

ArmorStart® EtherNet/IP Distributed Motor Controller

Increase critical information exchange and enhance control with EtherNet/IP

Features and Benefits

Lower Installation Costs

- **Plug-and-play design** for power, I/O, and communication allows faster installation and commissioning
- Significantly **reduce wiring errors** compared to Point-to-Point wiring
- Reduce the size and cost of custom panels and enclosures
- Labor cost reduced by 30%, overall system cost reduced by 20%

Reduced Engineering Time

- Integrated, pre-engineered, enclosed motor starter with **group motor and high fault SCCR listing**
- Maximize your network speed and bandwidth with **embedded switch technology**
- Enhanced control from front office to manufacturing with **EtherNet/IP communication**
- Beacon based **Device Level Ring** performance provides fault tolerant operation

Ease of Maintenance/Plant Operation Savings

- EtherNet/IP offers easy access to parameters, status and diagnostics
- **Modular two-piece design** allows for quick replacement and rapid commissioning
- **Embedded Web server** allows access to device status from any PC without special software



Ideal for motor control applications, the ArmorStart product family allows you to mount your motor control near the motor.

The ArmorStart Distributed Motor Controller is an integrated, pre-engineered starter for applications such as material handling, automotive assembly, airport conveyors, and sortation systems. Ideal for motor control applications, the ArmorStart Family was developed to improve productivity by allowing you to mount your motor control near the motor. Now with the added capability of EtherNet/IP, the ArmorStart can be configured, programmed and controlled using RSLogix™ 5000.

Ethernet has been the standard for business enterprise systems for many years. Now, worldwide the industry is witnessing a convergence of the Enterprise Ethernet and factory floor EtherNet/IP as the standard. This relationship allows a more efficient exchange of critical information without additional hardware to optimize your time and help with your decision-making process.

The ArmorStart with EtherNet/IP incorporates the advantages of distributed motor control, EtherNet/IP communication, and Embedded Switch Technology. The ArmorStart EtherNet/IP family includes full voltage or Sensorless Vector Control AC drive motor starters to cover most of your critical applications. ArmorStart with EtherNet/IP is a simple, seamless and cost-effective method of integrating pre-engineered starters, I/O and network capabilities in your On-Machine™ architecture. The dual port 10/100Mbps embedded Ethernet switch supports high performance applications and allows connectivity directly to your network, helping to reduce overall cost and simplifying system configuration. Lastly, RS Logix™ 5000 is the preferred software tool used for commissioning, programming and configuration.

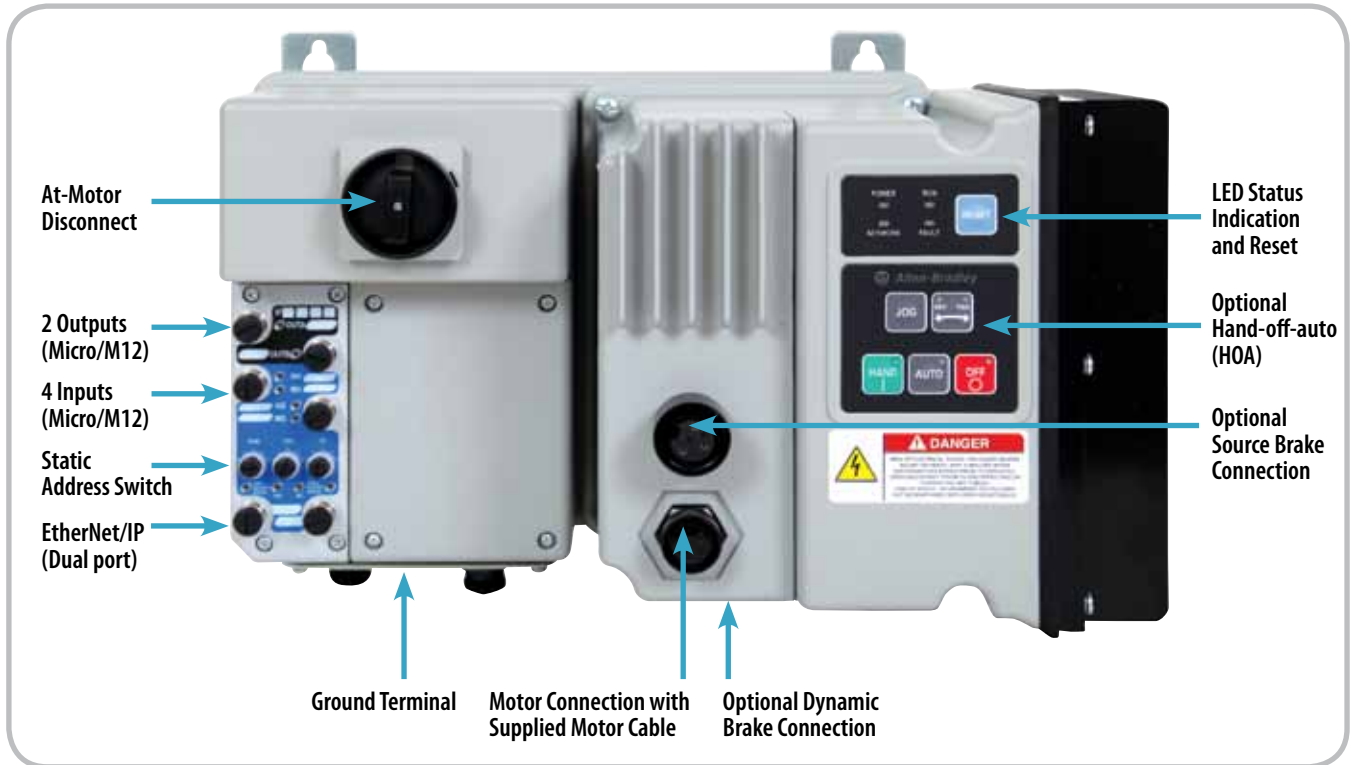
LISTEN.
THINK.
SOLVE.®

Allen-Bradley HMI's **Rockwell Automation**

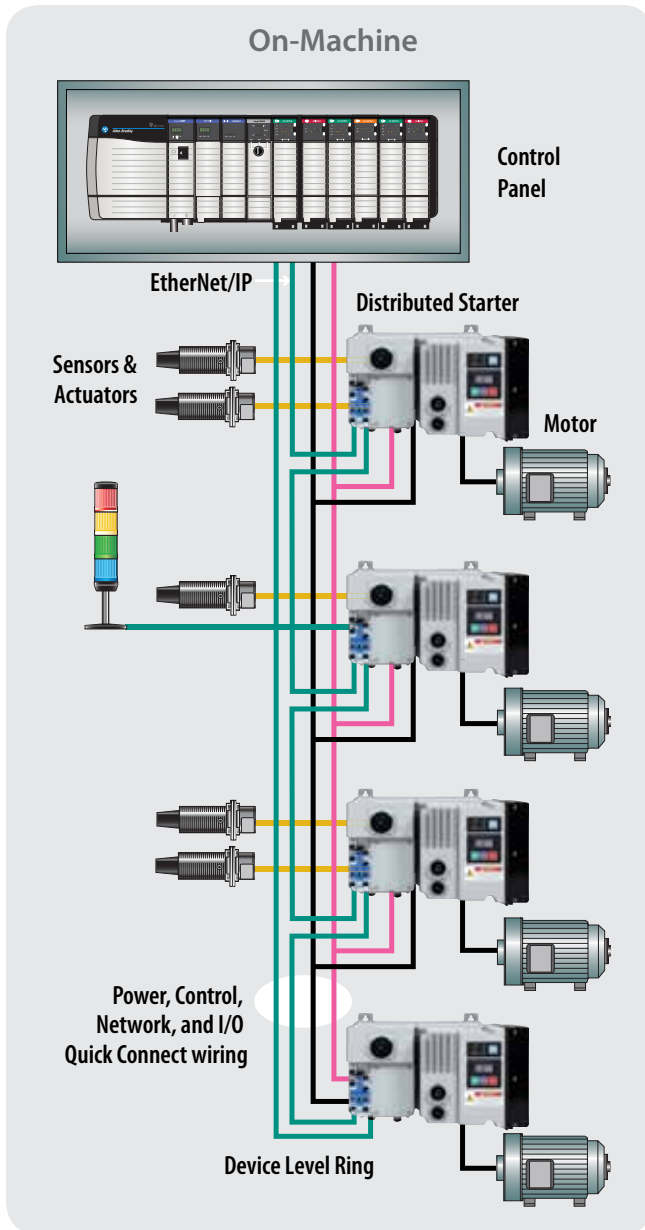
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ArmorStart EtherNet/IP Features:

- EtherNet/IP network connectivity
- Embedded 2-port Ethernet switch
- Device Level Ring (DLR) support
- End-to-end transparent clock support
- IP67/NEMA Type 4 environmental rating
- At-Motor disconnect with lockout capability
- 4 programmable inputs and 2 solid state outputs
- DeviceLogix enabled (Local logic)
- High fault SCCR rating
- Suitable for group motor applications
- 3 m motor cable included with every ArmorStart



		Bulletin:	280E/281E	284E
		Type:	EtherNet/IP™	
Horsepower Range:	0.5...10 Hp (0.37...7.5 kW)		✓	-
	0.5...5 Hp (0.4...3.3 kW)		-	✓
Starting Method:	Full-Voltage and Reversing		✓	-
	Sensorless Vector Performance		-	✓
Environmental Rating:	IP67/NEMA Type 4		✓	✓
Control Voltage:	24V DC		✓	✓
Operational Voltage Ratings:	200...480V AC		✓	-
	380...480V AC		-	✓
Suitable for Group Motor Installations			✓	✓
Local logic using DeviceLogix™			✓	✓
I/O Capability:	Four Inputs		✓	✓
	Two Outputs		✓	✓
LED Status Indication			✓	✓
Gland Plate Entry:	Conduit Entrance		✓	✓
	ArmorConnect Power Media		✓	✓
Quick Disconnects (I/O, Communications, Motor Connection, Three Phase and Control Power)			✓	✓
Factory Installed Options:	HOA Keypad		✓	✓
	Source Brake Contactor		-	✓
	Dynamic Brake Connector		-	✓
	Output Contactor		-	✓
	EMI Filter		-	✓
	Shielded Motor Cable		-	✓
				-



ArmorStart EtherNet/IP Networks

ArmorStart EtherNet/IP delivers true embedded dual port switch technology, not just a hub, to support Linear and Beacon based Device Level Ring (DLR) topology. You can quickly and easily configure the IP address to be static or dynamic (DHCP) by using the local address switches, add-on profile, or embedded webpage.

Flexible, scalable and simplified motor control solution

Faster Time to Market with On-Machine

On-Machine is a design philosophy that moves control and hardware closer to the application. On-Machine is a pre-engineered, quick-connect system that simplifies wiring, speeds up system commissioning, and minimizes wiring mistakes. This can reduce setup and commissioning time and provide faster time to market.

Reduce your setup and commissioning time

Advantages of ArmorStart for On-Machine Architecture

- Optimizes production floor space
- Reduces cost by minimizing panel size requirements
- Reduces costs by using plug-and-play connectivity
- Faster time to market with increased system modularity

Premier Integration

ArmorStart EtherNet/IP provides premier integration within the architecture to deliver information with enhanced control and access to parameter, status, and diagnostics for faster response to changing environments. ArmorStart EtherNet/IP supports:

RSLogix™ 5000 Add-On Profile

- Quicker and more efficient program development
- Automatic descriptive tag generation for status, diagnostics, and command information
- Help reduce mistakes and programming time

Simplify your implementation and configuration to reduce cost

Integrated Motion on EtherNet/IP Support

Embedded support of a transparent clock allows seamless integration into applications with Integrated Motion on EtherNet/IP – which uses CIP Motion™ and CIP Sync™ technology from ODVA. This is accomplished with no additional components or performance loss.

DeviceLogix

- Standard feature at no additional cost
- Faster local I/O processing
- Helps improve control system performance
- Increase system reliability
- Increase system/machine modularity

Embedded Web Server Support

- Uses a standard Web browser
- Offers online status, diagnostic and parameter configuration
- Receive email notification for faults and warnings

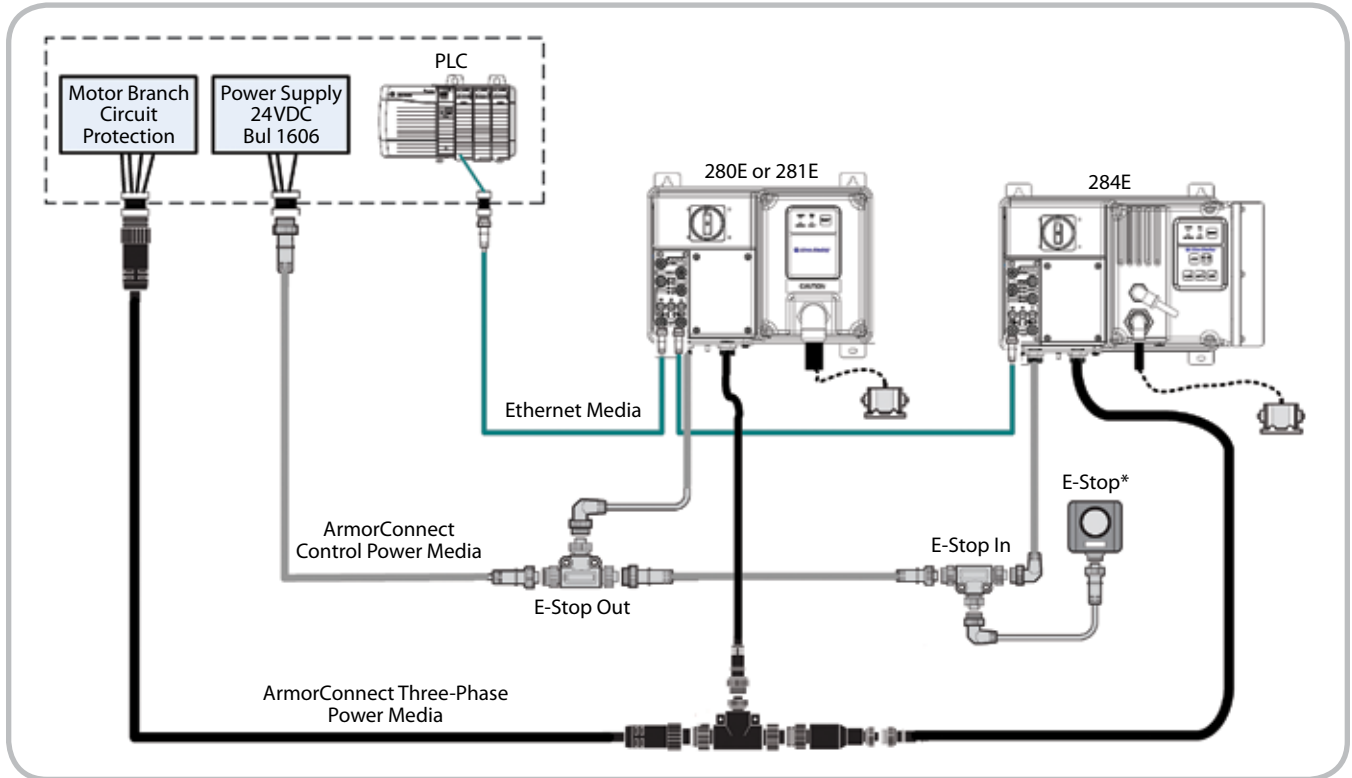
Allen-Bradley MMs

ArmorConnect® Control and Three-phase Power Media

ArmorConnect is a plug-and-play connectivity solution for ArmorStart Distributed Motor Control. ArmorConnect components allow multiple ArmorStart controllers to be connected quickly and reliably, which reduces installation time and helps prevent system wiring errors.

Industrial Ethernet Media

Rockwell Automation® offers a complete industrial Ethernet cabling solution that provides seamless connectivity for your Integrated Architecture and components. From raw cable and field-attachable connectors to RJ45 and M12 patchcords, Allen-Bradley® Ethernet connectivity enhances flexibility while helping ensure network integrity and performance.



* A single channel E-Stop is pictured. It is necessary to perform a risk assessment and determine specific application requirements.

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