

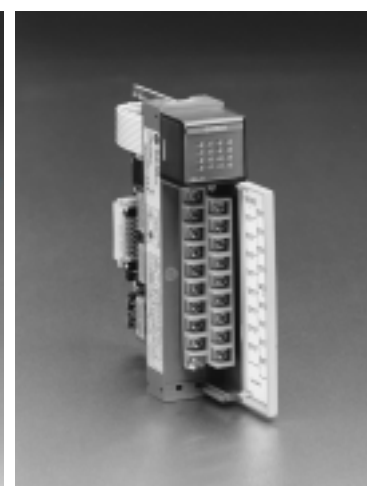
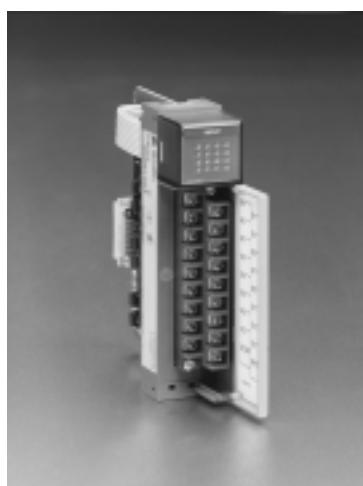


Allen-Bradley

Technical Data

Discrete Input and Output Modules

(Catalog Numbers 1746-IA4, -IA8, -IA16, -IB8, -IB16, -IB32, -IC16, -IG16, -IH16, -IM4, -IM8, -IM16, -IN16, -ITB16, -ITV16, -IV8, -IV16, -IV32, -OA8, -OA16, -OAP12, -OB6EI, -OB8, -OB16, OB16E, -OB32, OB32E, -OBP8, -OBP16, -OG16, -OV8, -OV16, OV32, -OVP16, -OW4, -OW8, -OW16, -OX8, -IO4, -IO8, -IO12, -IO12DC)



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Our wide variety of input, output, and combination modules makes the SLC 500™ family the smart choice for all of your small PLC applications. I/O

modules are available in a wide variety of densities including 4-, 8-, 16-, and 32-point and can interface to AC, DC, and TTL voltage levels. Output modules are available with solid state AC, solid state DC, and relay contact type outputs. For added flexibility, combination modules are also available in 2-input/2-output, 4-input/4-output, and 6-input/6-output versions.

Designed and tested for industrial applications, our modules are of the highest quality. The modules feature input filtering, optical isolation, and built-in surge protection to enhance the reliability of operation in noisy industrial environments.

Class 1, Division 2 certified by UL and CSA. CE compliant. All modules are UL 508 listed and CSA 22.2 142 approved and meet Class 1, Division 2 hazardous location requirements of both Underwriter's Laboratory and the Canadian Standards Association (except for those noted in the module summary on page 2). For use within the European Union or EEA regions, most modules have been tested to meet Council Directive 89/336 Electromagnetic Compatibility (exceptions are listed on page 2).

High Current Sourcing DC Output Modules (1746-OBP8, -OBP16)

Specification		Catalog Number	
		1746-OBP8 (RTB)	1746-OBP16 (RTB) ⁽¹⁾
Voltage Category		24V dc	
Operating Voltage		20.4 to 26.4V dc source	
Number of Outputs		8	16
Points per Common		4	16
Backplane Current Draw	5V dc	0.135A	0.250A
	24V dc	0.0A	0.0A
Signal Delay (max.) (Resistive Load) ⁽²⁾		on = 1.0 ms / off = 2.0 ms	
Off-State Leakage ⁽³⁾ (max.)		1 mA	
Load Current (min.)		1 mA	
Continuous Current (max.)	Per Point	2.0A at 60°C	1.5A at 30°C 1.0A at 60°C
	Per Module	8.0A at 0° to 60°C	6.4A at 0° to 60°C
On-State Voltage Drop (max.)		1V at 2A	1V at 2A
Surge Current ⁽⁴⁾ (max.)	Per Point	4A for 10 ms	4A for 10 ms
	Per Module	32A for 10 ms	32A for 10 ms

(1) A fused common and blown fuse LED are provided on this module. For replacement fuse, use catalog number 1746-F8 of Littelfuse 322010. See page 8 for additional information.

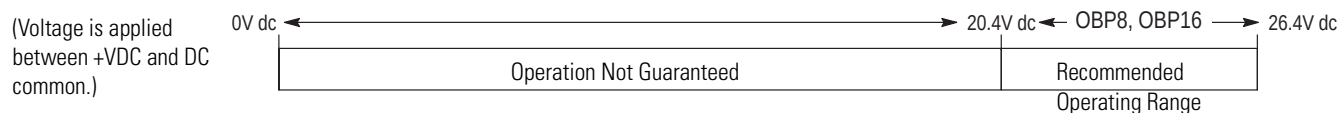
(2) Fast turn-off modules (1746-OB6EI, -OBP8 Series B and later, -OB16E Series B and later, -OBP16, and -OVP16) provide fast OFF delay for inductive loads. Fast turn-off delay for inductive loads is accomplished with surge suppressors on this module. A suppressor at the load is not needed unless another contact is connected in series. If this is the case, a 1N4004 diode should be reverse wired across the load. This defeats the fast turn-off feature. Comparative OFF delay times for 1746-OB8/-OV8 and fast turn-off modules, when switching Bulletin 100-B110 (24V sealed) contactor, are: 1746-OB8/-OV8 OFF delay = 152 ms; fast turn-off modules OFF delay = 47 ms.

(3) To limit the effects of leakage current, a loading resistor can be connected in parallel with your load. For 24V dc operation use a 5.6k ohm, ½W resistor.

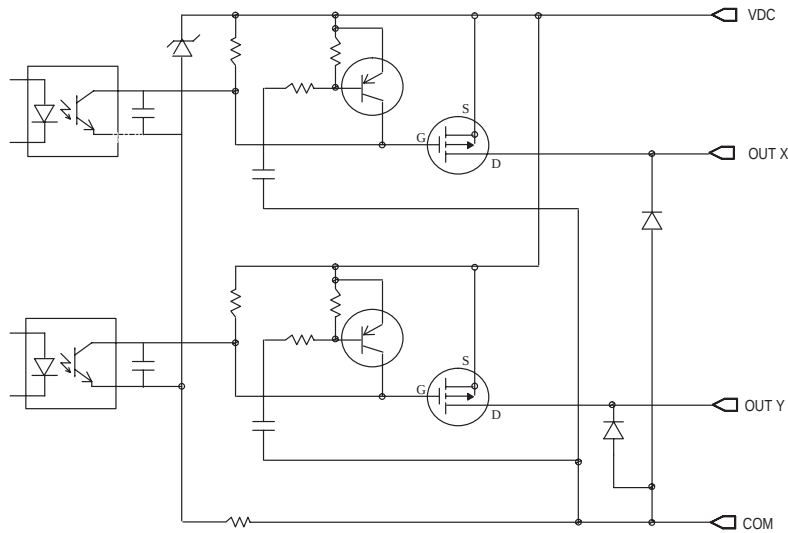
(4) Repeatability is once every second at 30°C. Repeatability in once every 2 seconds at 60°C.

RTB = Removable Terminal Block.

Operating Voltage Range

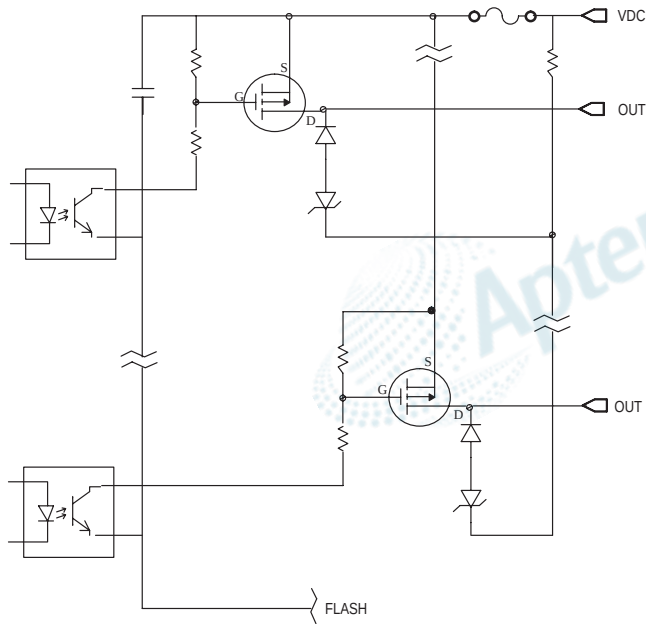
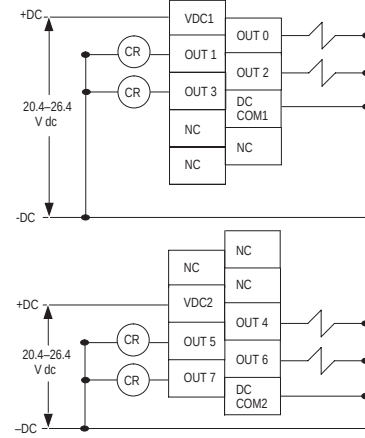


Circuit and Wiring Diagrams



1746-OBP8

20.4-26.4V dc TRANSISTOR OUTPUT, SOURCING



1746-OBP16

20.4-26.4V dc TRANSISTOR OUTPUT, SOURCING

