

Node services carrier

8718-CA-NS

- ◆ accommodates Bus Interface Module
- ◆ accommodates Node Services Module
- ◆ Modbus or Profibus-DP
- ◆ dual LAN connections (A & B)
- ◆ switchable RS485/RS422 termination options
- ◆ eight power fail inputs
- ◆ DIN rail or panel mounting

CARRIER SPECIFICATION

See also System Specification

CARRIER MOUNTING MODULES

Bus Interface Modules(Profibus-DP) 8502-BI-DP
(Modbus) 8505-BI-MB
Node Services Module8510-MO-NS

HAZARDOUS AREA APPROVALS

Location of node Zone 2, IIC T4 hazardous area
or Class 1, Div 2, Groups A, B, C, D T4 hazardous location

ELECTRICAL

Railbus connectormale out
 Power fail connector8 pairs (screw terminal)
 Carrier ground terminalM2 screw terminal

DC POWER

External power12.0 V dc (±5%)
 A 6-pin connector is provided at the top/rear of the carrier for the connection of the power supply.

LAN CONNECTORS

LAN A9-pin, D, sub-miniature, female
LAN B9-pin, D, sub-miniature, female
 Switchable terminations for Modbus RS485, Modbus RS422 or Profibus-DP

Note: The screw terminal beside each LAN connector is a termination for the cable screen and should not be used as system ground.

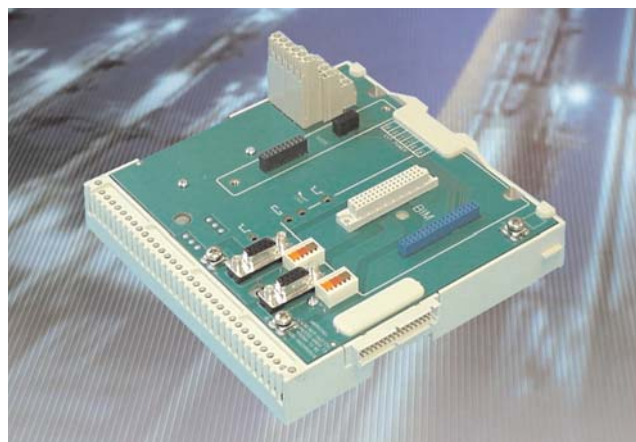
ENVIRONMENTAL

Ambient temp

Operating - 40°C to + 70°C
 Storage - 40°C to + 85°C

Relative Humidity5 to 95% RH (non-condensing)

Vibration and ShockSee System specification sheet



MATERIALS

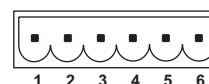
Carrier mouldingModified Poly-Phenylene Oxide
Printed wiring boardEpoxy Resin Woven Glass Laminate

MECHANICAL

Dimensions (overall)178 (w) x 170 (d) x 68 (h) mm
Weight (approx.)450 g
Mounting methodsFlat panel (2 fixings) or DIN rail
DIN-rail types‘Top hat’, 7.5 x 35 mm to EN 50022
or 15 x 35 mm to EN 50022
or G-section, to EN 50035

POWER SUPPLY CONNECTIONS

External power

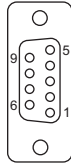


Terminal	External power
1	No connection
2	0 V
3	+12 V
4	+12 V
5	0 V
6	No connection

Power supply pins are provided in pairs. This enables one pin to be used for the supply input and the second to loop to another connector, when required.



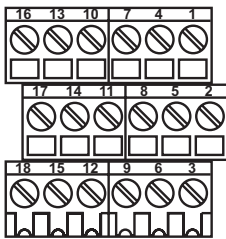
LAN INTERFACE



Terminals	Modbus RS422 LAN A/B	Modbus RS485 LAN A/B	Profibus-DP LAN A only
Pin 1	Socket shroud	Socket shroud	Socket shroud
Pin 2	RxD+	RxD/TxD+	NC
Pin 3	TxD+	RxD/TxD+	RxD/TxD+
Pin 4	RxD-	RxD/TxD-	RTS+
Pin 5	GND	GND	GND
Pin 6	V _T	V _T	V _P
Pin 7	RxD-	RxD/TxD-	RTS+
Pin 8	TxD-	RxD/TxD-	RxD/TxD-
Pin 9	NC	NC	NC

Note: Pins with assignments shown in *italics* are normally not connected; they occur because of the 'universal' nature of the interface.

PSU POWER FAIL CONNECTOR



Connection pairs

	AUX	-ve
Pair 1	1	4
Pair 2	2	5
Pair 3	3	6
Pair 4	7	10
Pair 5	8	11
Pair 6	9	12
Pair 7	13	16
Pair 8	14	17

Eight pairs of terminals are provided for the PSU health signals.

If an 8510-MO-NS module is fitted and power fail signalling is being used:

- connect the power supply AUX and -ve terminals to a pair as shown in the table (right)
- put individual wire links across each **unused terminal pairs** to prevent a continual alarm condition being signalled to the BIM.

Note: Terminals 15 and 18 are not used.

LAN DIL SWITCHES

One per LAN to determine termination and/or bias

ON = switch to right; OFF = switch to left (with normal orientation)

Note: Switch model may vary.

Modbus applications

Mode	Switch positions	Termination
RS422 not terminated		None
RS422 terminated receiver		
RS422 terminated & biased receiver		
RS485 not terminated		None
RS485 terminated		
RS485 terminated & biased		

Note: Switch model may vary but switching directions remain the same.

Profibus-DP applications

Mode	Switch positions	Termination
RS485 not terminated		None

Note: Any required termination should be implemented in the Profibus D-type plug.

