

INNOVATIVE ELECTRONICS

Multi-Variable
Auto-Drilling System

MODEL 8300

A FIRMS® modular component

“Quality by Design, Satisfaction by Performance”



Incorporating “Rig Match”

FEATURES:

- Saves Money By Increasing Bit Life And Improving Rate Of Penetration
- Digital Control Of The Target Weight Setting Maintains A Consistent Target Weight On Bit
- Calibrated Indicator Displays Weight Signal From The Diaphragm Unit
- Unique “rig Match” Function Maintains Accurate Weight On Bit Throughout Changing Rig Conditions And Most Drilling Operations
- Fail-safe Design Applies The Brake If The Rig Air Fails
- Available For Use With Drum Or Disk Type Brakes
- Can Control Drilling During Incorrect Rop, RPM, And Drilling Torque Parameters

DESCRIPTION:

The Multi-Variable Auto-Drilling System Model 8300 autodriller family uses high speed digital electronics to control the weight on bit under a wide range of drilling conditions. It's unique “Rig Match” adaptive brake control feature allows the MVA to “learn” the rig's braking properties thus providing constant and accurate weight on bit control. This “Rig Match” capability can reduce overall drilling costs and increase rate of penetration by providing smoother and more accurate drawworks brake control for longer bit life and a straighter drilled hole.

The MVA Model 8300 system includes a Controller Unit with built-in Operator's Display, a Brake Control Unit, Input Sensors and necessary hardware to complete a standard installation. Systems are available for installation on rigs with band brakes or disk brakes. The system can be supplied with a complete hydraulic package for integrated control of most disk brakes.

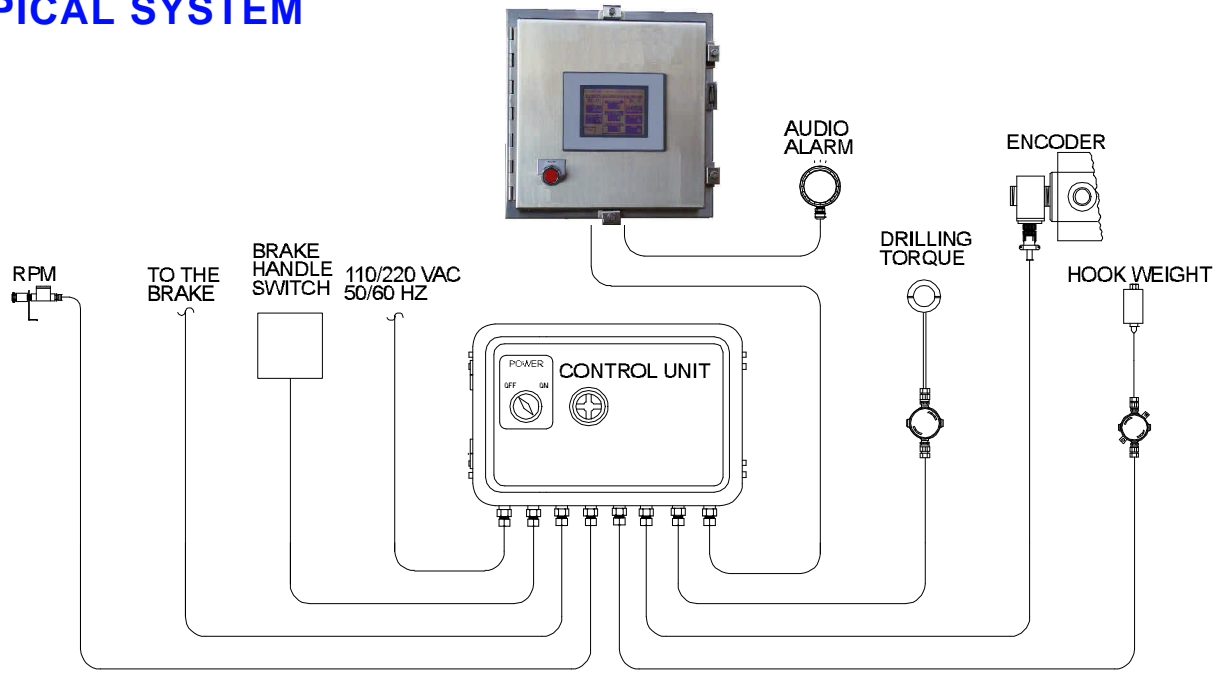
The Operators Display is calibrated to match

the rigs weight indicator scales. Hook weight, entered target weight on bit information, and actual weight on bit performance are all precisely entered and read using the digital touch screen display. Optional ROP, RPM, and Drilling Torque inputs can be monitored to stop the autodrilling function if any of these variable parameters are incorrect.

The use of rugged, electronic components, manufactured to internationally certified standards of safety and uniformity plus rugged NEMA 4 (IP 65) construction makes the system reliable and easily maintainable for years of dependable and trouble-free service.

The MVA Model 8300 is a Modular FIRMS® (Fully Integrated Rig Management System) component. It includes serial data capabilities to communicate with other FIRMS modules allowing company and rig personnel to easily monitor and log the MVA Model 8300 from various locations on and off the rig.

TYPICAL SYSTEM



SPECIFICATIONS:

DIMENSIONS 24"H x 18"W x 9"D
(60,9 x 45,7 x 22,8)cm

WEIGHT Approx. 90 lbs.

POWER 120/240 50-70Hz
Optional Battery Backup

TEMPERATURE RANGE 0F to 122F
(-32C to 50C)

RESOLUTION 100lbs (45kg)

OPERATING RANGE 0-1,000,000lbs
(0-453,600kg)

RATE OF PENETRATION 600ft/hr (182m/hr)

COMMUNICATIONS RS232/485 to FIRMS Sys.

OPERATOR INTERFACE Multi-Page Touch Screen

PACKAGING NEMA4X, IP65 Stainless Steel

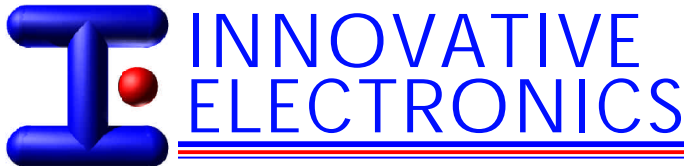
INTERFACES FOR Most models of disk brakes including Chinese disk brakes. All band brakes and most band brake remote actuators

ADDITIONAL INFORMATION

The MVA can be supplied in various configurations depending on requirements. The MVA can be quoted with or without cables and/or junction boxes, and can be specified for an installation that will be permanent or be broken down for rig moves. The MVA can be combined with other Innovative Electronics packages and FIRMS systems for complete consoles containing both hydraulic and electronic gauges and instruments, including computer systems.

To request a quotation; please include model number of anchor and hydraulic sensor, full scale of weight indicator scale, full scale of weight on bit scale, available rig power and if a battery backup is desired.

For Additional Information Contact:



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