

PhotoMOS Relay Schematic and Wiring Diagrams

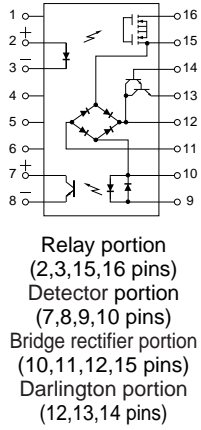
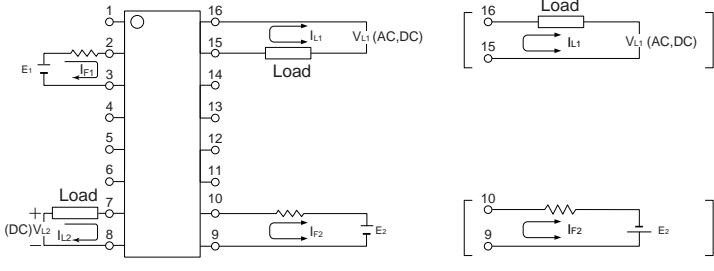
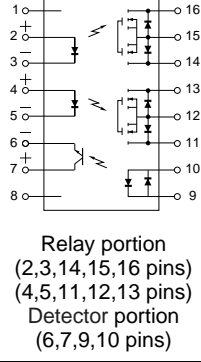
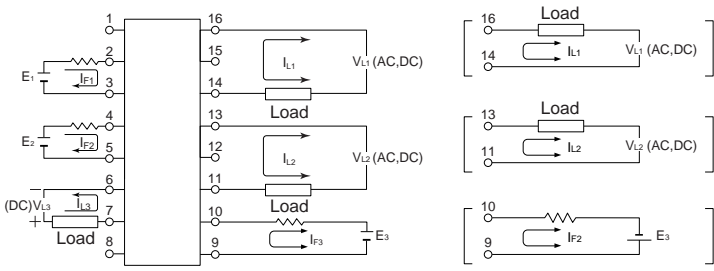
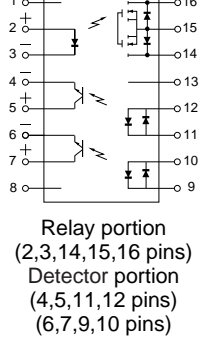
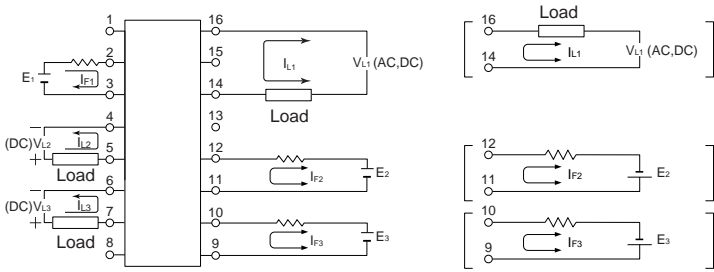
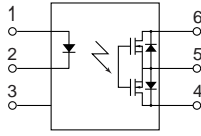
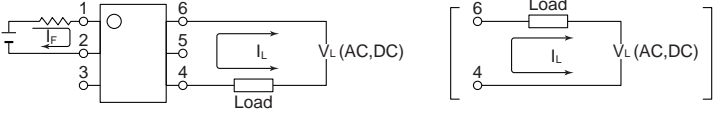
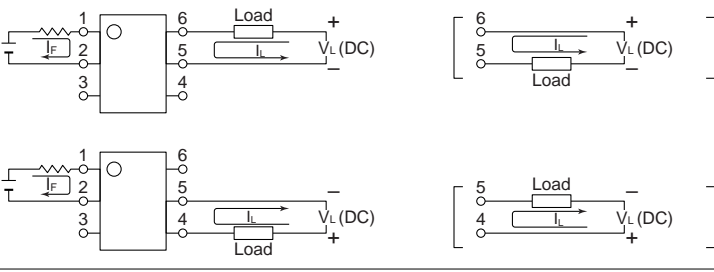
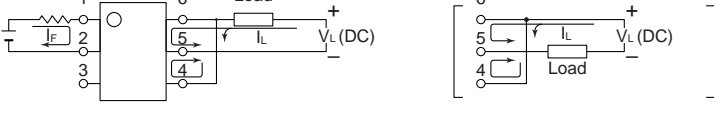
| Type | Schematic | Output configuration | Load | Con-nection | Wiring diagram |
|--|---|---|--|-------------|--|
| AQV21 AQV21 (SOP) AQV22 AQV22 (SOP) AQV23 AQV25 Series | | 1a | AC/DC | A | |
| | | | DC | B* | |
| | | | DC | C | |
| | (AQV254R only) | | | | |
| AQW21 AQW21OEH AQW21 (SOP) AQW22 AQW25 AQW27 Series | | 2a | AC/DC | — | (1) Two independent 1 Form A use (2) 2 Form A use |
| AQW21OTS Series | <p>Relay portion (1,2,7,8 pins) Detector portion (3,4,5,6 pins)</p> | Relay portion 1a Detector portion 1a | Relay portion AC/DC Detector portion DC | — | |
| AQW21OT2S Series | <p>Relay portion (1,2,11,12 pins) Detector portion (3,4,9,10 pins) (5,6,7,8 pins)</p> | Relay portion 1a Detector portion 2a | Relay portion AC/DC Detector portion DC | — | |

*Can be also connected as 2 Form A type. (However, the sum of the continuous load current should not exceed the absolute maximum rating.)

**Can be also connected as 2 Form B 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 | Con- nection | Wiring diagram |
|--------------------------------------|---|---|--|-----------------|--|
| AQS210PS Series |  <p>Relay portion (2,3,15,16 pins) Detector portion (7,8,9,10 pins) Bridge rectifier portion (10,11,12,15 pins) Darlington portion (12,13,14 pins)</p> | Relay portion 1a Detector portion 1a | Relay portion AC/DC Detector portion DC | — |  |
| AQS210TS Series |  <p>Relay portion (2,3,14,15,16 pins) Detector portion (4,5,11,12,13 pins) Detector portion (6,7,9,10 pins)</p> | Relay portion 2a Detector portion 1a | Relay portion AC/DC Detector portion DC | — |  |
| AQS210T2S Series |  <p>Relay portion (2,3,14,15,16 pins) Detector portion (4,5,11,12 pins) Detector portion (6,7,9,10 pins)</p> | Relay portion 1a Detector portion 2a | Relay portion AC/DC Detector portion DC | — |  |
| AQV41 AQV41 (SOP) AQV45 Series |  | 1b | AC/DC | A |  |
| | | | DC | B** |  |
| | | | DC | C |  |

*Can be also connected as 2 Form A type. (However, the sum of the continuous load current should not exceed the absolute maximum rating.)

**Can be also connected as 2 Form B 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 | Con-nection | Wiring diagram |
|--------------------------------------|-----------|----------------------|-------|-------------|---|
| AQW61 AQW61OEH AQW65 Series | | 1a1b | AC/DC | — | <p>(1) Two independent 1 Form A & 1 Form B use</p> <p>(2) 1 Form A 1 Form B use</p> |
| AQW41 AQW41OEH AQW45 Series | | 2b | AC/DC | — | <p>(1) Two independent 1 Form B use</p> <p>(2) 2 Form B use</p> |
| AQV10 Series | | 1a | DC | A | |
| AQV20 Series | | 1a | AC/DC | A | |
| | | | DC | B* | |
| | | | DC | C | |

*Can be also connected as 2 Form A type. (However, the sum of the continuous load current should not exceed the absolute maximum rating.)

**Can be also connected as 2 Form B 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 |
|--|--|----------------------|-------|------------|----------------|
| AQX21•44 Series (Multi-channel type) | <p> ① Input Common: DC+ ② Input 1: DC- ③ Input 2: DC- ④ Input 3: DC- ⑤ Input 4: DC- ⑥ Output 1 (N.O.): DC or AC ⑦ Output 1 (N.O.): DC or AC ⑧ Output 2 (N.O.): DC or AC ⑨ Output 2 (N.O.): DC or AC ⑩ Output 3 (N.O.): DC or AC ⑪ Output 3 (N.O.): DC or AC ⑫ Output 4 (N.O.): DC or AC ⑬ Output 4 (N.O.): DC or AC </p> | 4a | AC/DC | - | |
| AQY21 (SOP) AQY21•EH AQY22 (SOP) AQY27 Series | | 1a | AC/DC | - | |
| AQY41 (SOP) AQY41•EH Series | | 1b | AC/DC | - | |
| AQZ20 AQZ26 Series | | 1a | AC/DC | - | |
| AQZ10 Series | | 1a | DC | - | |

*Can be also connected as 2 Form A type. (However, the sum of the continuous load current should not exceed the absolute maximum rating.)

**Can be also connected as 2 Form B 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 | Wiring diagram |
|----------------|-----------|----------------------|-------|----------------|
| AQZ40 Series | | 1b | AC/DC | |
| AQZ20-V Series | | 1a | AC/DC | |
| AQZ20-D Series | | 1a | AC/DC | |
| AQZ10-D 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.