## ROTO-BIN-DICATOR® DOUBLE SWITCH MODELS

### HOUSING PARTS LIST

<table>
<thead>
<tr>
<th>PART NO.</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
<th>MOUNTING PLATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAR110940</td>
<td>Frame Assembly [ ] Aluminum [ ] S.S. includes shaft seal, clutch &amp; drive shaft, bearings and stub shaft. Specify weatherproof or explosionproof. LAR110930 supplied only in mating pairs for explosionproof models.</td>
<td>1</td>
<td>6-11/32 HOLE, 8&quot; O.D. 6&quot; I.D.</td>
</tr>
<tr>
<td>LAR121960</td>
<td>Cover [ ] Aluminum [ ] S.S.</td>
<td>1</td>
<td>N.P.T.</td>
</tr>
<tr>
<td>LAR120050</td>
<td>Switch Bracket</td>
<td>1</td>
<td>DETAILS COMMON FOR ALL TYPES</td>
</tr>
<tr>
<td>LAR110070</td>
<td>110v, 50/60 Hz Motor Kits</td>
<td>1</td>
<td>MODEL &quot;RA&quot; W.E.A. P.R.F. 110vac</td>
</tr>
<tr>
<td>LAR110100</td>
<td>220v, 50/60 Hz Motor Kits</td>
<td>1</td>
<td>MODEL &quot;RC&quot; W.E.A. P.R.F. 220vac</td>
</tr>
<tr>
<td>LAR11026</td>
<td>Micro Switch, Single Pole-Double Throw</td>
<td>1</td>
<td>MODEL &quot;RXA&quot; EXP. P.R.F. 110vac</td>
</tr>
<tr>
<td>LAR130300</td>
<td>Terminal Block</td>
<td>1</td>
<td>MODEL &quot;RXC&quot; EXP. P.R.F. 220vac</td>
</tr>
<tr>
<td>LAR131220</td>
<td>Cover Gasket (Not furnished on explosionproof units)</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

NOTE: 304 stainless steel is standard for metal parts of all shafts and paddles.

### SIDE OF BIN MOUNTING

#### TYPE 1
- **Flexible Shaft and Four Vane Paddle**
  - Flexible Shaft: H-36
  - Mounting Plate: H-19
  - Paddle: H-371, 2" x 7"

#### TYPE 2
- **Flexible Shaft and Four Vane Paddle**
  - Flexible Shaft: H-36
  - Mounting Plate: H-19
  - Paddle: H-371, 1-1/2" x 5"

#### TYPE 3
- **Solid Shaft with Single Vane Paddle**
  - Solid Shaft: H-19
  - Mounting Plate: H-19
  - Paddle: H-371, 1" x 2-7/8"

#### TYPE 3i
- **Solid Shaft with Insertable Paddle**
  - Solid Shaft: H-19
  - Mounting Plate: H-19
  - Paddle: H-371, 1-1/2" x 5"

#### TYPE 4
- **Solid Shaft with Four Vane Paddle**
  - Solid Shaft: H-19
  - Mounting Plate: H-19
  - Paddle: H-371, 1-1/2" x 7"

#### TYPE 5
- **Solid Shaft with Four Vane Paddle**
  - Solid Shaft: H-19
  - Mounting Plate: H-19
  - Paddle: H-371, 1-1/2" x 7"

### TOP OF BIN MOUNTING

#### TYPE 6
- **Flexible Shaft**
  - Flexible Shaft: H-36 (Optional) Coupling H-38
  - Shaft Extension: Galv. S.S.
  - Shaft Guard: Galv. S.S.
  - Paddle: H-370, 1-1/2" x 5"

#### TYPE 7
- **Flexible Shaft**
  - Flexible Shaft: H-36 (Optional) Coupling H-38
  - Shaft Extension: Galv. S.S.
  - Shaft Guard: Galv. S.S.
  - Overall Shaft Length: 20" Lengths Not Uncommon

#### TYPE 8
- **Flexible Shaft**
  - Flexible Shaft: H-36 (Optional) Coupling H-38
  - Shaft Extension: Galv. S.S.
  - Shaft Guard: Galv. S.S.
  - Overall Shaft Length: 20" Lengths Not Uncommon
  - Padding: H-373 Neoprene 24"  H-374 Stainless Steel 17"
OPERATION-INSTALLATION & WIRING INSTRUCTIONS

Operation centers around the low torque slow speed synchronous motor. The motor either turns the paddle in the absence of the bulk material, or turns itself to actuate the Micro switch when paddle rotation is stopped by the bulk material. Constant power to the stalled motor keeps the switch actuated until the paddle is again free to turn.

Mounting Location: There must be free flow of material both to and away from the paddle and shaft. Keep the paddle and shaft out of the direct flow of material. Protective baffles or offset mounting may be required.

Mounting Surface Preparation:

A. On a 7" bolt circle, drill and tap or drill 6 equally spaced holes in bin wall for 1/4" bolts or cap screws. Bolt heads should be tack welded to bin inner wall.
B. Cut 5" diameter hole to pass paddle.
C. If required, fabricate & weld or bolt protective baffle to inner wall.

Mounting on Side of Bin:
A. Conduit opening must be down or to the left.
B. Assemble gasket between mounting plate and bin wall.
C. Use a pair of rubber and steel washers beneath the attaching hardware.

Mounting on Top of Bin:
A. Cut shaft extension pipe to required length and drill a 1/8" hole through the pipe 7/16" from each end.
B. Assemble shaft extension to H-38 coupling and pin securely.
C. Cut pipe guard 5" shorter than overall extended shaft & paddle length. Thread one end 1-1/4" NPT.
D. Assemble guard over extension and screw securely into mounting plate.
E. Assemble paddle to shaft extension and pin securely.

Note: Shaft extension must be free to turn inside of shaft guard pipe. Drive all lock pins in flush to lock securely. * Shaft length 12" and longer require shaft guard.

NOTE: If separate couplings are used in place of conventional mounting plates with integral couplings, be sure they are welded in the bin wall or top so that half the coupling protrudes inside the bin. Use only half couplings for side of bin mounting.

Warning - Explosionproof Units: In hazardous locations, a seal fitting must be located within 18" of the control. In order to preserve the explosionproof integrity of the casting, care must be exercised when removing and replacing the cover so no damage is done to the flanges.

WIRING: In hazardous locations, a sealing fitting must be located within 18" of this control.
A. Connect power source for motor to terminal block. Continuous power is essential. Motor may be stalled indefinitely without damage.
B. Make wiring connections to control Micro switch using a separate circuit from that of the motor.
C. Apply power to motor circuit checking freeness of operation and actuation of the Micro switch.
D. Fasten housing cover securely to prevent damage from dust or moisture.

AUTOMATIC BIN LEVEL CONTROL WIRING DIAGRAM

Automatic control of feeding machinery. As material falls to low-level, the Roto-Bin-Dicator® control automatically stops feeding machinery. When material rises to high-level, the Roto-Bin-Dicator® control automatically starts feeding machinery. Feeding machinery will not start until material falls to low-level and cycle is repeated.

Automatic control in response to fluctuating levels of material in a bin.