50~42	100~84	31	60(80)	60	50	90	128	108	470
UP(UB)80(100)-80ECDL45-1-27.5	10	10	3"	3"(4")	2.7~3.0	55~45	110~90	38	60(80)	60	50	90	128	108	485
UP(UB)80(100)-80ECDL45-2-2-211	15	15	3"	3"(4")	4.3~4.9	55~45	110~90	60	60(80)	70	50	108	128	133	577
UP(UB)80(100)-80ECDL45-2-215	20	20	3"	3"(4")	5.5~6.1	55~45	110~90	72	60(80)	70	50	108	150	133	655
UP(UB)100(125)-100ECDL64-1-1-27.5	10	10	4"	4"(5")	1.8~2.3	80~60	160~120	30	60(80)	70	50	90	128	108	490
UP(UB)100(125)-100ECDL64-1-211	15	15	4"	4"(5")	2.8~3.3	80~60	160~120	42	60(80)	82	50	108	128	126	572
UP(UB)100(125)-100ECDL64-2-2-215	20	20	4"	4"(5")	3.7~4.7	80~60	160~120	55	60(80)	82	50	108	150	135	663

Remarks: ● UP: Duplex pumps with two inverters ; (UB): Duplex pumps with one inverter.

● CP: Cast iron close-coupled centrifugal pump ; CPS: Stainless steel close-coupled centrifugal pump.

● Over 20HP specifications or multi-pumps operation system are available upon request.

UP-ECM; UB-ECM SERIES



Optional: Pump system with two pressure tanks

Specifications

(1 bar= 14.5psi ; 1GPM=3.785LPM) (2P:3500rpm)

MODEL	Output (P2)		Pump Inlet/ outlet inch	Manifold pipeline dia. inch	Pressure setting bar	Rated Capacity		Max. head M	Pressure tank size Liter	Dimensions (unit:mm) (Refer to page.18)			Around Weight KG
	KW	HP				single pump running LPM	dual pumps running LPM			L	W	H	
UP(UB)40-25ECM2-40-2.75	0.75	1	1"	1.5"	3.5~4.0	50~40	100~80	48	20	93	91	97	123
UP(UB)40-25ECM2-60-21.1	1.1	1.5	1"	1.5"	5.0~5.8	50~40	100~80	72	20	93	91	97	126
UP(UB)40-25ECM4-40-21.1	1.1	1.5	1"	1.5"	4.0~4.8	100~70	200~140	55	20	93	91	97	128
UP(UB)50-25ECM4-40-21.1	1.1	1.5	1"	2"	4.0~4.8	100~70	200~140	55	20	93	91	97	133
UP(UB)50-40ECM8-10-21.1	1.1	1.5	1.5"	2"	1.9~2.3	150~100	300~200	28	20(60)	93	91	97	142
UP(UB)65-40ECM8-10-21.1	1.1	1.5	1.5"	2.5"	1.9~2.3	150~100	300~200	28	20(60)	93	91	97	152
UP(UB)50-40ECM8-15-21.5	1.5	2	1.5"	2"	3.1~3.7	150~100	300~200	43	20(60)	106	90	97	148
UP(UB)65-40ECM8-15-21.5	1.5	2	1.5"	2.5"	3.1~3.7	150~100	300~200	43	20(60)	106	90	97	158
UP(UB)50-40ECM8-20-21.8	1.8	2.5	1.5"	2"	3.8~4.6	150~100	300~200	53	20(60)	106	90	97	152
UP(UB)65-40ECM8-20-21.8	1.8	2.5	1.5"	2.5"	3.8~4.6	150~100	300~200	53	20(60)	106	90	97	162
UP(UB)50-40ECM8-25-22.2	2.2	3	1.5"	2"	5.0~6.0	150~100	300~200	68	20(60)	106	90	97	162
UP(UB)65-40ECM8-25-22.2	2.2	3	1.5"	2.5"	5.0~6.0	150~100	300~200	68	20(60)	106	90	97	172
UP(UB)50-40ECM8-30-23.7	3.7	5	1.5"	2"	5.7~6.9	150~100	300~200	78	20(60)	106	90	102	195
UP(UB)65-40ECM8-30-23.7	3.7	5	1.5"	2.5"	5.7~6.9	150~100	300~200	78	20(60)	106	90	102	205
UP(UB)50-40ECM12-10-21.5	1.5	2	1.5"	2"	2.2~2.6	200~150	400~300	31	20(60)	93	91	97	150
UP(UB)65-40ECM12-10-21.5	1.5	2	1.5"	2.5"	2.2~2.6	200~150	400~300	31	20(60)	93	91	97	160
UP(UB)50-40ECM12-15-22.2	2.2	3	1.5"	2"	3.5~4.1	200~150	400~300	45	20(60)	106	90	97	162
UP(UB)65-40ECM12-15-22.2	2.2	3	1.5"	2.5"	3.5~4.1	200~150	400~300	45	20(60)	106	90	97	172
UP(UB)50-40ECM12-20-23.7	3.7	5	1.5"	2"	4.4~5.2	200~150	400~300	58	20(60)	106	90	102	193
UP(UB)65-40ECM12-20-23.7	3.7	5	1.5"	2.5"	4.4~5.2	200~150	400~300	58	20(60)	106	90	102	203
UP(UB)65-50ECM16-20-23	3	4	2"	2.5"	2.2~2.8	400~267	800~534	37	20(60)	106	90	102	202
UP(UB)80-50ECM16-20-23	3	4	2"	3"	2.2~2.8	400~267	800~534	37	20(60)	106	90	102	212
UP(UB)65-50ECM16-30-24	4	5.5	2"	2.5"	3.3~4.2	400~267	800~534	55	20(60)	106	90	102	220
UP(UB)80-50ECM16-30-24	4	5.5	2"	3"	3.3~4.2	400~267	800~534	55	20(60)	106	90	102	235

Remarks: ● UP: Duplex pumps with two inverters ; (UB): Duplex pumps with one inverter.
● Customized design is available upon special request.

UP-ECA; UB-ECA SERIES



Specifications

(1 bar = 14.5psi ; 1GPM=3.785LPM) (2P;3500rpm)

MODEL	Output (P2)		Pump Inlet/ outlet	Manifold pipeline dia.	Pressure setting	Rated Capacity		Max. head	Pressure tank size	Dimensions (unit:mm) (Refer to page.55)			Around Weight
	KW	HP				inch	inch			bar	single pump running	dual pumps running	
			M ³ /hr	M ³ /hr	KG								
UP50(65)-40ECA50-32-160-21.5	1.5	2	1.5"	2"(2.5")	1.5~2.0	18~12.5	36~25	27.5	60	930	910	920	125
UP50(65)-40ECA50-32-160-22.2	2.2	3	1.5"	2"(2.5")	2.2~2.6	18~12.5	36~25	32	60	930	910	920	135
UP50(65)-40ECA50-32-160-23.0	3.0	4	1.5"	2"(2.5")	3.0~3.4	18~12.5	36~25	40	60	930	910	940	168
UP50(65)-40ECA50-32-160-24.0	4.0	5.5	1.5"	2"(2.5")	4.1~4.5	18~12.5	36~25	53	60	930	910	940	188
UP50(65)-40ECA50-32-160-25.5	5.5	7.5	1.5"	2"(2.5")	4.7~5.4	18~12.5	36~25	65	60	930	910	940	198
UP65(80)-50ECA65-40-125-22.2	2.2	3	2"	2.5"(3")	1.7~2.2	30~20	60~40	27.5	60	1060	900	1150	245
UP65(80)-50ECA65-40-125-23.0	3.0	4	2"	2.5"(3")	2.2~2.7	30~20	60~40	32	60	1060	900	1150	263
UP65(80)-50ECA65-40-160-24.0	4.0	5.5	2"	2.5"(3")	2.8~3.4	30~20	60~40	40	60	1200	1060	1180	318
UP65(80)-50ECA65-40-200-25.5	5.5	7.5	2"	2.5"(3")	3.8~4.4	30~20	60~40	48	60	1200	1060	1320	365
UP65(80)-50ECA65-40-200-27.5	7.5	10	2"	2.5"(3")	4.5~5.0	30~20	60~40	52	60	1200	1060	1320	460
UP65(80)-50ECA65-40-200-211	11	15	2"	2.5"(3")	6.6~6.8	30~20	60~40	69.5	60	1200	1060	1420	510
UP80(100)-65ECA65-50-125-23.0	3.0	4	2.5"	3"(4")	1.6~2.0	40~30	80~60	27.5	60	930	910	920	125
UP80(100)-65ECA65-50-125-24.0	4.0	5.5	2.5"	3"(4")	1.6~2.1	50~40	100~80	28.5	60	930	910	920	135
UP80(100)-65ECA65-50-160-25.5	5.5	7.5	2.5"	3"(4")	2.0~2.8	60~40	120~80	35	60	930	910	940	168
UP80(100)-65ECA65-50-200-27.5	7.5	10	2.5"	3"(4")	2.7~3.6	60~40	120~80	42	60	930	910	940	188
UP80(100)-65ECA65-50-200-211	11	15	2.5"	3"(4")	4.2~5.1	60~40	120~80	58	60	930	910	940	198
UP80(100)-65ECA65-50-200-215	15	20	2.5"	3"(4")	5.7~6.4	60~40	120~80	71	60	1060	900	1150	245

Remarks: ● UP: Duplex pumps with two inverters ; (UB): Duplex pumps with one inverter.
● Customized design is available upon special request.