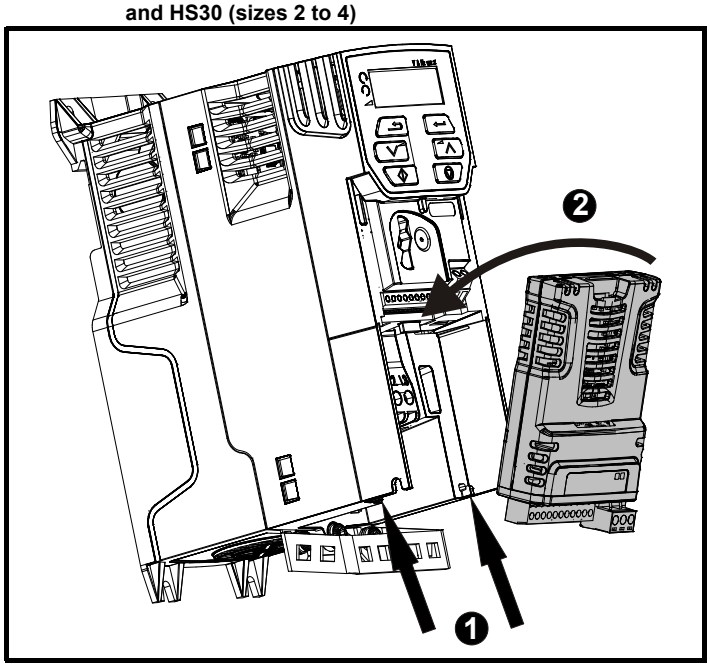
Option Module Installation: Fieldbus

CAUTION: Power down the drive before installing / removing option modules. Failure to do so may result in damage to the product. Refer to section *Safety Information* in the appropriate drive manual.

Figure 1-1 Installation of an SI option module on Commander C200/ C300, Commander C300 PM and Unidrive M200 to M400 and HS30 (sizes 2 to 4)

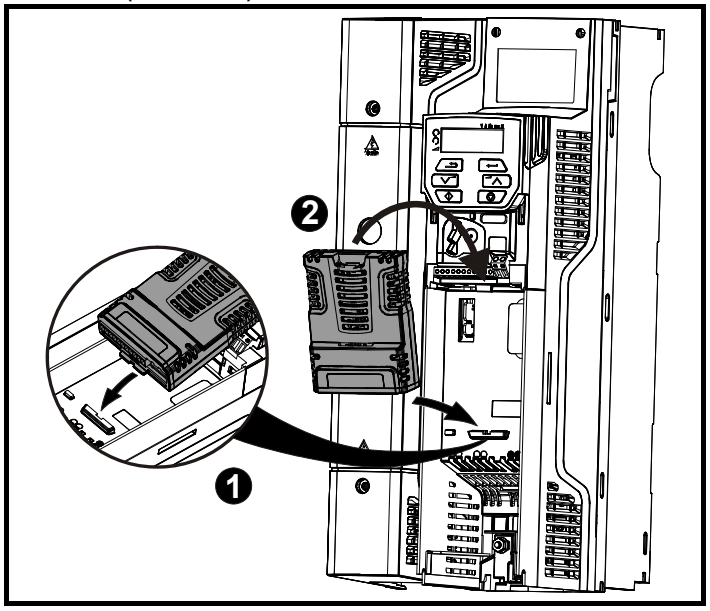


- With the option module tilted slightly backwards, align and locate the two holes in the rear of the option module onto the two tabs (1) on the drive.
- Place the option module onto the drive as shown in (2) until the module clicks into place. The terminal cover on the drive holds the option module in place, so this must be put back on.

NOTE

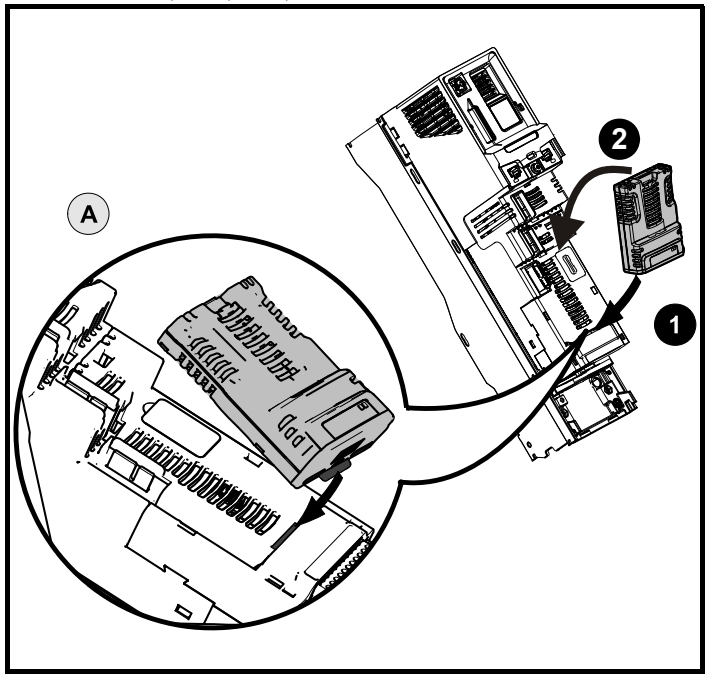
Option modules can only be installed on drives that have the option module slot functionality.

Figure 1-2 Installation of an SI option module on Commander C200/ C300, Commander C300 PM and Unidrive M200 to M400 (sizes 5 to 9)



- Place the option module onto the drive as shown in (2) until the module clicks into place. The terminal cover on the drive holds the option module in place, so this must be put back on.

Figure 1-3 Installation of an SI option module on Unidrive M600 to M702, F300, F600, H300 and HS70/71/72

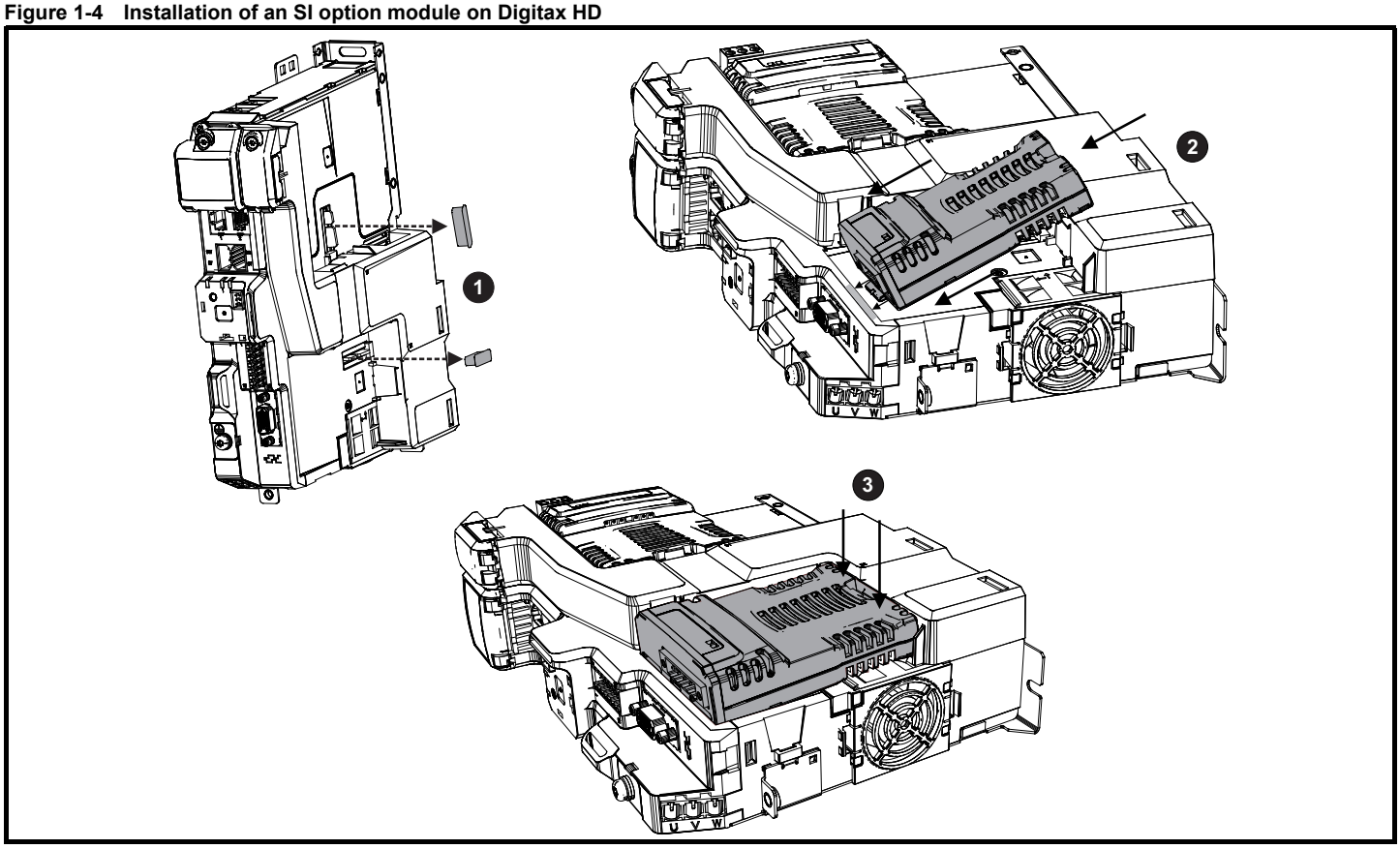


- Move the option module in direction shown (1/2).
- Align and insert the option module tab in to the slot provided, this is highlighted in the detailed view (A).
- Press down on the option module until it clicks into place.

NOTE

Option module slots must be used in the following order: Slot 3 (lower), Slot 2 (middle) and then Slot 1(upper).

Figure 1-4 Installation of an SI option module on Digitax HD



1. Remove the protective interface card covers.

2. Align and insert the option module tab into the slot on the drive plastic.

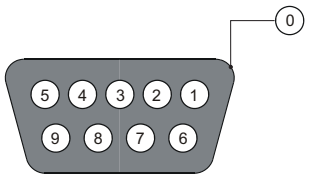
3. Once the option module tab is located into the slot on the drive, push down at the rear of the option module until it clicks into place.

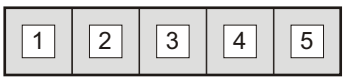
NOTE

Once fitted, the SI option module remains at an angle with respect to the drive.

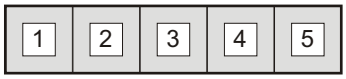
NOTE

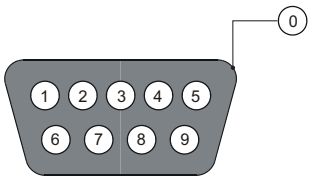
When connecting SI option modules, an additional SI option mounting kit is required for the Digitax HD M75X series, if the drive is not supplied with a SI option mounting kit fitted. The SI option mounting kit can be ordered from the supplier of the drive. Refer to the Digitax HD M75X Series Installation and Technical Guide for further information.

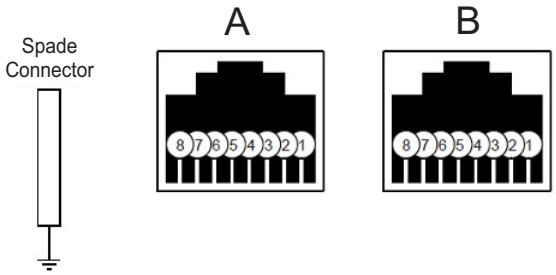
<table>
<tr><th>Module</th><th>Color</th><th>Terminal information</th></tr>
<tr><td> 
SI-PROFIBUS</td><td>Red Lilac
(RAL4001)</td><td> 

<table>
<tr><th>*Pin</th><th>Description</th></tr>
<tr><td>0</td><td>Cable screen (braided shield) / Shell</td></tr>
<tr><td>3</td><td>RxD/TxD-P (Red)</td></tr>
<tr><td>4</td><td>CNTR-P</td></tr>
<tr><td>5</td><td>0V ISO (for termination only)</td></tr>
<tr><td>6</td><td>+5V ISO (for termination only)</td></tr>
<tr><td>8</td><td>RxD/TxD-N (Green)</td></tr>
</table>
*Pins 1,2,7 and 9 not connected</td></tr>
<tr><td> 
SI-DeviceNet</td><td>Basalt Grey
(RAL7012)</td><td> 

<table>
<tr><td>1</td><td>0V external power supply (black)</td></tr>
<tr><td>2</td><td>CAN-L negative data line (blue)</td></tr>
<tr><td>3</td><td>Cable screen (braided shield)</td></tr>
<tr><td>4</td><td>CAN-H positive data line (white)</td></tr>
<tr><td>5</td><td>+24V external power supply (red)</td></tr>
</table></td></tr>
</table>

<table>
<tr><th>Module</th><th>Color</th><th>Terminal information</th></tr>
<tr><td> 
 
SI-CANopen (V2)</td><td>Pale Grey
(RAL7035)</td><td> 

<table>
<tr><td>1</td><td>0V external power supply (black)</td></tr>
<tr><td>2</td><td>CAN-L negative data line (blue)</td></tr>
<tr><td>3</td><td>Cable screen (braided shield)</td></tr>
<tr><td>4</td><td>CAN-H positive data line (white)</td></tr>
<tr><td>5</td><td>+24V external power supply (red)</td></tr>
</table>


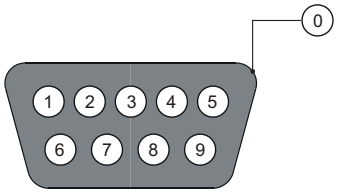
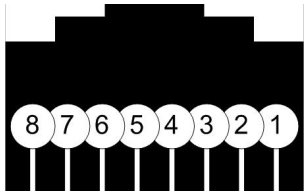
<table>
<tr><td>*Pin</td><td>Description</td></tr>
<tr><td>0</td><td>Cable Shield / Shell</td></tr>
<tr><td>2</td><td>CAN-L negative data line (blue)</td></tr>
<tr><td>3</td><td>Cable Shield</td></tr>
<tr><td>5</td><td>Cable Shield</td></tr>
<tr><td>6</td><td>0V external power supply (black)</td></tr>
<tr><td>7</td><td>CAN-H positive data line (white)</td></tr>
<tr><td>9</td><td>+24V external power supply (red)</td></tr>
</table>
*Pins 1,4 and 8 not connected</td></tr>
<tr><td> 
SI-Ethernet</td><td>Beige
(RAL1001)</td><td rowspan="3"> 

<table>
<tr><th>Ethernet</th><th>Function</th><th>Ethernet</th><th>Function</th></tr>
<tr><td>1</td><td>Transmit +</td><td>5</td><td>Not used</td></tr>
<tr><td>2</td><td>Transmit -</td><td>6</td><td>Receive -</td></tr>
<tr><td>3</td><td>Receive +</td><td>7</td><td>Not used</td></tr>
<tr><td>4</td><td>Not used</td><td>8</td><td>Not used</td></tr>
</table></td><td rowspan="3">Link / Activity
Indicators
A B</td></tr>
<tr><td> 
SI-BACnet IP</td><td>Water Blue
(RAL5021)</td></tr>
<tr><td> 
SI-PROFINET
SI-PROFINET V2*
SI-PROFINET SR</td><td>Yellow Green
(RAL6018)</td></tr>
<tr><td> 
SI-EtherCAT</td><td>Traffic Red
(RAL3020)</td><td></td><td></td></tr>
<tr><td> 
SI-POWERLINK**</td><td>Pastel Blue
(RAL5024)</td><td><table>
<tr><th>Ethernet</th><th>Function</th><th>Ethernet</th><th>Function</th></tr>
<tr><td>1</td><td>Receive +</td><td>5</td><td>Not used</td></tr>
<tr><td>2</td><td>Receive -</td><td>6</td><td>Transmit -</td></tr>
<tr><td>3</td><td>Transmit +</td><td>7</td><td>Not used</td></tr>
<tr><td>4</td><td>Not used</td><td>8</td><td>Not used</td></tr>
</table></td><td>Status and
Error Indicators
BS BE</td></tr>
</table>

* If PROFINET functionality is required with Commander C200, C300, Unidrive M200, M300 and M400, SI-PROFINET V2 should be used.

** The Transmit and Receive connections are transposed to those of other Ethernet based option modules in accordance with EPSG recommendations. However, Auto-MDI-X is supported.

Continued on next page.

Module	Color	Terminal information
 SI-INTERBUS (500 kBd / 2 MBd)	Dark Grey (RAL7021)	**Bus IN (9 way 'D' Male)**  **Bus OUT (RJ45)** 

Item	Part Number
500 kBd	82400000021220
2 MBd	82400000021230

*Bus IN 9 pin 'D' male	**Bus OUT 8 pin RJ45	Description
0	N/A	Cable shield
2	1	DI - Transmit data output (non-inverted)
1	2	DO – Receive data input (non-inverted)
3	3	0V Ground
6	7	/DO – Receive data input (inverted)
7	8	/DI - Transmit data output (inverted)
Shell	Shell	Cable shield

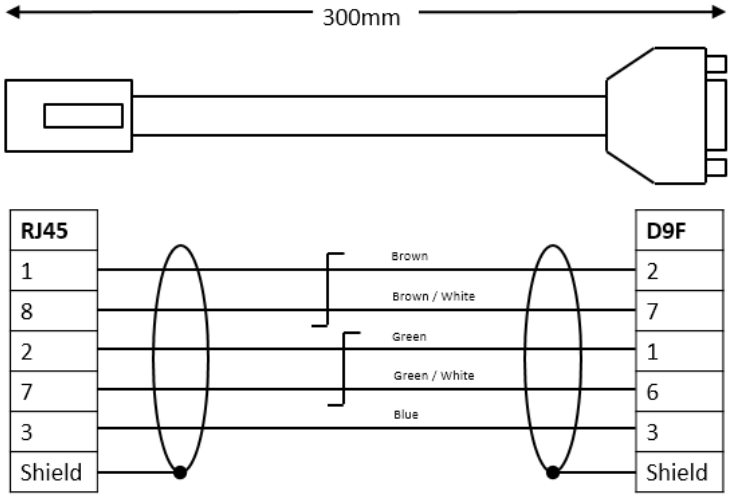
*Pins 4,5,8 and 9 not connected

**Pins 4,5 and 6 not connected

RJ45 to D9F

Item	Part Number
RJ45 to D9F Cable	9500-1067

The SI-INTERBUS module requires a suitable adapter cable to connect a standard INTERBUS 9 pin 'D' type male connector to the RJ45 port.



For full details on any of the option modules, please refer to the appropriate option module user guide.