

Characteristics

Terminals	Function	Characteristics	Default function setting
PLC	External power supply input	+24 Vdc input for external power supply for logic inputs Max. permissible voltage: 50 Vdc	—
P24	Internal supply	Short-circuit and overload protection: 24 Vdc supply (min. 21 Vdc, max. 27 Vdc), maximum current: 200 mA	
CC	Common	0 Vdc common (2 terminals)	
FLA, FLB, FLC	Configurable relay outputs	1 relay logic output, 1 N/C contact, and 1 N/O contact with common point Minimum switching capacity: 10 mA for 5 Vdc Maximum switching capacity: • On resistive load (cos φ = 1): 5 A for 250 Vac or 30 Vdc • On inductive load (cos φ = 0.4 and L/R = 7 ms): 2 A for 250 Vac or 30 Vdc Max. response time: 10 ms	Fault relay
RY, RC		1 relay logic output, 1 N/O contact Minimum switching capacity: 3 mA for 24 Vdc Maximum switching capacity: • On resistive load (cos φ = 1): 3 A for 250 Vac or 30 Vdc • On inductive load (cos φ = 0.4 and L/R = 7 ms): 2 A for 250 Vac or 30 Vdc Max. response time: 7 ms ± 0.5 ms	Speed attained
F R RES	Configurable logic inputs	3 programmable logic inputs, 24 Vdc, compatible with level 1 PLC, IEC 65A-68 standard Impedance: 4.7 kΩ Maximum voltage: 30 Vdc Max. sampling time: 2 ms ± 0.5 ms Multiple assignment makes it possible to configure several functions on one input	F: Run forward (2-wire control) R: Preset speed 1 command (15 Hz) RES: Clear trip
		Positive logic (Source): State 0 if ≤ 5 Vdc or logic input not wired, state 1 if ≥ 11 Vdc	
		Negative logic (Sink): State 0 if ≥ 16 Vdc or logic input not wired, state 1 if ≤ 10 Vdc	
FM	Configurable analog output	1 switch-configurable (SW101) voltage or current analog output: • Voltage analog output 0–10 Vdc, minimum load impedance 7.62 kΩ • Current analog output X–Y mA by programming X and Y from 0 to 20 mA, maximum load impedance: 970 Ω Max. sampling time: 2 ms ± 0.5 ms Resolution: 10 bits Accuracy: ±1 % for a temperature variation of 60 °C Linearity: ±0.2%	Output frequency
PP	Internal supply available	Short-circuit and overload protection: One 10.5 Vdc ± 5% supply for the reference potentiometer (1 to 10 kΩ), maximum current: 10 mA	—
VIA	Configurable analog/logic input	Switch-configurable voltage or current analog input: • Voltage analog input 0–10 Vdc, impedance 30 kΩ maximum voltage: 24 Vdc • Analog current input X–Y mA by programming X and Y from 0 to 20 mA, with impedance 250 Ω Max. sampling time: 3.5 ms ± 0.5 ms Resolution: 10 bits Accuracy: ±0.6% for a temperature variation of 60 °C Linearity: ±0.15% of the maximum value This analog input is also configurable as a logic input. Consult the Altivar 212 Programming Manual for more information.	Primary speed reference, 0–10 V
VIB	Configurable analog input	Voltage analog input, configurable as an analog input or as a PTC probe input. Voltage analog input: • 0–10 Vdc, impedance 30 kΩ max. voltage 24 Vdc • Max. sampling time: 22 ms ± 0.5 ms • Resolution: 10 bits • Accuracy: ±0.6% for a temperature variation of 60 °C • Linearity: ±0.15% of the maximum value PTC probe input: • 6 probes max. mounted in series • Nominal value < 1.5 kΩ • Trip resistance 3 kΩ, reset value 1.8 kΩ • Short-circuit detection threshold < 50 Ω	Secondary speed reference, 1–10 V
RJ45	Graphic display terminal or Modbus	Used to connect graphic display terminal or connect the drive to a Modbus fieldbus. Note: For using Modbus on the RJ45, modify parameter F807. See Modbus manual.	
Open Style connector	Fieldbus	Refer to communication manual related to the fieldbus.	