

# Product Specifications

	V280	V290
<b>Graphic Display Screen</b>		
Type	Black & White FSTN LCD	Black & White FSTN LCD
Touchscreen	Resistive, Analog	Resistive, Analog
Illumination Backlight	CCFL (Fluorescent lamp)	CCFL (Fluorescent lamp)
Display Resolution	320 x 240 pixels (QVGA), 4.7" active area	320 x 240 pixels (QVGA), 5.7" active area
HMI Displays	Up to 255	Up to 255
<b>Keyboard</b>		
Number of Keys	27, user-labeled, includes soft keys & numeric keypad	None, Virtual keyboard
<b>Program</b>		
Application Memory	1000K	
Execution Time for Bit Operation	0.5µsec	
Memory Bits (coils)	4096	
Memory Integers (registers)	2048	
Long Integers (32 bit)	256	
Memory Floats	24	
Double Word (32 bit unsigned)	64	
Timers (32 bit)	192	
Counters	24	
Data Tables	Up to 120K (RAM), 64K (Flash)	
<b>Communication</b>		
RS232/RS485	2 RS232 ports + 1 optional RS232 or RS485 (see additional communication modules)	
Ethernet	1 optional port (see additional communication modules)	
CANbus	1 port	
MODBUS	Supports MODBUS protocol, Master/Slave	
GPRS	Access your Vision using a remote PC, via wireless data transmission, SMS-enabled	
GSM/CDMA	SMS messages to/from any quantity of phone numbers, Remote Access-enabled	
<b>General</b>		
Power Supply	12VDC or 24VDC	
PID	Up to 12 independent PID loops, including internal auto-tune, ramp-soak programmer & bumpless transfer	
Battery Back-up	7 year typical battery back-up, at 25°C, for all memory sections and real-time clock (RTC)	
Environment	IP65/NEMA4X (front panel, when mounted)	
Expansion option	Up to 128 <sup>1</sup> additional I/Os, via plug-in expansion modules	
Dimensions	10.24" x 6.1" x 2.8" (260 x 155 x 72 mm)	10.24" x 6.1" x 2.8" (260 x 155 x 72 mm)
Article Number	V280-18-B20B	V290-19-B20B

## Additional communication modules

Add one of the following COM ports:

Article Number	
V200-19-ET1	1 Ethernet port
V200-19-R4	1 RS485 port
V200-19-RS4-X <sup>3</sup>	1 RS232/RS485 port (Isolated)



<sup>1</sup> Number may vary according to I/O module.

<sup>2</sup> Certain digital inputs can function as high-speed counters, shaft-encoder inputs, frequency measurers

<sup>3</sup> V200-18-E3XB, V200-18-E4XB, V200-18-E5 and V200-19-RS4-X are not yet UL certified.

## Snap-in I/O Modules

Article Number	V200-18-E1B	V200-18-E2B	V200-18-E3XB <sup>3</sup>	V200-18-E4XB <sup>3</sup>	V200-18-E5B <sup>3</sup>
Digital Inputs (Isolated)	16 pnp/npn Inputs (24VDC)	16 pnp/npn Inputs (24VDC)	18 pnp/npn Inputs (24VDC)	18 pnp/npn Inputs (24VDC)	18 pnp/npn Inputs (24VDC)
High-speed Counter/Shaft Encoder/Frequency Measurer <sup>2</sup>	Two 10 kHz pnp/npn Inputs	Two 10 kHz pnp/npn Inputs	Two 10 kHz pnp/npn Inputs	Two 10 kHz pnp/npn Inputs	Two 10 kHz pnp/npn Inputs
Analog Inputs	Three 10 bit Inputs, 0-10V, 0-20mA, 4-20mA	Two 10 bit Inputs, 0-10V, 0-20mA, 4-20mA	Four Isolated 14 bit Inputs, 0-10V, 0-20mA, 4-20mA. May also be set to Thermocouple or PT100 (Res. 0.1°)	Four Isolated 14 bit Inputs, 0-10V, 0-20mA, 4-20mA. May also be set to Thermocouple or PT100 (Res. 0.1°)	Three 10 bit Inputs, 0-10V, 0-20mA, 4-20mA
Temperature Measurement	None	None			None
Digital Outputs (Isolated)	4 pnp/npn Outputs (24VDC)	4 pnp/npn Outputs (24VDC)	2 pnp/npn Outputs (24VDC)	2 pnp/npn Outputs (24VDC)	2 pnp/npn Outputs (24VDC)
	10 Relay Outputs	10 Relay Outputs	15 Relay Outputs	15 pnp Outputs (24VDC)	15 pnp Outputs (24VDC)
High-speed Output/ PWM	2 Transistor Outputs are high-speed outputs, 50 kHz for npn / 2 kHz for pnp				
Analog Outputs	None	Two 12 bit Outputs, 0-10V, 0-20mA, 4-20mA	Four Isolated 12 bit Outputs, 0-10V, 4-20mA	Four Isolated 12 bit Outputs, 0-10V, 4-20mA	None