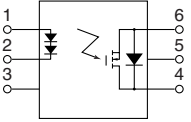
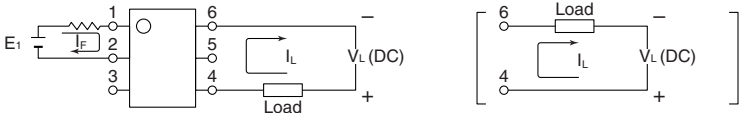
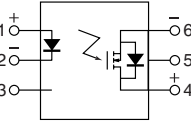
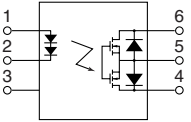
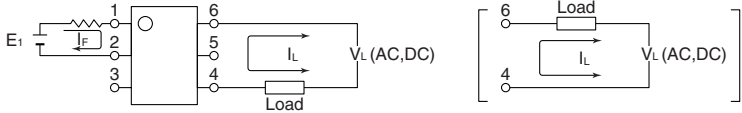
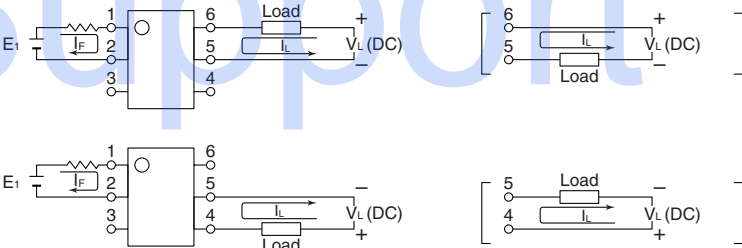
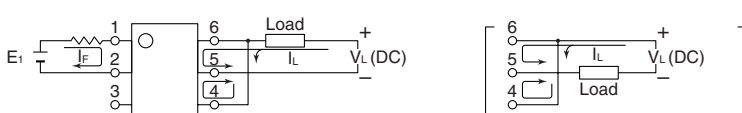


# PhotoMOS Relay Schematic and Wiring Diagrams

Type	Schematic	Output configuration	Load	Con-nection	Wiring diagram
AQV10 Series	 <p>Terminal 3 cannot be used, since it is in the internal circuit of the relay.</p>	1a	DC	A	
AQV11 Series	 <p>Terminal 3 cannot be used, since it is in the internal circuit of the relay.</p>				
AQV20 Series	 <p>Terminal 3 cannot be used, since it is in the internal circuit of the relay.</p>	1a	AC/DC	A	
			DC	B	 <p>Can be also connected as 2 Form A type. (However, the sum of the continuous load current should not exceed the absolute maximum rating.)</p>
			DC	C	

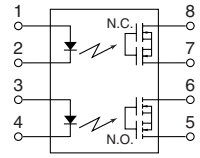
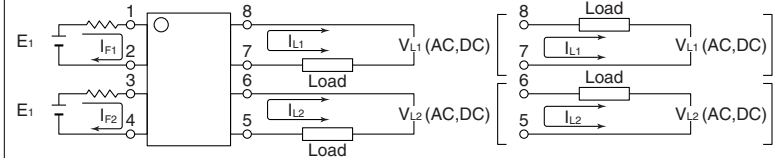
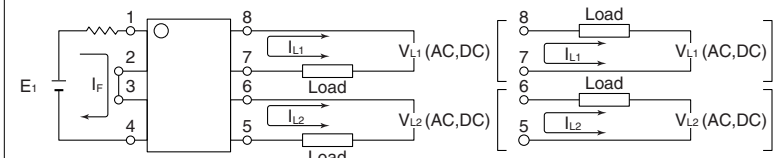
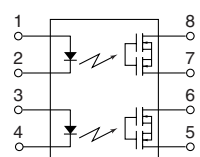
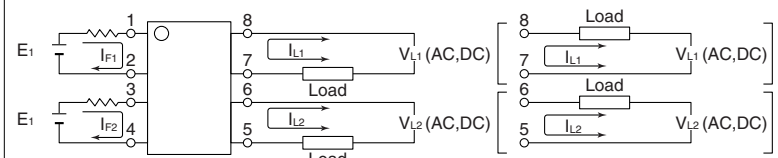
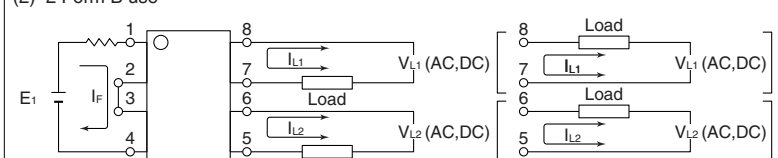
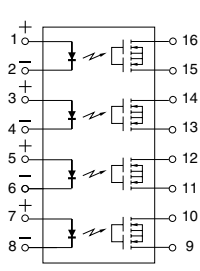
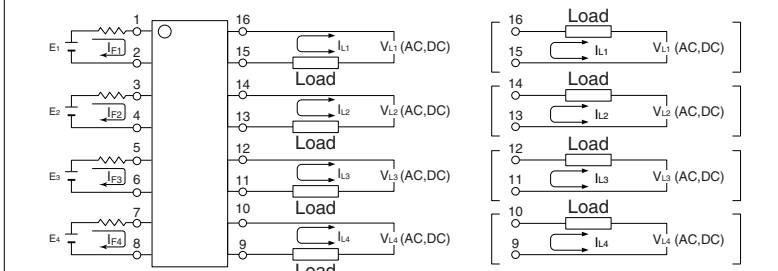
Notes: 1.  $E_1$ : Power source at input side;  $V_{in}$ : Input voltage;  $I_F$ : LED forward current;  $I_{in}$ : Input current;  $V_L$ : Load voltage;  $I_L$ : Load current; R: Current limit resistor.  
 2. Method of connecting the load at the output is divided into 3 types.

Type	Schematic	Output configuration	Load	Connection	Wiring diagram
AQY21 AQY21(SOP) AQY22 (SOP, SSOP) AQY27 Series		1a	AC/DC	—	
AQV21 AQV21(SOP) AQV22 AQV22(SOP) AQV25(SOP) AQV23 AQV25 Series		1a	AC/DC	A	
			DC	B	
			DC	C	
Terminal 3 cannot be used, since it is in the internal circuit of the relay.					Can be also connected as 2 Form A type. (However, the sum of the continuous load current should not exceed the absolute maximum rating.)

Notes: 1.  $E_1$ : Power source at input side;  $V_{IN}$ : Input voltage;  $I_F$ : LED forward current;  $I_{IN}$ : Input current;  $V_L$ : Load voltage;  $I_L$ : Load current;  $R$ : Current limit resistor.  
2. Method of connecting the load at the output is divided into 3 types.

Type	Schematic	Output configuration	Load	Connection	Wiring diagram
AQW21 AQW21(SOP) AQW22 AQW25 AQW27 Series		2a	AC/DC	—	<p>(1) Two independent 1 Form A use</p> <p>(2) 2 Form A use</p>
AQY41 AQY41(SOP) Series		1b	AC/DC	—	
AQV41 AQV41(SOP) AQV45 Series		1b	AC/DC	A	
			DC	B	<p>Can be also connected as 2 Form B type. (However, the sum of the continuous load current should not exceed the absolute maximum rating.)</p>
	Terminal 3 cannot be used, since it is in the internal circuit of the relay.		DC	C	

Notes: 1.  $E_1$ : Power source at input side;  $V_{IN}$ : Input voltage;  $I_F$ : LED forward current;  $I_{IN}$ : Input current;  $V_L$ : Load voltage;  $I_L$ : Load current;  $R$ : Current limit resistor.  
 2. Method of connecting the load at the output is divided into 3 types.

Type	Schematic	Output configuration	Load	Con-nection	Wiring diagram
AQW61 AQW61(SOP) AQW65 Series		1a1b	AC/DC	—	<p>(1) Two independent 1 Form A &amp; 1 Form B use</p>  <p>(2) 1 Form A 1 Form B use</p> 
AQW41 AQW45 Series		2b	AC/DC	—	<p>(1) Two independent 1 Form B use</p>  <p>(2) 2 Form B use</p> 
AQS22 Series		4a	AC/DC	—	

Notes: 1.  $E_1$ : Power source at input side;  $V_{IN}$ : Input voltage;  $I_F$ : LED forward current;  $I_{IN}$ : Input current;  $V_L$ : Load voltage;  $I_L$ : Load current;  $R$ : Current limit resistor.  
2. Method of connecting the load at the output is divided into 3 types.

Type	Schematic	Output configuration	Load	Connection	Wiring diagram
AQZ20 AQZ26 Series		1a	AC/DC	—	
AQZ10 Series		1a	DC	—	
AQZ20○D Series		1a	AC/DC	—	
AQZ10○D Series		1a	DC	—	
AQZ40 Series		1b	AC/DC	—	

Notes: 1.  $E_1$ : Power source at input side;  $V_{IN}$ : Input voltage;  $I_F$ : LED forward current;  $I_{IN}$ : Input current;  $V_L$ : Load voltage;  $I_L$ : Load current;  $R$ : Current limit resistor.  
2. Method of connecting the load at the output is divided into 3 types.

Type	Schematic	Output configuration	Load	Connection	Wiring diagram								
APV1122		1a	AC/DC	—	<p>Power MOSFET drive wiring diagram</p> <p>Example of each input power supply and current limit resistors (<math>I_F = 10\text{mA}</math>)</p> <table border="1"> <thead> <tr> <th><math>E_1</math></th> <th>R</th> </tr> </thead> <tbody> <tr> <td>5V</td> <td>Approx. 380<math>\Omega</math></td> </tr> <tr> <td>15V</td> <td>Approx. 1.4k<math>\Omega</math></td> </tr> <tr> <td>24V</td> <td>Approx. 2.3k<math>\Omega</math></td> </tr> </tbody> </table>	$E_1$	R	5V	Approx. 380 $\Omega$	15V	Approx. 1.4k $\Omega$	24V	Approx. 2.3k $\Omega$
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5V	Approx. 380 $\Omega$												
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24V	Approx. 2.3k $\Omega$												
APV1121S APV2121S APV2111V		1a	DC	—	<p>Power MOSFET drive wiring diagram</p> <p>Example of each input power supply and current limit resistors (<math>I_F = 10\text{mA}</math>)</p> <table border="1"> <thead> <tr> <th><math>E_1</math></th> <th>R</th> </tr> </thead> <tbody> <tr> <td>5V</td> <td>Approx. 380<math>\Omega</math></td> </tr> <tr> <td>15V</td> <td>Approx. 1.4k<math>\Omega</math></td> </tr> <tr> <td>24V</td> <td>Approx. 2.3k<math>\Omega</math></td> </tr> </tbody> </table>	$E_1$	R	5V	Approx. 380 $\Omega$	15V	Approx. 1.4k $\Omega$	24V	Approx. 2.3k $\Omega$
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