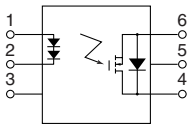
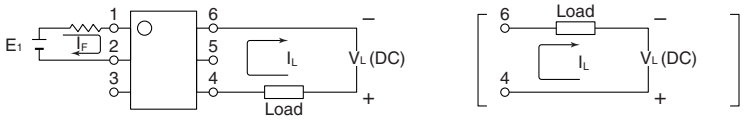
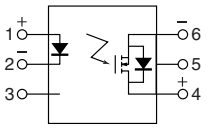
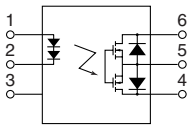
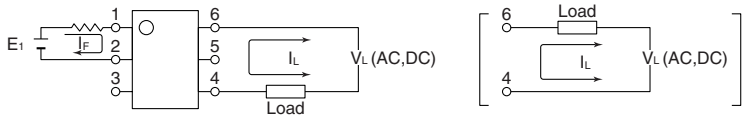
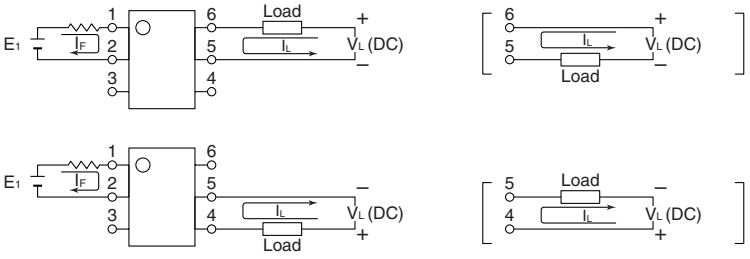
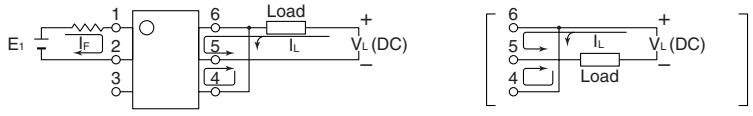
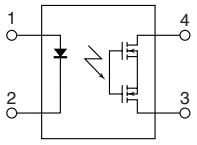
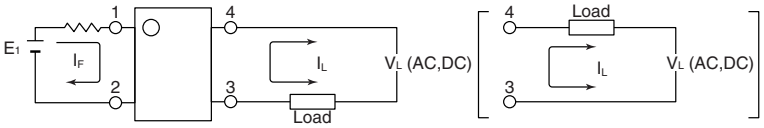
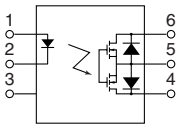
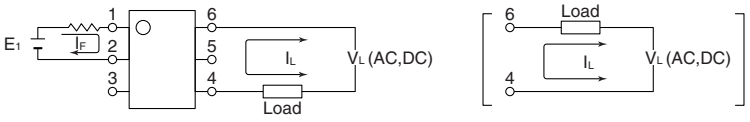
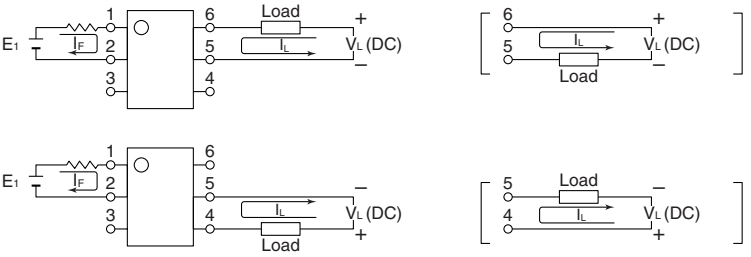
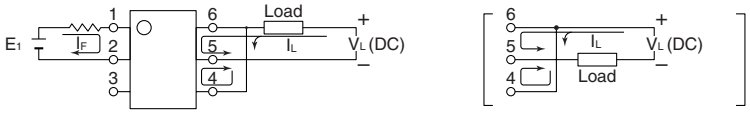
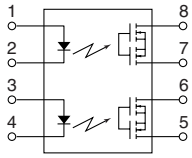
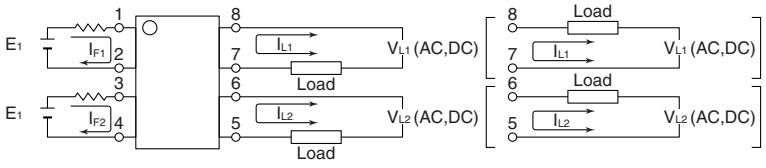
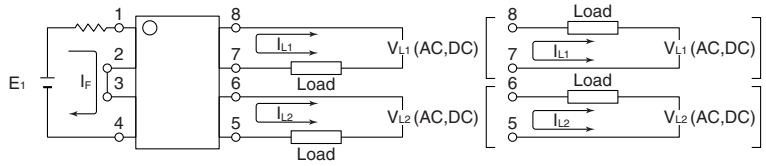
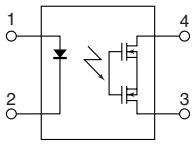
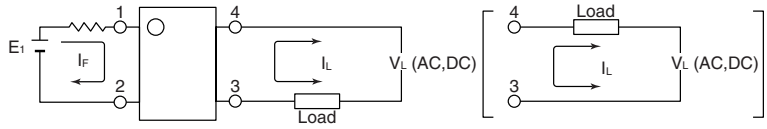
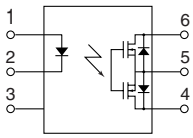
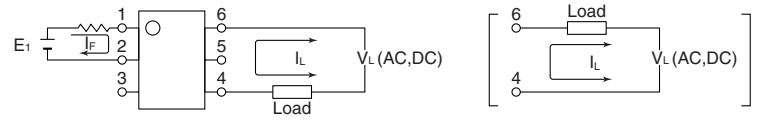
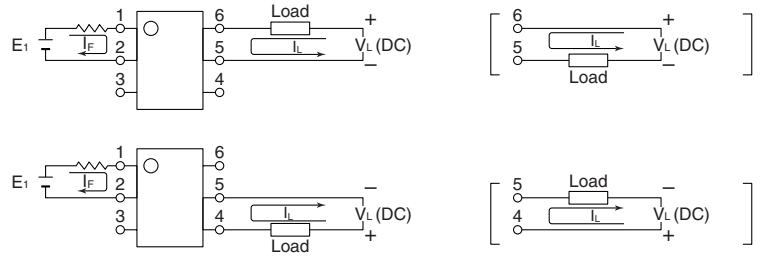
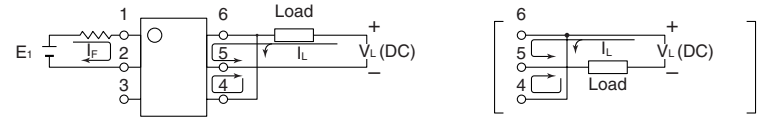
PhotoMOS Relay Schematic and Wiring Diagrams

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

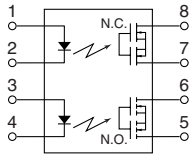
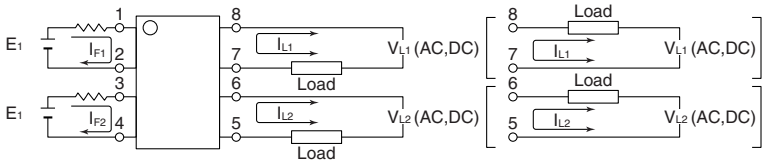
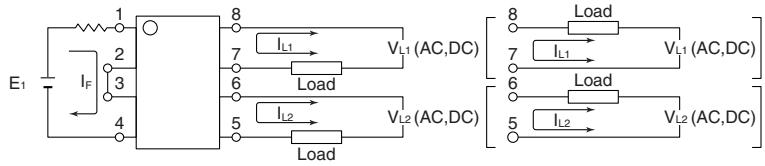
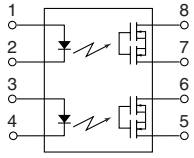
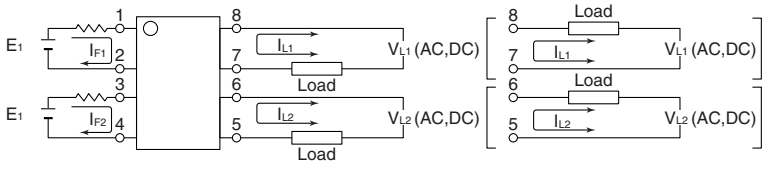
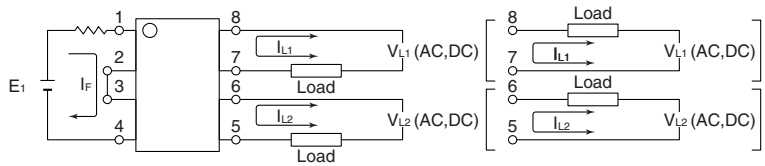
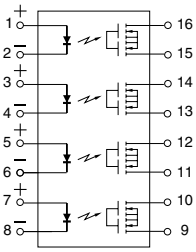
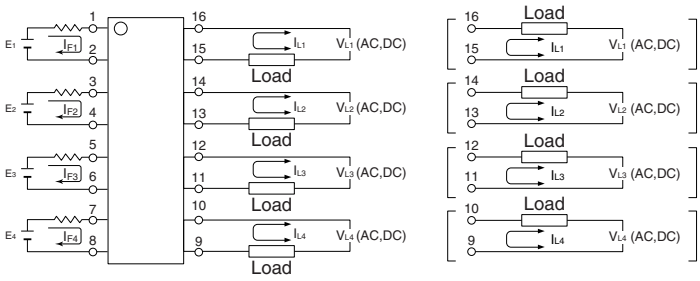
Notes: 1. E_1: Power source at input side; V_{IN}: Input voltage; I_F: LED forward current; I_{IN}: Input current; V_L: Load voltage; I_L: Load current; R: Current limit resistor.
2. Method of connecting the load at the output is divided into 3 types.

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	 Terminal 3 cannot be used, since it is in the internal circuit of the relay.	1a	AC/DC	A	
			DC	B	 Can be also connected as 2 Form A type. (However, the sum of the continuous load current should not exceed the absolute maximum rating.)
			DC	C	

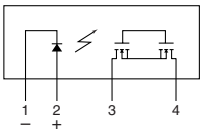
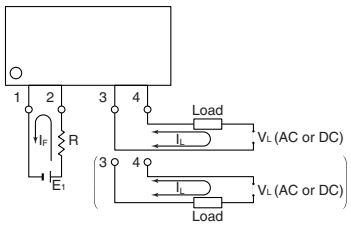
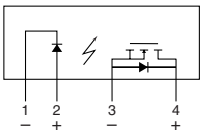
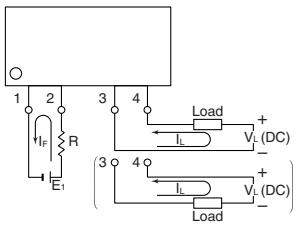
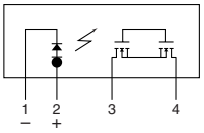
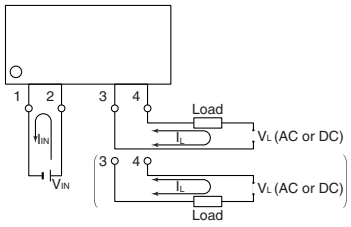
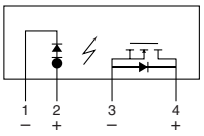
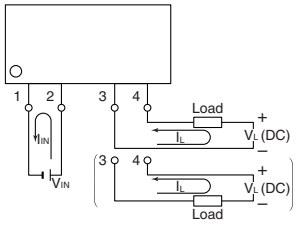
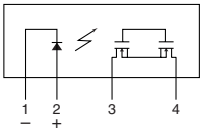
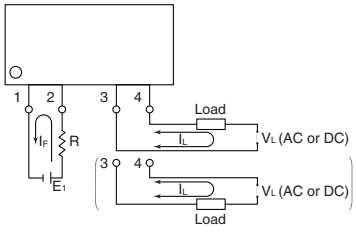
Notes: 1. E_1: Power source at input side; V_{IN}: Input voltage; I_F: LED forward current; I_{IN}: Input current; V_L: Load voltage; I_L: Load current; R: Current limit resistor.
2. Method of connecting the load at the output is divided into 3 types.

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

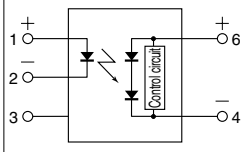
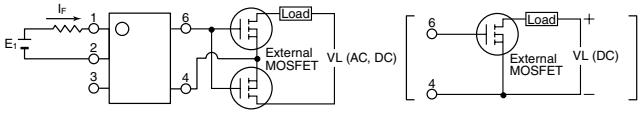
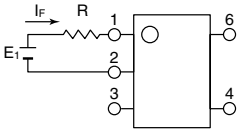
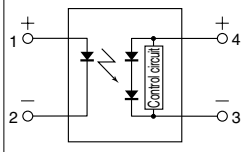
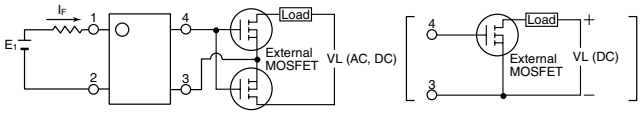
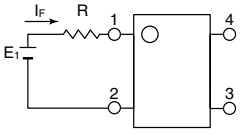
Notes: 1. E_1: Power source at input side; V_{IN}: Input voltage; I_F: LED forward current; I_{IN}: Input current; V_L: Load voltage; I_L: Load current; R: Current limit resistor.
2. Method of connecting the load at the output is divided into 3 types.

Type	Schematic	Output configuration	Load	Connection	Wiring diagram
AQW61 AQW61(SOP) AQW65 Series		1a1b	AC/DC	—	(1) Two independent 1 Form A & 1 Form B use  (2) 1 Form A 1 Form B use 
AQW41 AQW45 Series		2b	AC/DC	—	(1) Two independent 1 Form B use  (2) 2 Form B use 
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 configu-ration	Load	Con-nection	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	—	Power MOSFET drive wiring diagram  Example of each input power supply and current limit resistors (I_F = 10mA)  E_1 / R: 5V — Approx. 380Ω; 15V — Approx. 1.4kΩ; 24V — Approx. 2.3kΩ
APV1121S APV2121S APV2111V		1a	DC	—	Power MOSFET drive wiring diagram  Example of each input power supply and current limit resistors (I_F = 10mA)  E_1 / R: 5V — Approx. 380Ω; 15V — Approx. 1.4kΩ; 24V — Approx. 2.3kΩ

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.