Rockwell Automation
Allen-Bradley

48V and 125V DC Modules Expand SLC 500™ Control Capabilities to Electric Power Industry

Product Profile

Deregulation and privatization are creating a need for cost effective automation solutions in the electric power industry. Allen-Bradley's 48V and 125V dc discrete I/O and power supplies allow many electric power applications to be served with the SLC 500 family of controllers. The SLC 500 can perform a wide variety of tasks, ranging from substation data collection and circuit breaker control to power generation applications such as coal handling and water treatment facilities.

48V dc and 125V dc discrete I/O modules provide removable wiring terminal blocks and LED status indication for each channel. Input modules provide 16 channels with input filtering, a broad operating voltage range and 1500 volt optical isolation between logic circuitry and field wiring terminals. Discrete output modules are relay contact type with current ratings rating from .22 amps per point to .58 amps per point for inductive loads. Relay modules are available with 16 channels — 2 commons or 8 channels — 8 commons.

48V dc and 125V dc power supplies also provide 1500 volt isolation, a broad voltage range and a 50 watt output capacity. The power supplies also provide 200 mA @ 24V dc user power for powering user inputs and loads.

The 1746-NI8 analog input module is also available for monitoring 0-1 mA signals from electric power transducers. The NI8 is a high speed, high accuracy input module which can interface to both current and voltage signals.

Catalog Number	Channels per Module	Specifications	
1746-IC16 Input Module	16	voltage range: commons/module: signal delay:	30-60V dc @ 55ºC, 30-55V dc @ 60ºC single ON = 4 msec OFF = 4 msec
1746-IH16 Input Module	16	voltage range: commons/module: signal delay:	90–146V dc single ON = 9 msec OFF = 9 msec
1746-OX8 Relay Contact Output Module	8	voltage range: commons/module: signal delay: current per point:	5–146V dc 5–265V ac 8 (ch-ch isolated) ON = 10 msec OFF = 10 msec inductive .22 amps @ 125V dc, .58 amps @ 48V dc resistive 1 amp @ 125V dc, 1.5 amps @ 48V dc
1746-OW16 Relay Contact Output Module	8	voltage range: commons/module: signal delay: current per point:	5–146V dc 5–265V ac 2 ON = 10 msec OFF = 10 msec inductive .22 amps @ 125V dc, .58 amps @ 48V dc resistive 1 amp @ 125V dc, 1.5 amps @ 48V dc
1746-NI8 Analog Input Module	8	input ranges: resolution: accuracy 0-60°C:	0–20 mA, 4–20 mA, ± 20 mA, 0–1 mA 0–5V dc, 1–5V dc, 0–10V dc, ± 10V dc 14–16 bit (range dependent) 10 bit for 0–1 mA range current input type: ± .05% of full scale[1] voltage input type: ± .10% of full scale
1746-P5 Power Supply	—	input voltage: output capacity:	90–146 V dc 5 Amps @ 5V dc .96 Amps @ 24V dc .20 Amps @ 24V dc user power
1746-P6 Power Supply [2]	—	input voltage: output capacity:	30-60 V dc 5 Amps @ 5V dc .96 Amps @ 24V dc .20 Amps @ 24V dc user power

[1] for all ranges except 0-1 mA, which is ± .5%
[2] Available for shipment April, 1998.