

Wiring Specifications

Refer to the following steps for details on power and accessory wiring for the operator.

AC Power Wiring



ALL AC ELECTRICAL CONNECTIONS TO THE POWER SOURCE AND THE OPERATOR MUST BE MADE BY A LICENSED ELECTRICIAN AND MUST OBSERVE ALL NATIONAL AND LOCAL ELECTRICAL CODES.

1. Find the listing on this page corresponding to the model, voltage
- USE COPPER WIRE ONLY!**

and horsepower rating of your operator.

2. The distance shown in the table is measured in feet from the operator to the power source. **DO NOT EXCEED THE MAXIMUM DISTANCE.** These calculations have been based on standard 115 V and 230 V supplies with a 10% drop allowable. If your supply is under the standard rating, the runs listed may be longer than what your application will handle, and you should not run wire too near the maximum distance for the gauge of wire you are using.
3. When large-gauge wire is used, a separate junction box (not supplied) may be needed for the operator power connection.
4. Wire length calculations are based on the National Electrical Code, Article 430 and have been carefully determined based on motor inrush, brake solenoids, and operator requirements.
5. Connect power in accordance with local codes. **The green ground wire must be properly connected.**
6. Wire insulation must be suitable to the application.
7. Electrical outlets are supplied in all 115 VAC models for convenience with occasional use or low power consumption devices only. If you choose to run dedicated equipment from these devices, it will decrease the distance for maximum length and the charts will no longer be accurate.

DC Control and Accessory Wiring

1. **All control devices are now 24 VDC, which can be run up to 2000 feet with 14 AWG wire.**
2. Control wiring must be run in a separate conduit from power wiring. Running them together may cause interference and faulty signals in some accessories.
3. A three-wire shielded conductor cable is required to connect two operators together for dual operation. You must use Belden 8760 Twisted Pair Shielded Cable (or equivalent) only – P/N 2500-1982, per foot). See Page 23 for details of this connection. **Note: The shield wire should be connected in both the operators.**

| MODEL SWR POWER WIRING | | | |
|------------------------|-------------------------|------|------------|
| VOLTS & HP | MAXIMUM DISTANCE (FEET) | | WIRE GAUGE |
| | SINGLE | DUAL | |
| 115 VOLTS 1/2-HP | 316 | 158 | 12 |
| | 502 | 251 | 10 |
| | 800 | 400 | 8 |
| | 1272 | 636 | 6 |
| | 2022 | 1011 | 4 |
| 230 VOLTS 1/2-HP | 764 | 382 | 12 |
| | 1218 | 609 | 10 |
| | 1936 | 968 | 8 |
| | 3076 | 1538 | 6 |
| | 4896 | 2448 | 4 |

| MODEL SWC POWER WIRING | | | |
|------------------------|-------------------------|------|------------|
| VOLTS & HP | MAXIMUM DISTANCE (FEET) | | WIRE GAUGE |
| | SINGLE | DUAL | |
| 115 VOLTS 1/2-HP | 222 | 111 | 12 |
| | 354 | 177 | 10 |
| | 566 | 283 | 8 |
| | 900 | 450 | 6 |
| | 1430 | 715 | 4 |
| 115 VOLTS 3/4-HP | 178 | 89 | 12 |
| | 282 | 141 | 10 |
| | 450 | 255 | 8 |
| | 716 | 358 | 6 |
| | 1140 | 570 | 4 |
| 115 VOLTS 1-HP | 160 | 80 | 12 |
| | 254 | 127 | 10 |
| | 406 | 203 | 8 |
| | 646 | 323 | 6 |
| | 1026 | 513 | 4 |
| 208 VOLTS 1/2-HP | 760 | 380 | 12 |
| | 1200 | 600 | 10 |
| | 1924 | 962 | 8 |
| | 3060 | 1830 | 6 |
| | 4864 | 2432 | 4 |
| 208 VOLTS 3/4-HP | 604 | 302 | 12 |
| | 958 | 478 | 10 |
| | 1526 | 763 | 8 |
| | 2424 | 1212 | 6 |
| | 3856 | 1928 | 4 |
| 208 VOLTS 1-HP | 544 | 272 | 12 |
| | 864 | 432 | 10 |
| | 1374 | 686 | 8 |
| | 2184 | 1092 | 6 |
| | 3476 | 1738 | 4 |
| 230 VOLTS 1/2-HP | 894 | 447 | 12 |
| | 1422 | 711 | 10 |
| | 2264 | 1132 | 8 |
| | 3600 | 1800 | 6 |
| | 5724 | 2862 | 4 |
| 230 VOLTS 3/4-HP | 710 | 355 | 12 |
| | 1128 | 564 | 10 |
| | 1796 | 898 | 8 |
| | 2852 | 1426 | 6 |
| | 4538 | 2269 | 4 |
| 230 VOLTS 1-HP | 640 | 320 | 12 |
| | 1016 | 508 | 10 |
| | 1616 | 808 | 8 |
| | 2570 | 1285 | 6 |
| | 4090 | 2045 | 4 |

| MODEL SWD POWER WIRING | | | |
|------------------------|-------------------------|------|------------|
| VOLTS & HP | MAXIMUM DISTANCE (FEET) | | WIRE GAUGE |
| | SINGLE | DUAL | |
| 115 VOLTS 1/2-HP | 970 | 485 | 12 |
| | 1542 | 771 | 10 |
| | 2452 | 1226 | 8 |
| | 3898 | 1949 | 6 |
| | 6200 | 3100 | 4 |