PhotoMOS Relay Schematic and Wiring Diagrams

Туре	Schematic	Output configu- ration	Load	Con- nection	Wiring diagram
AQV10 Series	Terminal 3 cannot be used, since it is in the internal circuit of the relay.	- 1a	DC	A	E ₁ T E ₂ C C C C C C C C C C C C C C C C C C C
AQV11 Series	Terminal 3 cannot be used, since it is in the internal circuit of the relay.	Ia	DO		3 4 Load + 4 0 1 + 1 4 1 1 1 1 1 1 1 1
			AC/DC	А	E ₁ T F 2 O O O O O O O O O O O O O O O O O O
AQV20 Series	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1a	DC		$E_1 \xrightarrow{\frac{1}{ F }} \underbrace{\frac{6}{2}}_{3} \underbrace{\frac{Load}{ L }}_{4} \underbrace{\frac{+}{ V_L(DC)}}_{1} \underbrace{\frac{6}{5}}_{Load} \underbrace{\frac{+}{ V_L(DC)}}_{1} \underbrace{\frac{6}{5}}_{Load} \underbrace{\frac{+}{ V_L(DC)}}_{1}$
					Can be also connected as 2 Form A type. (However, the sum of the continuous load current should not exceed the absolute maximum rating.)
	Terminal 3 cannot be used, since it is in the internal circuit of the relay.		DC	С	E ₁ T F 2 S T L V _L (DC)

Notes: 1. E1: Power source at input side; Vin: Input voltage; IF: LED forward current; In: Input current; Vi.: Load voltage; Ii.: Load current; R: Current limit resistor. 2. Method of connecting the load at the output is divided into 3 types.

Туре	Schematic	Output configu- ration	Load	Con- nection	Wiring diagram
AQY21 AQY21(SOP) AQY22 (SOP, SSOP) AQY27 Series	1 4 0 3 3 0	1a	AC/DC	_	E ₁
			AC/DC	A	E ₁ T F 2 O 6 S IL VL(AC,DC)
AQV21 AQV21(SOP) AQV22 AQV22(SOP) AQV25(SOP) AQV23 AQV25 Series	1 2 0 3 0 4 0	1a	DC	В	$E_{1} \xrightarrow{\downarrow F} 2$ 0 0 0 0 0 0 0 0 0 0
					Can be also connected as 2 Form A type. (However, the sum of the continuous load current should not exceed the absolute maximum rating.)
	Terminal 3 cannot be used, since it is in the internal circuit of the relay.		DC	С	E ₁ T F ₂ C C C C C C C C C C C C C C C C C C C

Notes: 1. E1: Power source at input side; Vin: Input voltage; IF: LED forward current; Inv: Input current; Vi.: Load voltage; Ii.: Load current; R: Current limit resistor. 2. Method of connecting the load at the output is divided into 3 types.

Туре	Schematic	Output configu- ration	Load	Con- nection	Wiring diagram
AQW21 AQW21(SOP) AQW22 AQW25 AQW27 Series	10 20 30 40 50	2a	AC/DC	_	(1) Two independent 1 Form A use $E_1 \xrightarrow{I_{F_2}} I_{F_2} I_{F$
AQY41 AQY41(SOP) Series	1 2 2 3 0	1b	AC/DC	_	E ₁ Load V _L (AC,DC) J _L V _L (AC,DC) J _L V _L (AC,DC)
			AC/DC	А	E ₁ T F 2 O S O S O S O S O S O S O S O S O S O
AQV41 AQV41(SOP) AQV45 Series	1 2 3 3 0 1 1 4	1b	DC	В	E ₁
	Terminal 3 cannot be used, since it is in the internal circuit of the relay.		DC	С	E ₁

Notes: 1. E1: Power source at input side; VIN: Input voltage; IF: LED forward current; IIN: Input current; VL: Load voltage; IL: Load current; R: Current limit resistor. 2. Method of connecting the load at the output is divided into 3 types.

Туре	Schematic	Output configu- ration	Load	Con- nection	Wiring diagram
AQW61 AQW61(SOP) AQW65 Series	1 N.C. 8 0 2 7 7 0 6 0 0 4 1 1 5 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1a1b	AC/DC	_	(1) Two independent 1 Form A & 1 Form B use E1
AQW41 AQW45 Series	1 8 8 0 7 7 0 6 6 0 4 5 5 0 0	2b	AC/DC	_	(1) Two independent 1 Form B use E1
AQS22 Series	10 16 20 15 30 14 40 13 50 12 60 11 70 10 80 9	4a	AC/DC	_	16 Load 15 L1 V1 (AC,DC) 14 Load 15 L2 V1 (AC,DC) 14 Load 15 L1 V1 (AC,DC) 14 Load 15 L2 V2 (AC,DC) 16 L0ad 17 L2 V2 (AC,DC) 18 L2 V2 (AC,DC) 19 L0ad 10 Load 10 Load 10 Load 11 L3 V1 (AC,DC) 11 L0ad 12 Load 13 L2 V2 (AC,DC) 14 Load 15 L1 V1 (AC,DC) 16 Load 17 L2 V2 (AC,DC) 18 L2 V2 (AC,DC) 19 L1 V3 (AC,DC) 10 Load 9 L1 V4 (AC,DC)

Notes: 1. E₁: 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.

Туре	Schematic	Output configu- ration	Load	Con- nection	Wiring diagram
AQZ20 AQZ26 Series	1 2 3 4	1a	AC/DC	_	O 1 2 3 4 Load VL (AC or DC) The R 3 4 VL (AC or DC) Load VL (AC or DC)
AQZ10 Series	1 2 3 4 - + - +	1a	DC	_	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
AQZ20OD Series	1 2 3 4 - +	1a	AC/DC	_	1 2 3 4 Load VL (AC or DC) VL (AC or DC) Load
AQZ10OD Series	1 2 3 4 - + - +	1a	DC	_	1 2 3 4 Load TIN VIN (DC) 3 4 VIN (DC)
AQZ40 Series	1 2 3 4 - +	1b	AC/DC	_	O Load VL (AC or DC)

Notes: 1. E₁: 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.

Туре	Schematic	Output configu- ration	Load	Con- nection	Wiring diagram
APV1122	1 + + 66 2 - 2 - 4	1a	AC/DC	_	Power MOSFET drive wiring diagram $\begin{array}{c ccccccccccccccccccccccccccccccccccc$
APV1121S APV2121S APV2111V	1 + + 0 4 - 2 - 3	1a	DC	_	Power MOSFET drive wiring diagram $External VL (AC, DC) $

Notes: 1. E1: Power source at input side; Vin: Input voltage; IF: LED forward current; Inv: Input current; VL: Load voltage; IL: Load current; R: Current limit resistor. 2. Method of connecting the load at the output is divided into 3 types.