DEEP SEA ELECTRONICS PLC

P123

DSE Load Share Lines Interface

053-004
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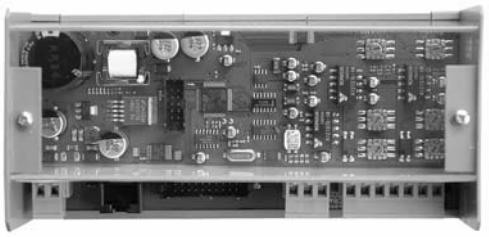


DESCRIPTION

The advent of electronic load share controllers has in some cases meant that existing control systems require expensive updates if additional generating sets are added into the system. This is because many of the 'newer' controllers utilise proprietary communication links rather than the traditional analogue load share lines (often called Parallel Lines) used in existing systems.

The DSE 5510 load sharing controller utilises the MultiSet Communications (M.S.C.) link to enable load sharing between other 5510 equipped generators as well as providing other advanced functionality not available with load share lines.

The P123 Load Share Lines Interface is designed to allow the DSE 5510 load sharing controller to interface with analogue load share lines on existing systems without the need to replace the existing controls.

The P123 monitors the load share lines and converts this into digital information. This data is then used by the onboard microprocessor to allow the P123 to drive its own load share lines and to communicate on the M.S.C. link with the host DSE 5510 controller.

When DC power is applied to the module, the status LED will illuminate. If the P123 cannot communicate to the host 5510 controller using the M.S.C. link, the status LED begins flashing to indicate "Link Lost".

CONFIGURATION

To allow connection to the load sharing lines of a wide variety of manufacturers, the P123 interface is selector switch configurable as detailed below.
Ensure the P123 selector switches are correctly positioned before connecting to the load share lines.

Table of switch positions for common types of load share lines

Type	P123 switch position					
	kW share settings			Var share settings		
	A	B	C	D	E	F
Barber Colman	6	4	2	0	0	0
Deif*	0	1	8	0	1	8
Selco	2	2	8	0	0	0
Woodward	6	8	1	0	0	0

NOTE:- Switch locations shown opposite.

NOTE:- * Deif includes VAr share lines.

NOTE:- Operation of the P123 cannot be determined if switch combinations other than those listed above are chosen.

NOTE:- When using analogue load sharing lines, some additional external equipment may be required to complete the synchronising and load sharing system.

SPECIFICATION

DC SUPPLY:
8V DC to 33V DC

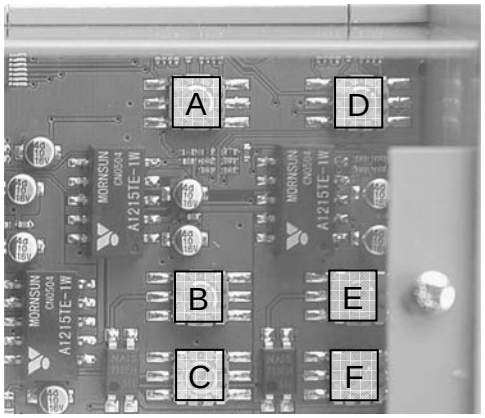
MAX. CURRENT (operating and standby):
150mA @ 12V DC, 80mA @ 24V DC.

DIMENSIONS:
160.5mm x 77.5mm x 76mm
(6.32" x 3.05" x 2.99")
DIN Rail mounted housing**.**

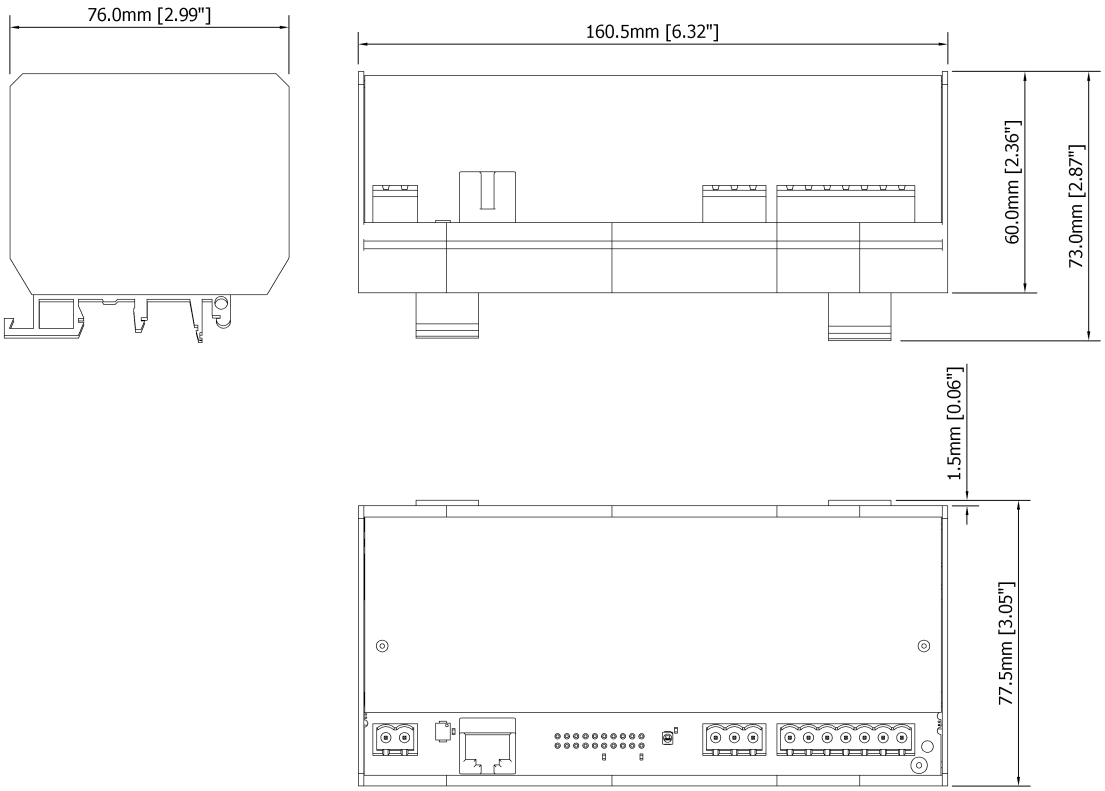
OPERATING TEMPERATURE RANGE:
-30°C to +70°C

INDICATIONS:
Status LED:
LED lit steady - OK
LED flashing - M.S.C. Link lost

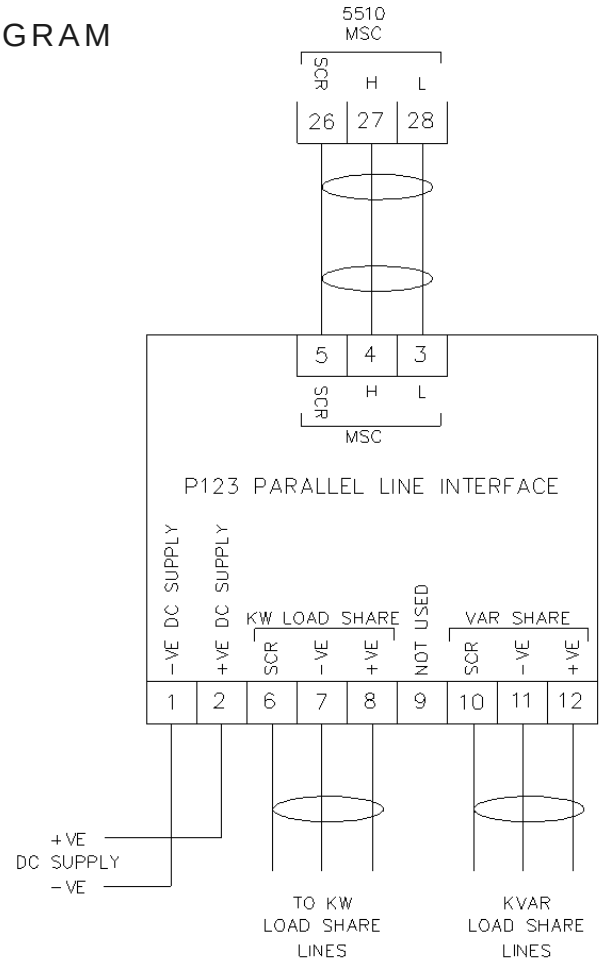
SWITCH LOCATION:



CASE DIMENSIONS



TYPICAL WIRING DIAGRAM



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