SD Type

**Dimension**

<table>
<thead>
<tr>
<th>DV-1101</th>
<th>DV-1102</th>
<th>DV-1104</th>
</tr>
</thead>
<tbody>
<tr>
<td>DV-1201</td>
<td>DV-1202</td>
<td>DV-1204</td>
</tr>
</tbody>
</table>

**Wiring Diagram**

1. **Single Direction + Variable Speed (3~90W)**
   - 單向運轉 + 變速

   (Cautions)
   - The motor rotate direction is CW when viewed from shaft side for thick wire connections. When adjusting to CCW direction, Connect as per — Diagram.
   - (注) 單向運轉時的變速，現在與順時針連接時相同。調節為逆時針連接時，將圖中的方向對調。

2. **Single Direction + Variable Speed + Brake (Less than 25W)**
   - 單向運轉 + 變速 + 制動

   (Cautions)
   1. The motor rotate direction is CW (clock wise) for thick wiring while it is CCW (counter-clock wise) for diagram viewed from motor shaft side.
   2. Changing from RUN to STOP, the control brake function for 0.5sec and the motor stops rapidly.

   (注) 單向運轉時的制動，現在與順時針連接時相同。調節為逆時針連接時，將圖中的方向對調。
   2. RUNにSTOPに切り換えるとき、制動（電動ブレーキ）の動作が約0.5秒でleaderされる。

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**Specifications**

- **SW1**: AC125V or 250V Min 5A
- **R1**: DC12V 10mA
- **R2**: DV-OP03 (Option)
- **SW1**: AC125V or 250V Min 5A
- **R1**: DC12V 10mA
- **R2**: DV-OP08 (Option)
Wiring Diagram

Single Direction + Variable Speed + Brake (40~90W)

鏡向下滑動+變速+制動

<table>
<thead>
<tr>
<th>SW1/SW2</th>
<th>AC125V or 250V Min 5A</th>
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<tbody>
<tr>
<td>SW3</td>
<td>DC10V 10mA</td>
</tr>
<tr>
<td>R1+R2</td>
<td>DV-OP008 (Option)</td>
</tr>
<tr>
<td>R2</td>
<td>DV-OP003 (Option)</td>
</tr>
</tbody>
</table>

(Caution)
1. The motor rotate direction is CW (clock wise) for thick wiring while it is CCW (counter-clock wise) for --- diagram viewed from motor shaft side.
2. Changing from RUN to STOP, the control brake function for 0.5sec and the motor stops rapidly.

(注) 1. 如欲使馬達在轉動方向時針方向(CW)旋轉, 就按圖中黑色螺旋; 反時針方向旋轉, 就按逆時針螺旋即可。
2. 由RUN轉換至STOP時, 用手動裝置之制動作用, 馬達約0.5秒之間停機。

Reverse + Variable Speed (3~90W)

正反向運轉+變速

| SW1/SW2 | AC125V or 250V Min 5A |

(Caution)
Change to SW2 with a certain period after STOP

(注) 設定停止時間，設到馬達停止後要轉換開關SW2。
(注) 停止期間要 設定為時關閉停止的下，SW2轉切換為另一邊。
Wiring Diagram

Reverse + Variable Speed + Brake
(Less than 25W)

正反向運轉＋變速＋制動

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<td>DV-DP008 (Option)</td>
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<td>R2</td>
<td>DV-DP003 (Option)</td>
</tr>
</tbody>
</table>

(Caution)
1. Changing from RUN to STOP, the control brake function for 0.5sec and the motor stops rapidly.
2. During this 0.5sec, do not operate SW4 or SW5.
3. The switching for SW4 and SW5 should be earlier than STOP from RUN of SW3 and SW4.

(from 1. 由RUN轉換到STOP時 電機即刻起動製動 連鎖約0.5秒間停機 2. 停機時約0.5秒間不可操作SW4 SW5 3. 將SW4 SW5開關由STOP轉換到RUN之前 應先將轉換SW4 SW5開關)

(주) 1. RUN에서 STOP으로 하여 제동(電機BRAKE)이 약 0.5초 동작시 MOTOR가 즉시 조정한다.
2. 이러한 0.5초 동안 SW4의 SW5를 조작하지 마세요.
3. SW4, SW5의 전환은 RUN의 SW4, SW5의 전환보다 빠르게 해 주세요.

Reverse + Variable Speed + Brake
(40~90W)

正反向運轉＋變速＋制動

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(Caution)
1. Changing from RUN to STOP, the control brake function for 0.5sec and the motor stops rapidly.
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(from 1. 由RUN轉換到STOP時 電機即刻起動製動 連鎖約0.5秒間停機 2. 停機時約0.5秒間不可操作SW4 SW5 3. 將SW4 SW5開關由STOP轉換到RUN之前 應先將轉換SW4 SW5開關)

(주) 1. RUN에서 STOP으로 하여 제동(電機BRAKE)이 약 0.5초 동작시 MOTOR가 즉시 조정한다.
2. 이러한 0.5초 동안 SW4의 SW5를 조작하지 마세요.
3. SW4, SW5의 전환은 SW4, SW5의 전환보다 빠르게 해 주세요.
The following is the explanations of external speed set device (DC-OP002)

- **When Distance Control is Necessary**
  - Need to control operation when
  - Need a remote control

(Caution)
1. The speed set should be '0'.
2. Adjust the wire connection as short as possible.
   In this case, use the twisted sealed wire.
3. It is recommended to use the mountable frame rather than speed set device for distance control.

(Notice)
1. The speed set should be '0'.
2. Adjust the wire connection as short as possible.
   In this case, use the twisted sealed wire.
3. It is recommended to use the mountable frame rather than speed set device for distance control.

- **When Multi-Stage Speed Set is Necessary**
  - Need to set multiple speeds:
  - Need a multi-stage speed control

(Caution)
1. The speed set should be '0'.
2. Change the speed with external speed set device VR1, VR2 and VR3, and switch with SWa.

(Notice)
1. The speed set should be '0'.
2. Change the speed with external speed set device VR1, VR2 and VR3, and switch with SWa.
3. Use SWa to select the desired speed.
Wiring Diagram

With Cooling Fan Motor (F)/Thermal Protector (TP)
Motor Wire Connection (90W)

SW A: Momentary N O Contact
SW B: Momentary N C Contact
RY: AC1125V or 220V
Min 5A, 3a Contact

SW A
- close
SW B
- close, open
RY
- ON
TP
- close, operate

(Caution)
1. The wire connection should follow as per above diagram since thermal protector (TP) automatically revives.
2. When the TP operates, a certain period of cooling time is necessary until revival.
3. The cooling fan motor (F) should be connected between source terminals 1 and 2.
4. Motor (M) and tacho-generator (TG) and other wire connections should follow as per its explanations dependent upon its purpose.

(Notes)
1. Overload protective device (TP) (break capacity 125V, 5A or 250V, 3A) is automatic reset type, its circuit should be wired as follows.
2. Cooling fan and TP input power source should be connected as follows.
3. Motor (M) and tacho-generator (TG) should be connected as follows.
4. Other wires should be connected as follows.

Wire Connection / For Single Direction Operation

Adjust the motor speed with the speed dial.
The thick wiring shows the main circuit. Use approx. 0.75mm² wires.
When the tachogenerator (TG) wiring becomes longer than 1m, use a twisted sealed wire of 2 cores.

1. Adjust the motor speed with the speed volume dial.
2. The thick wiring shows the main circuit. Use approx. 0.75mm² wires.
3. Use a twisted sealed wire of 2 cores.

Note: The motor speed is adjustable within the range of 50Hz to 60Hz.
Wire Connection for Electro-Magnetic Brake Motor

1. When Electric Brake of Controller is Not Used at the Same Time

不配用控制器的電制動器時

---

SW1: DC10V 10mA
SW2: DV-OP008 (Option)
SW3: DV-OP082 (Option)

(Caution)

1. Leave a certain period until the motor stops, then switch SWs.
2. The power source SW1 shall be switched 0.5sec faster than the operation start signals of SWs and SW2.
3. When operating RUN-STOP, leave the SW ‘ON’, and control with SWs and SW2.
4. When leaving non-operated for a long time, turn OFF SWs.
5. Set the external speed set at ‘0’, and adjust the speed with the external speedset device VR.

EX Type

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Dimension

Socket (Option)
Wire Connection for Electro-Magnet Brake Motor

When Electric Brake of Controller is Not Used at The Same Time

<table>
<thead>
<tr>
<th>SW1/SW2/SW3</th>
<th>AC125V or 250V Min 5A</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW4/SW5</td>
<td></td>
</tr>
<tr>
<td>R2</td>
<td>DV-OP0008 (Option)</td>
</tr>
<tr>
<td>R1+R3</td>
<td>DV-OP003 (Option)</td>
</tr>
<tr>
<td>VR</td>
<td>DV-OP002 (Option)</td>
</tr>
</tbody>
</table>

配用控制器的電制動器時

(Less than 25W)

From shaft side view

<table>
<thead>
<tr>
<th>CW</th>
<th>Clock side</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCW</td>
<td>Counter clock wise</td>
</tr>
</tbody>
</table>

(Caution)
1. When changing from RUN to STOP, the electric brake operates and the motor suddenly stops.
2. Operate SW4 and SW5 after motor stops.
3. The switching for SW4 and SW5 shall be faster than the switching from stop to RUN with SW1, SW2 and SW3.
4. The power source SW1 should be switched 0.5 sec faster than the operation start signal of SW2, SW3 and SW5.
5. When operating RUN-STOP, leave the SW1 on, and operate with SW4, SW2 and SW5.

(주) 1. RUN에서 STOP으로 하는 when電機 BRAKE(制動)가 작동하여 MOTOR가 휴정된다.
2. MOTOR가 정지한 경우 SW4, SW5를 작동해 주세요.
3. SW4, SW5의 대체가 SW2, SW3, SW5의 STOP부터 RUN의 변환은 발리 해 주세요.
4. 전원 SWITCH SW1, SW2, SW3, SW5의 작동은 SW2, SW3, SW5의 대체 getter한 뒤 작동선호의 정보로 보도를 0.5 sec 이상 발리 해 주세요.
5. 브레이크를 쫒는 것을 지원(SW1)의 그대로 SW2, SW3, SW5를 작동해 주세요, 작동선호에서 MOTOR를 지능할 수 있습니다. 또한 전원 전위할 때는 SW1을 끄여 주세요.