FEATURES

NEMA 4X, 30 watt, flashing red light and alarm horn - 95db.

NEMA 4X, fiberglass enclosure with gasketed, hinged door and stainless steel hardware.

Entire unit is UL and CUL listed.

Single Phase
- Field adjustable for 115, 208 or 230V, 60 Hz.
- 2 pump circuit breakers.

Three Phase
- Field adjustable for 208/230/460/575V, 60 Hz.
- 115V control circuit transformer.
- 2 adjustable motor overload protectors.
- Heaters not required.

Provides fully automatic operation for two pumps.

Solid state pump alternator circuit displays float status for ease of installation and trouble shooting.

DUPLEX NEMA 4X
WEATHERPROOF PANELS
SINGLE AND THREE PHASE CONTROL PANELS
APPLICATIONS
Superior quality duplex liquid-level controller, automatically controls alternation for two pump operation. High-level alarm warning designed for a variety of sump, effluent, sewage and water transfer applications.

SPECIFICATIONS
- Accepts single or dual power feed.
- 2 hand-off-automatic (H-O-A) pump switches.
- On-off control circuit switch.
- 2 oversized magnetic contactors.
- Numbered terminal strip-screw type.
- Float Switches – Note: Please order float switches separately. We offer several types and models. See the Float Switch bulletin for available options. The type selected determines the quantity needed. The basin depth and panel location determine the required cord length. Contact your distributor or Customer Service for additional information.
- Electronic pump alternator.
- Alternator selector switch.
- Lag pump start delay.

FEATURES
- Rugged, NEMA 4X construction withstands even the most severe weather conditions and prevents corrosion.
- Provides fully automatic operation for two pumps. Alternates pump starting to distribute operating time. Provides extra pumping capacity in times of high inflow by energizing both pumps.
- Alternator selector toggle for maintenance on one or both pumps.
- Hinged door with lockable stainless steel latch for safe operation indoors or out.
- High-level alarm circuit includes through-door mounted silence switch for manual silence of alarm horn.
- Through-door mounted alarm test switch insures proper operation of the alarm circuit without the need to open the panel.
- Two through-door mounted pump run lights.
- Top-mounted high intensity flashing red light provides 360° visibility.
- Pulsating, corrosion proof alarm horn.
- These duplex controls are factory wired for operation with three float bulbs. An easy field modification for four float bulb operation using separate “lag-on” and “alarm bulbs” is provided.
- Alternator selector switch allows a choice of automatic alternation or operation of only pump 1 or pump 2. Typically used if one pump is down for maintenance.
- Lag pump-start delay built-in. Delays starting lag pump for 5 seconds if both pumps attempt to start simultaneously as after a power outage.
- Panel can be wired for a single power feed for pumps and control circuit or the control circuit can be wired to a separate power supply to insure alarm integrity in case of a tripped main breaker.
- Auxiliary alarm contacts provided for remote alarm connection.
- Color coded wiring, screw type terminals and plug in sockets, ensure ease of field servicing.
- Field wiring diagram, panel schematic and installation instructions included.
- Requires three float switches or with optional fourth lag float, order separately.

<table>
<thead>
<tr>
<th>PANEL MODEL INFORMATION</th>
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<tr>
<td><strong>SINGLE PHASE PANELS</strong></td>
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<td><strong>ORDER NUMBER</strong></td>
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<td>D10020</td>
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<td>D12836</td>
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**ADDITIONAL OPTIONS**

**Code** (add as required)

A = Guaranteed pump submergence circuit  
C = 115V condensation heater  
D = Single phase lightning arrester  
E = Three phase lightning arrester  
G = Elapsed time meter (2) - Duplex  
J = Seal fail circuit (2) - Duplex  
L = Cycle counter (2) - Duplex  
N = High temp. indicator with pump shutdown - Duplex

P = Special duplex Mini CAS seal fail and high temperature circuit for use on **only three phase** 15/20GD, 15/20GX, 1GA/2GA, GV Plus and Impact pumps. For single phase, see CentriPro single phase grinder control panels bulletin BCP1PGP for standard, BCP1PC1P for explosion proof.  
T = 4 intrinsically safe relays in duplex panel  
V = Duplex 3SDX/4SDX/4NS/4XD Seal Fail  
YY = Duplex dry contact for seal failure interface to building management system.  
ZZ = Duplex dry contact for pump running interface to building management system.

When ordering options, add the appropriate code number as a suffix to the panel order number.  
Example...D31625CG adds a condensation heater and (2) elapsed time meters.

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**ENCLOSURE DIMENSIONS** (in inches)

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<tr>
<th>Single Phase</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
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<th>Three Phase</th>
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<th>B</th>
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**NOTE:** Mounting holes are $\frac{3}{8}$".
SINGLE PHASE COMPONENTS
1. NEMA 4X enclosure
2. Flashing alarm light
3. Alarm horn
4. Pump run light
5. Alarm silence button
6. Alarm test button
7. Control power on/off switch
8. H-O-A switch
9. Alarm reset button
10. Contactor
11. Terminal strip
12. Alternator circuit
13. Motor circuit breakers

THREE PHASE COMPONENTS
1. NEMA 4X enclosure
2. Flashing alarm light
3. Alarm horn
4. Pump run light
5. Alarm silence button
6. Alarm test button
7. Control power on/off switch
8. H-O-A switch
9. Alarm reset button
10. Contactor
11. Terminal strip
12. Alternator circuit
13. Control transformer
14. Motor circuit protectors
DUPLEX SINGLE PHASE WIRING DIAGRAM - D10020

NOTE: The standard panels shown in this book are not designed to be used with pumps requiring external capacitors. See the catalog for panels with built-in capacitor packs.

FOR 120 VOLT OPERATION
USE TERMINALS (L1) AND (N)
JUMP TERMINALS (N) AND (L2)

230 VAC
SINGLE PHASE
60 Hz

A 230 VOLT SYSTEM
REQUIRES A 4-WIRE
POWER SUPPLY LINE
L1, L2, N AND GND.
WITHOUT A NEUTRAL
THE CONTROL CIRCUIT
WILL NOT WORK.

ALTERNATOR SWITCH -
STANDARD ON ALL DUPLEX
PANELS, THIS SWITCH
PROVIDES OPTIONS FOR:
ALTERNATE PUMPS, USE
ONLY PUMP 1 OR USE ONLY
PUMP 2. IT IS USED WHEN A
PUMP IS REMOVED FOR
SERVICE.

① FOR SEPARATE 120 VAC
CONTROL POWER SUPPLY,
REMOVE JUMPER (J1) FROM
TERMINALS (H) AND (L1).
CONNECT 15 AMP MAX.
PROTECTED 120 VAC SUPPLY
TO TERMINALS (L1) AND (N).
WITH THE NEUTRAL OF THE
SUPPLY TO (N).

② FOR USE WITH WIDE
ANGLE FLOAT SWITCH (ONE
FLOAT FOR BOTH ON AND
OFF OPERATION). JUMP
TERMINALS (3) AND (4),
INSTALL WIDE ANGLE FLOAT
TO TERMINALS (1) AND (2).

③ FACTORY WIRED FOR (3) FLOAT
OPERATION. FOR (4) FLOAT
OPERATION, REMOVE JUMPER (J2)
FROM TERMINALS (6) AND (8). INSTALL
LAG FLOAT ON TERMINALS (5) AND (6).

NOTE: The standard panels shown in this book are not designed to be used with pumps requiring external capacitors. See the catalog for panels with built-in capacitor packs.
**DUPLICATE THREE PHASE WIRING DIAGRAM - D3**

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**208/230/460/575 VAC THREE PHASE 60 Hz**

**FACTORY WIRED FOR 460 VAC. FOR 208, 230 OR 575 VAC OPERATION CHANGE CONTROL TRANSFORMER PRIMARY AT TERMINAL BLOCK.**

**ALTERNATOR SWITCH**

- **STANDARD ON ALL DUPLEX PANELS. THIS SWITCH PROVIDES OPTIONS FOR:**
  - **ALTERNATE PUMPS. USE ONLY PUMP 1 OR USE ONLY PUMP 2. IT IS USED WHEN A PUMP IS REMOVED FOR SERVICE.**

1. **FOR SEPARATE 120 VAC CONTROL POWER SUPPLY, REMOVE JUMPER (J1) FROM TERMINALS (H) AND (L1). CONNECT 15 AMP MAX. PROTECTED 120 VAC SUPPLY TO TERMINALS (L1) AND (N). WITH THE NEUTRAL OF THE SUPPLY TO (N).**

2. **FOR USE WITH WIDE ANGLE FLOAT SWITCH (ONE FLOAT FOR BOTH ON AND OFF OPERATION). JUMP TERMINALS (3) AND (4), INSTALL WIDE ANGLE FLOAT TO TERMINALS (1) AND (2).**

3. **FACTORY WIRED FOR (3) FLOAT OPERATION. FOR (4) FLOAT OPERATION, REMOVE JUMPER (J2) FROM TERMINALS (6) AND (8). INSTALL LAG FLOAT ON TERMINALS (5) AND (6).**
Xylem |ˈzɪləm|

1) The tissue in plants that brings water upward from the roots; 
2) a leading global water technology company.

We’re a global team unified in a common purpose: creating advanced technology solutions to the world’s water challenges. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. Our products and services move, treat, analyze, monitor and return water to the environment, in public utility, industrial, residential and commercial building services, and agricultural settings. With its October 2016 acquisition of Sensus, Xylem added smart metering, network technologies and advanced data analytics for water, gas and electric utilities to its portfolio of solutions. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise with a strong focus on developing comprehensive, sustainable solutions.

For more information on how Xylem can help you, go to www.xyleminc.com