

Technical Specifications

	V120-22-R1	V120-22-R2C	V120-22-R6C	V120-22-R34 ¹	V120-22-T1	V120-22-T38 ¹	V120-22-T2C	V120-22-UN2	V120-22-UA2
	10 Digital Inputs 6 Relay Outputs 1 Analog Input	10 Digital Inputs 6 Relay Outputs 2 Analog Inputs	6 Digital Inputs 6 Relay Outputs 6 Analog Inputs	20 Digital Inputs 2 Analog/Digital Inputs ² 12 Relay Outputs	12 Digital Inputs 12 Transistor Outputs	22 Digital Inputs 16 Transistor Outputs	10 Digital Inputs 12 Transistor Outputs 2 Analog/Digital Inputs ²	10 Digital Inputs 12 Transistor Outputs 2 PT100/TC/Analog/Digital Inputs ²	10 Digital Inputs 10 Transistor Outputs 2 TC/Analog/Digital Inputs ² 2 Analog Outputs
I/Os									
Digital Inputs	10 pnp/npn (source/sink) 12/24VDC	10 pnp/npn (source/sink) 12/24VDC	6 pnp/npn (source/sink) 24VDC	22 ² pnp/npn (source/sink) 24VDC	12 pnp/npn (source/sink) 12/24VDC	22 pnp/npn (source/sink) 24VDC	12 ² pnp/npn (source/sink) 12/24VDC	12 ² pnp/npn (source/sink) 12/24VDC	12 ² pnp/npn (source/sink) 24VDC
High-speed counter/ Shaft-encoder/ Frequency measurer ³	Three 10 kHz 32 bit resolution	Three 10 kHz 32 bit resolution	One 10 kHz 32 bit resolution	Three 10 kHz 32 bit resolution	Two 10 kHz 32 bit resolution	Two 10 kHz 32 bit resolution	Three 10 kHz 32 bit resolution	Two 10 kHz 32 bit resolution	One 10 kHz 32 bit resolution
Analog Inputs	One 10 bit input: 0-10V, 0-20mA, 4-20mA	Two 10 bit input: 0-10V, 0-20mA, 4-20mA	Six 10 bit input: Two 0-10V, 0-20mA, 4-20mA, Four 0-20mA, 4-20mA	Two 10 bit inputs ² : 0-10V, 0-20mA, 4-20mA	None	None	Two 10 bit inputs ² : 0-10V, 0-20mA, 4-20mA	Two 14 bit inputs ² : 0-10V, 0-20mA, 4-20mA	Two 14 bit inputs ² : 0-10V, 0-20mA, 4-20mA
Temperature measurement	None	None	None	None	None	None	None	Two PT100 or Thermocouple inputs ²	Two Thermocouple inputs ²
Digital Outputs	6 relay outputs	6 relay outputs	6 relay outputs	12 relay outputs	12 pnp (source)	16 pnp (source)	12 pnp (source)	12 pnp (source)	10 pnp (source)
High-speed Outputs	None	None	None	None	First 2 outputs can function as HSQ, 2 kHz maximum, PWM				
Analog Outputs	None	None	None	None	None	None	None	None	Two 12 bit Outputs, 0-10V, 4-20mA
I/O Expansions	Up to 128 I/Os may be added via I/O expansion port (number of I/Os may vary according to expansion model)								
Operator panel									
Screen Type	Graphic STN LCD, LED backlight								
Display Resolution	128 x 64 pixels								
HMI Displays	Up to 255								
Keyboard	16 programmable sealed membrane keys								
Program									
Application memory	448K								
Bits/Coils	4096								
Integers/Registers	2048								
Long Integers (32 bit)	256								
Double Word (32 bit unsigned)	64								
Floats	24								
Timers (32 bit)	192								
Counters	24								
Data Tables	120K (RAM) / 64K (FLASH)								
Execution Time for bit Operation	0.8µsec								
Communication									
Serial communication	2 RS232/RS485 ports (selectable)								
MODBUS	Supports MODBUS protocol, Master/Slave								
GPRS	Use a GPRS modem to establish a Vision-PC data connection via Internet, and transmit IP packets of data over the cellular network. SMS-enabled								
GSM/CDMA	SMS messages to/from any quantity of phone numbers, Remote Access-enabled								
CANbus	None	1 port	1 port	None	None	None	1 port	None	None
General									
Power Supply	12/24VDC	12/24VDC	24VDC	24VDC	12/24VDC	24VDC	12/24VDC	12/24VDC	24VDC
PID	Up to 12 independent PID loops, including internal auto-tune, ramp-soak programmer and bumpless transfer (up to 32 loops without auto-tune)								
Clock (RTC)	Real-time clock functions (date and time)								
Battery Back-up	7 year typical								
Dimensions	96 x 96 x 64 mm (3.78" x 3.78" x 2.52")								
Environment	IP65/NEMA4X (from panel, when mounted)								

¹ V120-22-R34 and V120-22-T38 are not yet UL certified

² In these models certain inputs can function as either digital, analog, thermocouple or PT100 inputs (model dependent). When using these inputs as thermocouple or PT100, the number of free digital inputs is reduced to 8 or 7, respectively.

³ Certain inputs can function as high-speed counters, shaft-encoder inputs, frequency measurers, or normal digital inputs.

