1398-DDM-009

ULTRA 100 1000 W universal servo drive / product dossier

Allen-Bradley 1398-DDM-009 is a 1000 W ULTRA 100 universal digital servo drive. It manages brushless servo motor current, velocity and position with selectable command interfaces.

System position

SUPPLY Single-phase AC > **COMMAND** Controller mode > **DRIVE** Current / velocity / position > **FEEDBACK** Motor encoder + Hall > **MOTOR** Brushless servo

Published product summary

Field	Value	Engineering meaning
Manufacturer / model	Allen-Bradley 1398-DDM-009	Exact non-indexing catalog suffix
Drive role	ULTRA 100 universal servo drive	1000 W continuous output power
Power path	100–240 V AC, single phase	External 12–24 V DC still needed for I/O
Shipping	Swift global dispatch	Quantity and timing confirmed in quotation
Condition	New, original product	Confirm offered-unit marking and scope

Key decisions before ordering

Compare full drive suffix, motor/feedback code, command mode, saved parameter set and included accessories. A 1398-DDM-009X indexing unit or DeviceNet variant is a separate catalog reference.

Electrical and control profile

Tabulated manufacturer data for the exact 009 rating class

Power and control

Parameter	Published value
Drive variant	Universal drive; 1398-DDM-009X is the distinct indexing variant
Continuous output power	1000 W
AC supply	100–240 V AC nominal, single phase, 47–63 Hz
AC input current	9 A rms
Peak output current	15 A
Continuous output current	5 A peak basis in source table
DC bus range	141–339 V DC
Digital I/O supply	External 12–24 V DC
Command choices	±10 V analog, presets, encoder follower, step/direction or CW/CCW
Serial setup	RS-232 or four-wire RS-485; 1200–19200 baud

I/O and feedback

Parameter	Published value
Digital inputs	Four selectable active-high inputs and dedicated ENABLE
Digital outputs	Two selectable active-high outputs and two dedicated relay outputs
Current-limit input	0–10 V single-ended analog
Monitoring output	Selectable ±10 V analog, for monitoring only
Motor feedback	Motor-mounted incremental encoder and Hall inputs
Motor encoder output	Differential line-driver division by 1, 2, 4 or 8

Source: Rockwell Automation 1398-5.2 / 1398-UM002. The source current table describes the 5 A continuous output on a peak-current basis; apply motor and duty limits in the installed design.

Integration and applications

Operating relationship of the ULTRA 100 axis

How the axis is controlled

Layer	Interface	Commissioning question
Controller	Analog, preset, follower or pulse command	Does the active mode match the installed logic?
Drive	Microcontroller current, velocity and position loops	Is the saved parameter set matched to the motor?
Motor	Power, encoder/Hall and thermostat paths	Do wiring and direction match the axis drawing?
Machine	Guarding, load and travel limits	Can motion be tested safely before process release?

Documented application patterns

Analog velocity or torque axis

Use a qualified ±10 V controller output and verify command polarity, scaling and the drive's active velocity or torque mode before coupling the load.

Pulse-controlled position axis

Use step/direction or CW/CCW command wiring with the applicable differential or TTL source limits, then test direction and pulse count with the mechanism secured.

Encoder follower axis

Feed the documented quadrature encoder interface for electronic gearing after confirming signal levels, cable shielding and commanded direction against the master axis.

Preset-command machine axis

Use the selectable active-high inputs for approved preset torque or velocity states; confirm external I/O supply, assignment and ENABLE behavior during each state transition.

Axis fit depends on the selected controller mode, motor feedback and verified parameter file; confirm each before torque is enabled.

Service decisions and portfolio

Lifecycle, technical FAQ and catalogue navigation

Lifecycle Status

1398-DDM-009 status: A current lifecycle phase for the exact Allen-Bradley 1398-DDM-009 was not confirmed in the manufacturer material used for this page.

Support and replacement: The ULTRA 100 platform is covered by Rockwell Automation legacy-product support. Replacement selection requires a separate check of motor, feedback, supply, I/O and command-mode fit; an indexing or DeviceNet suffix is not equivalent.

Apter Power availability: The offered unit quantity and dispatch timing are confirmed separately in the Apter Power quotation.

FAQ for the installed axis

How do I distinguish 1398-DDM-009 from 1398-DDM-009X before replacement?

Check the complete nameplate suffix and existing application program. Rockwell lists 1398-DDM-009 as the universal drive and -009X as the indexing drive; matching 1000 W power does not establish equivalent indexing capability.

Why might a 1398-DDM-009 show power but ignore an ENABLE command?

Verify the external 12–24 V DC I/O supply, ENABLE wiring, active-high level and drive status independently of the AC line. Check the configured fault/reset assignments before applying a motion command.

Related Allen-Bradley catalogue pages

Navigation only. Confirm each full catalog number and installed-system fit before ordering.

Allen-Bradley 1746-HSCE
SLC 500 high-speed counter

Allen-Bradley 1794-IV16
FLEX I/O sourcing input

Allen-Bradley 1756-L62
ControlLogix controller

Allen-Bradley 1756-DNB
ControlLogix DeviceNet

Allen-Bradley 1756-PSCA2
ControlLogix power supply

Allen-Bradley 1756-OV32E
ControlLogix output

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