

# 1781, Classic & WRC4 Series Single Point Discrete I/O

## SPECIFICATIONS

### AC output modules

- To specify the WRC4 package, use the prefix "WRC4" (eg. WRC4-OA5S.)
- To specify the slim package, use the "S" suffix with the 1781 prefix (eg. 1781-OA5S.)
- To specify the mini package, use the "M" suffix with the 1781 prefix (eg. 1781-OA5M.)
- To specify the standard package, use the "Classic" part number (eg. OAC5A)

Discrete I/O Modules

INPUT: WRC4 and 1781 INPUT: CLASSIC	OAS5 OAC5	OAYS OAC15	OAXS OAC24	OL5S	OM5S OAC5A	OM5MS	OMYS OAC15A	OMXS OAC24A	OM5SC OAC5A5	OMYSC	OMXSC	OM5SR OAC5A11	OMYSR OAC15A11	OMXSR OAC24A11	OP5S	OPYS	OPXS	Units
Nominal input voltage	5	15	24	5	5	5	15	24	5	15	24	5	15	24	5	15	24	V dc
Min input volt. @ pin 3 -WRC4	4	10	18	4	4	4	10	18	4	10	18	4	10	18	4	10	18	V dc
Min input volt. @ pin 3 -1781	2.5	8.5	16.5	2.5	2.5	3	8.5	16.5	2.5	8.5	16.5	2.5	8.5	16.5	2.5	8.5	16.5	V dc
Max input volt. @ pin 3 -WRC4	7.5	20	30.5	7.5	7.5	7.5	20	30.5	7.5	20	30.5	7.5	20	30.5	7.5	20	30.5	V dc
Max input volt. @ pin 3 -1781	7.5	20	30.5	7.5	7.5	32	20	30.5	7.5	20	30.5	7.5	20	30.5	7.5	20	30.5	V dc
Must turn off voltage	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	V dc
Typical input current	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	mA dc
Maximum input current	27	20	13.5	27	27	27	20	13.5	27	20	13.5	27	20	13.5	27	20	13.5	mA dc
Nominal input resistance	240	900	2.2K	240	240	240	900	2.2K	240	900	2.2K	240	900	2.2K	240	900	2.2K	ohm

OUTPUT																			
Nominal line voltage	120	120	120	240	240	240	240	240	240	240	240	240	240	240	240	480	480	480	V rms
Maximum line voltage	140	140	140	280	280	480	280	280	280	280	280	280	280	280	280	480	480	480	V rms
Minimum line voltage	12	12	12	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	V rms
Max peak off-state voltage	400	400	400	600	600	600	600	600	600	600	600	600	600	600	800	800	800	800	V peak
Max. off-state leakage cur.	2.5	2.5	2.5	1.5	4.5	2.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	mA rms
Static off-state (dv/dt)	200	200	200	200	200	200	200	200	200	200	200	—	—	—	200	200	200	200	V/us
Maximum on-state current*	3	3	3	3	3	3	3	3	3	3	3	3	3	3	5**	5**	5**	5**	A rms
Minimum on-state current	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	mA rms
Maximum 1 cycle surge	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	A peak
Peak on-state voltage	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	V peak
Fuse rating (WRC4 only)	4A	4A	4A	4A	4A	—	4A	4A	4A	4A	4A	4A	4A	4A	5A	5A	5A	5A	fast-acting
Response time	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	50 μsec max			0.5	0.5	0.5	cycle	

- \* Derate 33mA/deg. above 25C
- \*\* 60% duty cycle

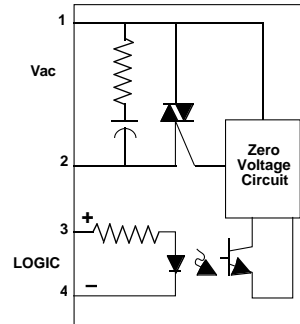
### General specifications

Operating temperature range	-30 to +80°C
Storage temperature range	-40 to +100°C
Isolation	4,000 V rms
Capacitance input to output	8 pF
Line frequency range	47 to 63 Hz

### Application notes

- Do not install or remove modules in live (electrically hot) circuits. High voltage may be present.
- Output connections are non-polarized.
- All units, except OM\_ \_R, and OAC--A11 are zero-cross outputs. These modules turn on irrespective of zero crossing.
- All units, except OM\_ \_C and OAC\_ \_A5 are normally open. These modules are normally closed. The OM5MS covers the 5V, 15V and 24V logic levels.

### 1781 and Classic



### WRC4

