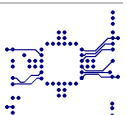


FIRELEC Migration Solution

**Alspa C350/C370™ > EMERSON
DeltaV™**

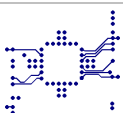
FMS-C350_C370-DV-1

Rev	Date	Subject
01	31/07/2014	First revision

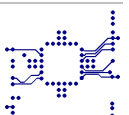


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1. INTRODUCTION



The purpose of this document is to guide the user of ALSPA C350/C370 system within the safe, efficient and easy way to migrate toward a EMERSON DeltaV™ system.

FIRELEC has developed migration solution "**FMS-C350_C370-DV-1**" allowing to protect the existing wiring investment as the user converts from an existing ALSPA C350/C370 system to the EMERSON DeltaV™ system.

The **FMS-C350_C370-DV-1** solution is a set of migration adapters installed in place of the existing I/O cards, allowing to connect easily existing Alspa C350/C370 I/O cables, to the EMERSON DeltaV I/O cards.

The Alspa C350/C370 process cables are kept in place. The DIN E-Type connectors of this cables are then, through the ADP-S, connected to the EMERSON DeltaV I/O cards using dedicated shielded cables with SUBD connectors at one end and numbered wires or suitable connectors (matching with the type of I/O block of the EMERSON DeltaV card) at the other end.

1.1. KEY ADVANTAGES OF THE FMS-C350_C370-DV-1 SOLUTION

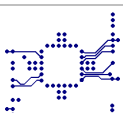
FMS-C350_C370-DV-1 solution protect your wiring investment as you convert from the ALSPA C350/C370™ system to the EMERSON DeltaV™ system with following advantages :

FMS-C350_C370-DV-1 is a pre-engineered marshalling solution ready to work without any technical rework or limitation regarding the existing capabilities of the Alspa C350/C370™ system to be migrated.

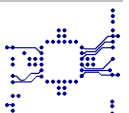
As the instrument wiring is not disturbed, the instrument checkout during startup is reduced to the minimum

The EMERSON DeltaV™ system's configuration allows for the engineering conversion to be done efficiently. The speed at which **FMS-C350_C370-DV-1** solution can be implemented ensures to reduce the process downtime to the minimum.

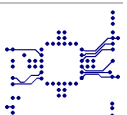
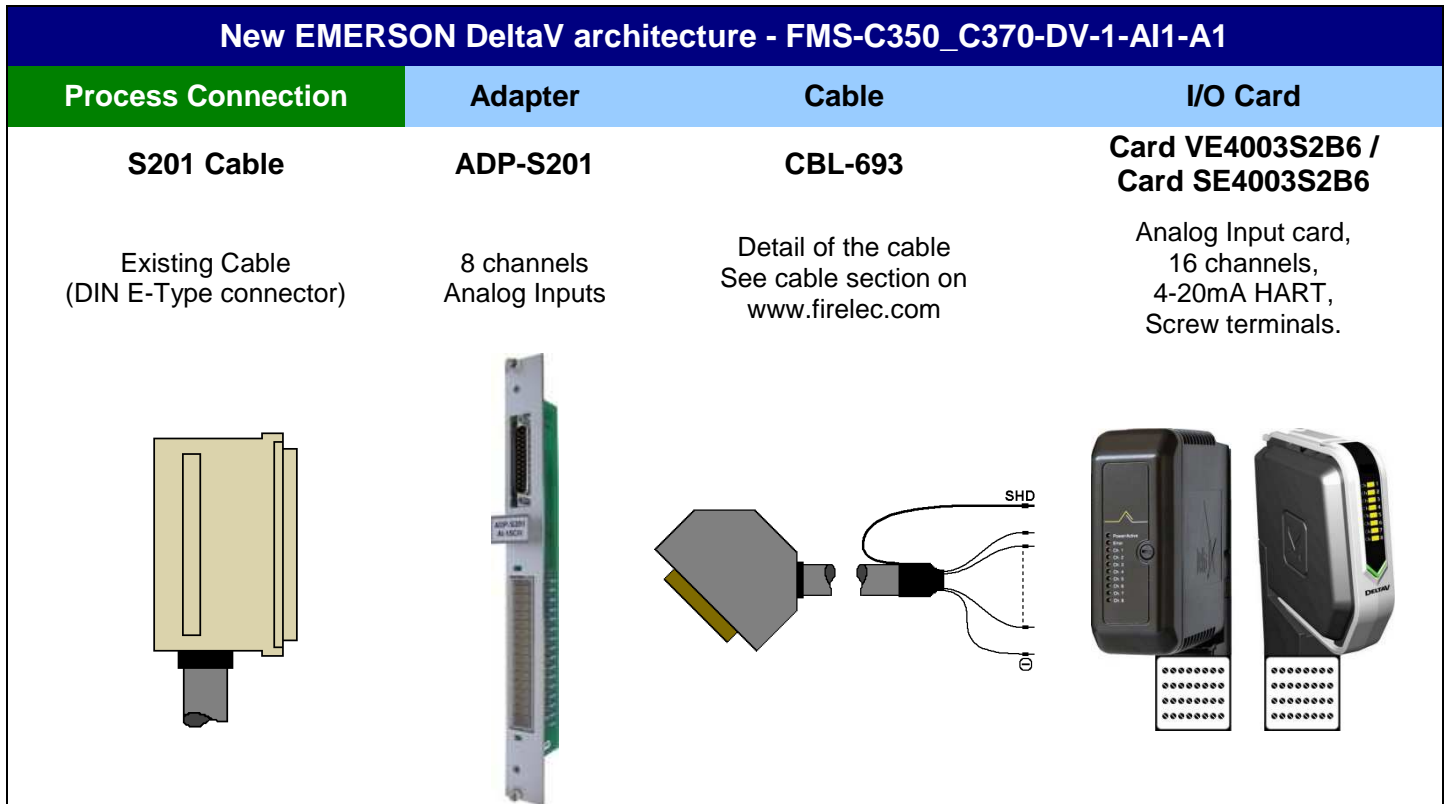
All existing documentations (electrical schemes, loop drawings, maintenance procedures,) remain unchanged as the existing process connections are kept in place.



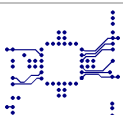
2. ANALOG INPUTS



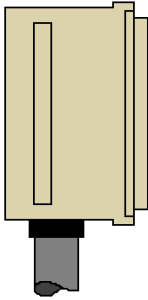

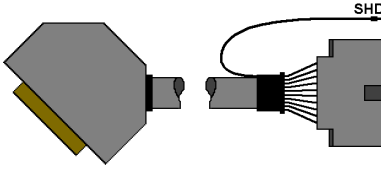

2.1. EXISTING MODULE TO BE REMOVED S201 :

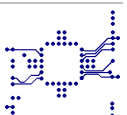


3. ANALOG OUTPUTS

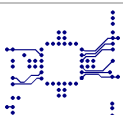


3.1. EXISTING MODULE TO BE REMOVED S234 :

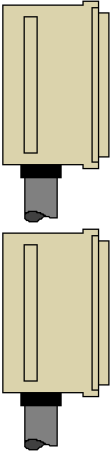

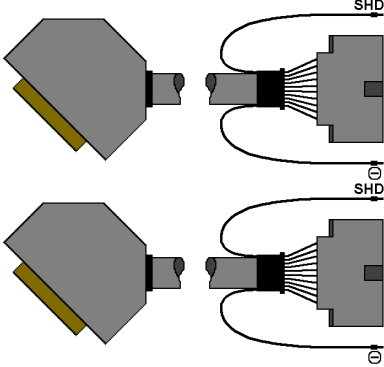

New EMERSON DeltaV architecture - FMS-C350_C370-DV-1-AO1-A1			
Process Connection	Adapter	Cable	I/O Card
<p>S234 Cable</p> <p>Existing Cable (DIN E-Type connector)</p> 	<p>ADP-S234</p> <p>8 channels Analog Outputs</p> 	<p>CBL-685</p> <p>Detail of the cable See cable section on www.firelec.com</p> 	<p>Card VE4005S2B3 / Card SE4005S2B3</p> <p>Analog Output card, 8 channels, 16 pin Mass Termination</p> 



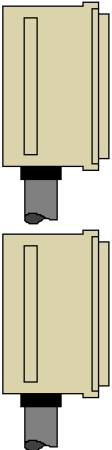

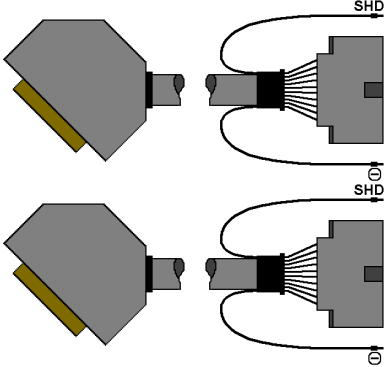

4. DISCRETE INPUTS

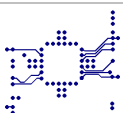


4.1. EXISTING MODULE TO BE REMOVED S101 :

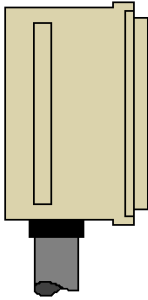

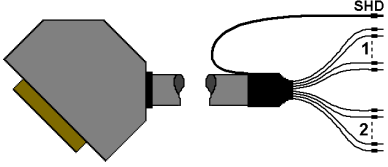

New EMERSON DeltaV architecture - FMS-C350_C370-DV-1-DI1-A1			
Process Connection	Adapter	Cable	I/O Card
<p>2 x S101 Cables</p> <p>Existing Cable (DIN E-Type connector)</p> 	<p>2 x ADP-S101</p> <p>16 channels Discrete Inputs</p> 	<p>CBL-686A (First 16ch) and CBL-686B (Last 16ch)</p> <p>Detail of the cable See cable section on www.firelec.com</p> 	<p>½ Card VE4001S2T2B5 / ½ Card SE4001S2T2B5</p> <p>Discrete Input card, 32 channels, 40 pin Mass Termination</p> 

4.2. EXISTING MODULE TO BE REMOVED S891 :

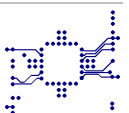
New EMERSON DeltaV architecture - FMS-C350_C370-DV-1-DI2-A1			
Process Connection	Adapter	Cable	I/O Card
<p>2 x S891 Cables</p> <p>Existing Cable (DIN E-Type connector)</p> 	<p>2 x ADP-S891</p> <p>16 channels Discrete Inputs</p> 	<p>CBL-686A (First 16ch) and CBL-686B (Last 16ch)</p> <p>Detail of the cable See cable section on www.firelec.com</p> 	<p>½ Card VE4001S2T2B5 / ½ Card SE4001S2T2B5</p> <p>Discrete Input card, 32 channels, 40 pin Mass Termination</p> 



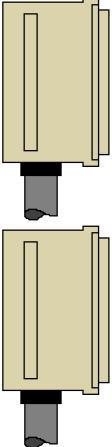

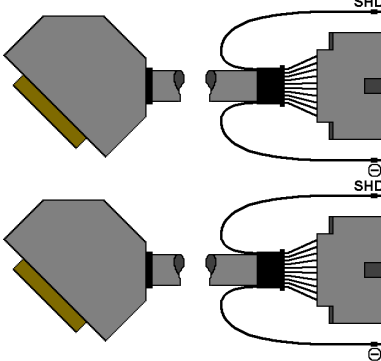

4.3. EXISTING MODULE TO BE REMOVED S416 :
New EMERSON DeltaV architecture - FMS-C350_C370-DV-1-DI3-A1

Process Connection	Adapter	Cable	I/O Card
<p>S416 Cable</p> <p>Existing Cable (DIN E-Type connector)</p> 	<p>ADP-S416</p> <p>8 channels - Frequency Inputs</p> 	<p>CBL-687</p> <p>Detail of the cable See cable section on www.firelec.com</p> 	<p>2 x VE4015 / SE4015</p> <p>Pulse Input card, 4 channels, Terminal block</p> 

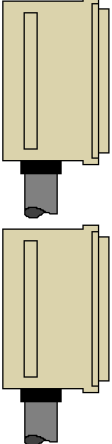

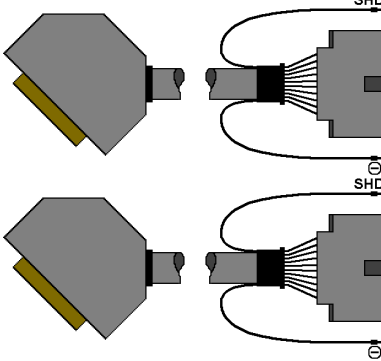
5. DISCRETE OUTPUTS



5.1. EXISTING MODULE TO BE REMOVED S151 :

New EMERSON DeltaV architecture - FMS-C350_C370-DV-1-DO1-A1			
Process Connection	Adapter	Cable	I/O Card
<p>S151 Cable</p> <p>Existing Cable (DIN E-Type connector)</p> 	<p>ADP-S151</p> <p>16 channels Digital Outputs with electromechanic relays</p> 	<p>CBL-686A (First 16ch) and CBL-686B (Last 16ch)</p> <p>Detail of the cable See cable section on www.firelec.com</p> 	<p>1/2 Card VE4002S1T2B6 / 1/2 Card SE4002S1T2B6</p> <p>Discrete Output card, 32 channels, 40 pin Mass Termination</p> 

5.2. EXISTING MODULE TO BE REMOVED S160

New EMERSON DeltaV architecture - FMS-C350_C370-DV-1-DO2-A1			
Process Connection	Adapter	Cable	I/O Card
<p>S160 Cable</p> <p>Existing Cable (DIN E-Type connector)</p> 	<p>ADP-S160</p> <p>16 channels Digital Outputs with DC solid state relays</p> 	<p>CBL-686A (First 16ch) and CBL-686B (Last 16ch)</p> <p>Detail of the cable See cable section on www.firelec.com</p> 	<p>1/2 Card VE4002S1T2B6 / 1/2 Card SE4002S1T2B6</p> <p>Discrete Output card, 32 channels, 40 pin Mass Termination</p> 