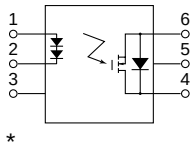
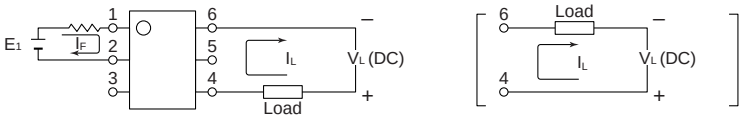
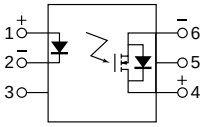
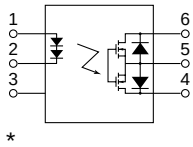
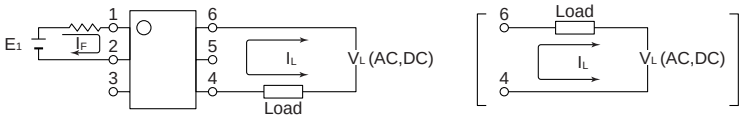
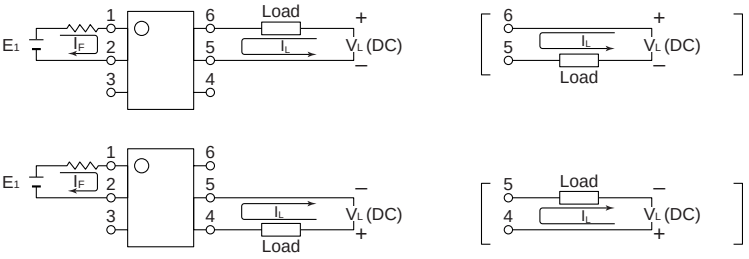
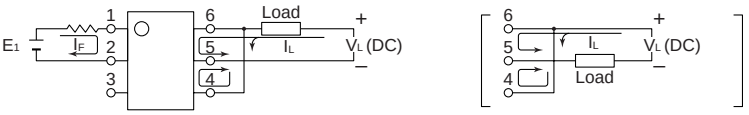
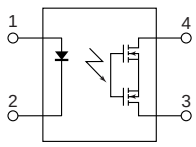
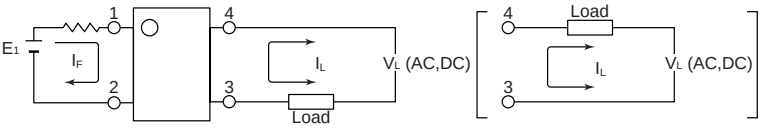
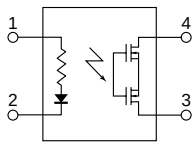
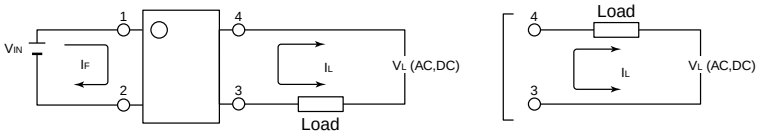
PhotoMOS Relay Schematic and Wiring Diagrams

	Schematic	Output configu-ration	Load type	Connec-tion	Wiring diagram
AQV10(DIP) Series		1a	DC	A	
AQV11(DIP) Series					
AQV20(DIP) Series			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	
AQY21 (DIP, SOP) AQY22(SOP, SSOP, SON) AQY27 (Power-DIP) Series		1a	AC/DC	—	
AQY22○F AQY21○F Series		1a	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.
*Terminal 3 cannot be used, since it is in the internal circuit of the relay.

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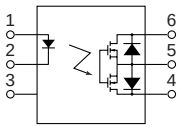
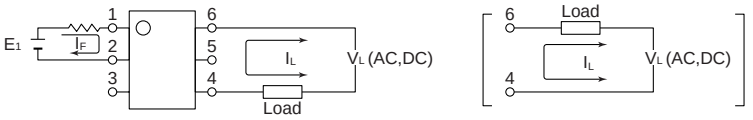
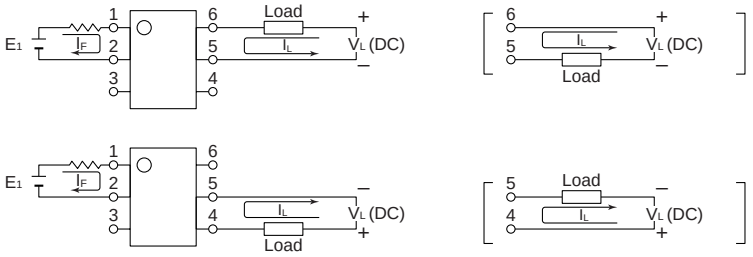
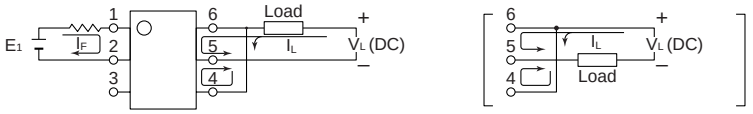
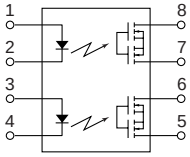
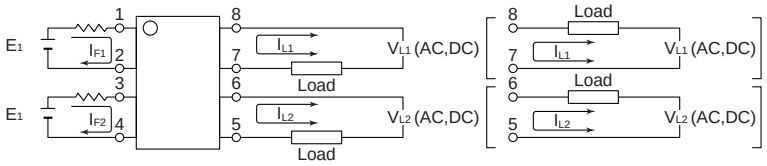
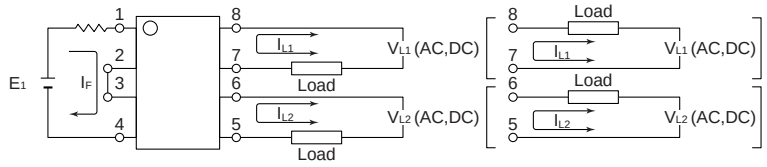
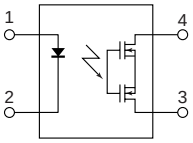
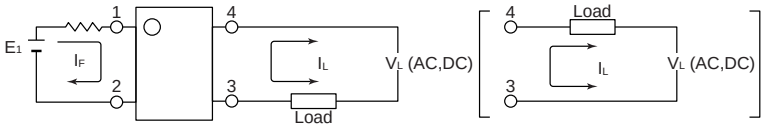
	Schematic	Output configuration	Load type	Connection	Wiring diagram
AQV21 (DIP, SOP) AQV22 (DIP, SOP) AQV23(DIP)* AQV25 (DIP, SOP) Series	 Terminal 3 cannot be used, since it is in the internal circuit of the relay.	1a	AC/DC	A	
			DC	B	 Can be also connected as 2 Form A type. (However, the sum of the continuous load current should not exceed the absolute maximum rating.)
			DC	C	
AQW21 (DIP, SOP) AQW22 (DIP, SOP) AQW25(DIP) Series		2a	AC/DC	—	(1) Two independent 1 Form A use  (2) 2 Form A use 
AQY41 (DIP, SOP) 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.
* AQV23 series in SOP is also possible. Please inquire.

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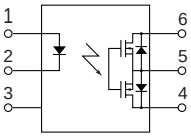
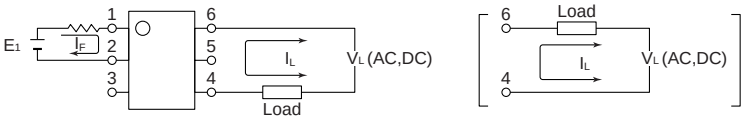
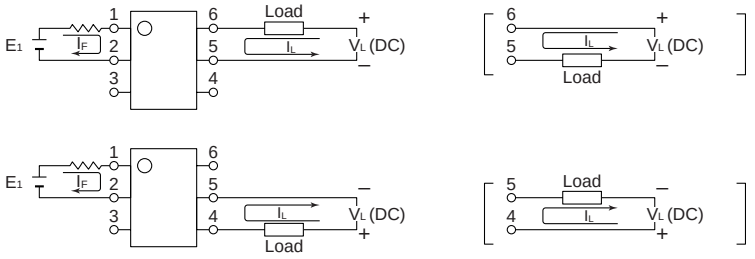
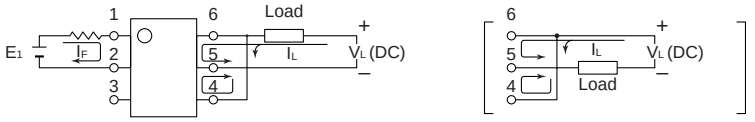
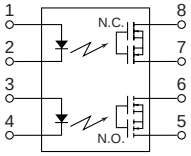
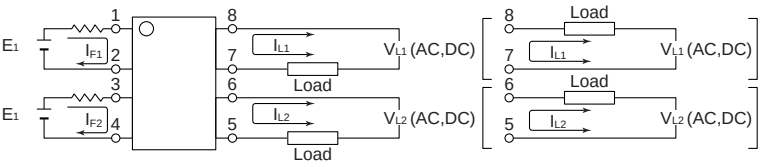
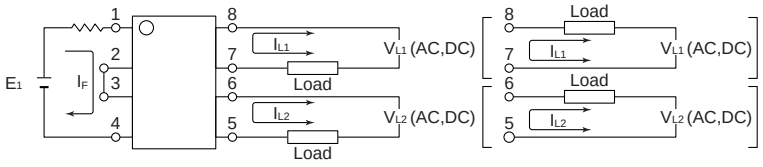
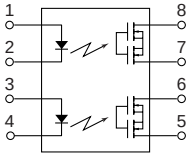
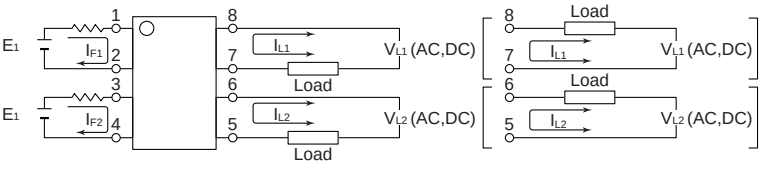
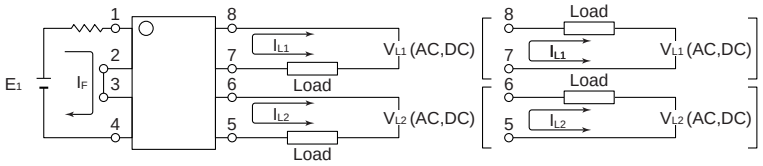
	Schematic	Output configuration	Load type	Connection	Wiring diagram
AQV41 (DIP, SOP) AQV45(DIP) Series	 Terminal 3 cannot be used, since it is in the internal circuit of the relay.	1b	AC/DC	A	
			DC	B	 Can be also connected as 2 Form B type. (However, the sum of the continuous load current should not exceed the absolute maximum rating.)
			DC	C	
AQW61 (DIP, SOP) AQW65(DIP) Series		1a1b	AC/DC	—	(1) Two independent 1 Form A & 1 Form B use  (2) 1 Form A 1 Form B use 
AQW41(DIP) AQW45(DIP) Series		2b	AC/DC	—	(1) Two independent 1 Form B use  (2) 2 Form B use 

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.

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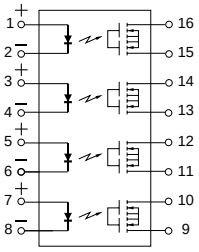
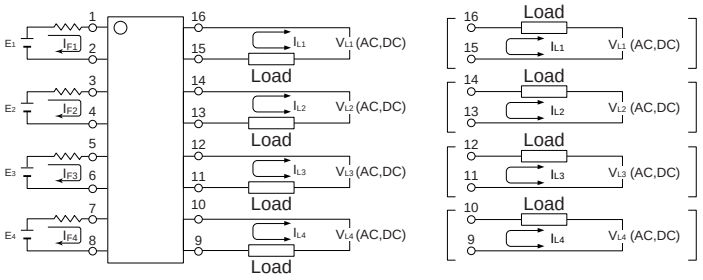
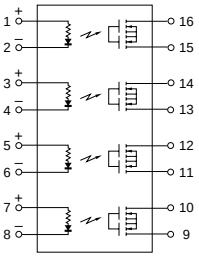
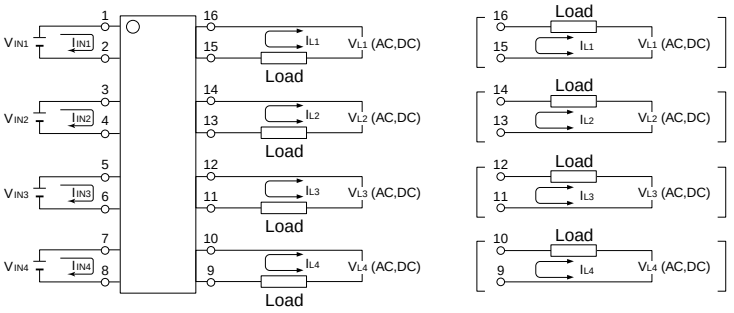
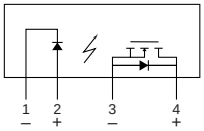
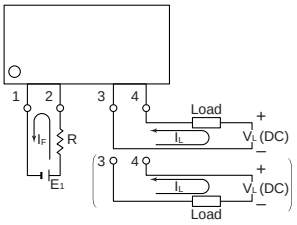
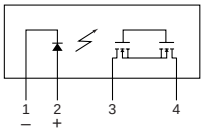
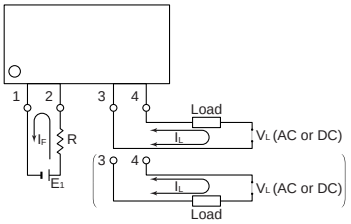
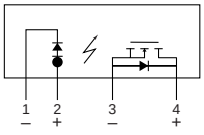
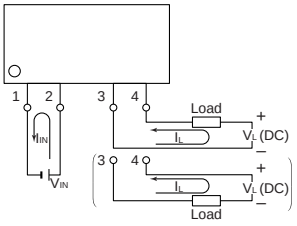
	Schematic	Output configu-ration	Load type	Connec-tion	Wiring diagram
AQS22(SOP) Series		4a	AC/DC	—	
AQS22❍F (SOP) Series		4a	AC/DC	—	
AQZ10(SIL) Series		1a	DC	—	
AQZ20(SIL) AQZ26(SIL) Series		1a	AC/DC	—	
AQZ10❍D (SIL) Series		1a	DC	—	

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.

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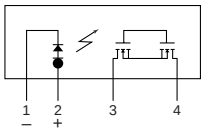
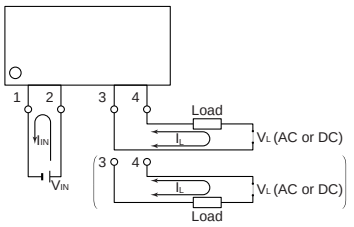
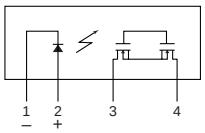
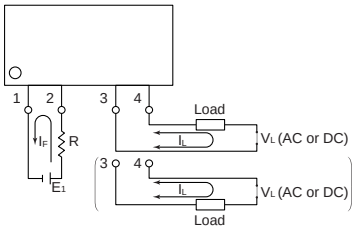
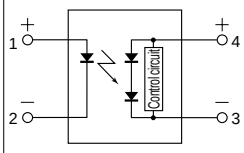
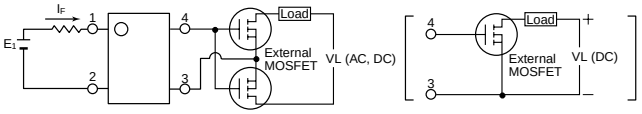
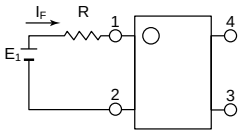
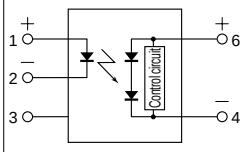
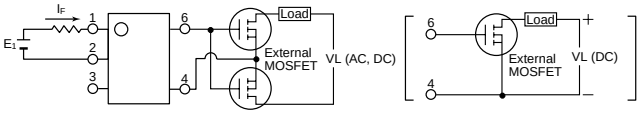
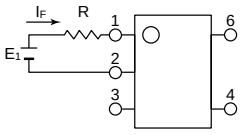
	Schematic	Output configu-ration	Load type	Connec-tion	Wiring diagram
AQZ20❍D (SIL) Series		1a	AC/DC	—	
AQZ40(SIL) Series		1b	AC/DC	—	
APV1121S (SOP) APV2121S (SOP) APV2111V (SSOP)		1a	DC	—	Power MOSFET drive wiring diagram  Example of each input power supply and current limit resistors (I_F = 10mA) 
APV1122(DIP)		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

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.

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