



SPN2

CONTROLLER



- ECU which can handle up to 8 inputs and up to 12 outputs
- Can be implemented in a CAN-BUS network as SLAVE module
- Implementable in a CAN network, as SLAVE
- Separately disposed resources
- Polyurethane resin case



TECHNICAL FEATURES

MASTER CODE	SPN2	
POWER SUPPLY	9-36 VDC / CURRENT CONSUMPTION 25 mA AT 24 VDC (STAND BY MODE)	
INPUT	TOTAL 8	4 UNIVERSAL INPUTS 4 DIGITAL INPUTS
OUTPUT	TOTAL 12	8 PWM / DIGITAL OUTPUTS 4 DIGITAL LOW SIDE OUTPUTS
CAN BUS	1 PORT	2.0B COMPLIANT - (11, 29 BIT) - ISO 11898 - UP TO 1MBIT/S
CAN BUS PROTOCOLS	CAN OPEN (CIA DS401 DEVICE PROFILE FOR GENERIC I/O MODULE, WITH DS306 EDS FILE) ON REQUEST: SAE J1939 - ISO 11783 (ISO BUS) - FMS	
CONNECTIONS PORT	11	2 AMP SUPERSEAL 6 PIN – STANDARD CABLE LENGTH: 40 cm 9 AMP SUPERSEAL 4 PIN - STANDARD CABLE LENGTH: 40 cm
WORKING TEMPERATURE	-40°C +80°C	
CASE	ENCAPSULATED IN PUR RESIN - SELF-EXTINGUISHING UL94 (V0)	

ELECTRONIC FEATURES

SLAVE USAGE	EDS
PROGRAMMING	FIRMWARE UPLOAD BY CAN BUS WITH ALoader SOFTWARE TOOL
CYCLE TIME	50 ms



(25/06/2025) - 1



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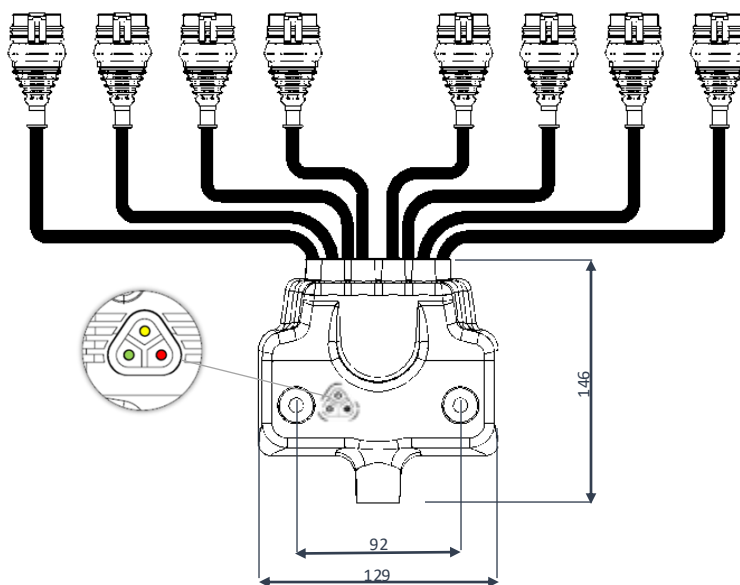
STANDARDS

ELECTROMAGNETIC EMISSIONS	EN 61000-6-4// EN 55011 (RF RADIATE)
ELECTROMAGNETIC IMMUNITY	EN 61000-6-2// EN 61000-4-2/3/4/6
IP	BOX: IP68; CONNECTORS: IP67
MTTFd	55,98 YEARS CALCULATED ACCORDING TO THE IEC61709 (SIEMENS SN29500), WITH ENVIRONMENTAL FACTORS 3K7 (IEC60721)
PERFORMANCE AND SAFETY INTEGRITY LEVEL	PLc – SIL1 (SINGLE-CHANNEL INTERNAL SCHEME)

IN ACCORDANCE WITH THE EN50498 THE DEVICE MEETS THE TECHNICAL SPECIFIC REQUIREMENTS OF 2004-104 DIRECTIVE (AUTOMOTIVE). THE DEVICE IS EMC 2004/108 COMPLIANT.

SIZE (mm)

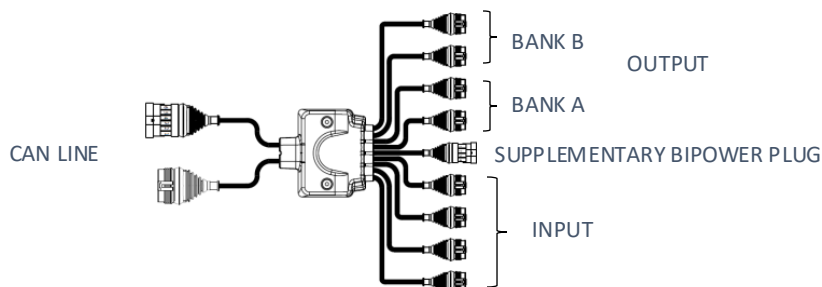
- BOARD / APPLICATION STATUS
- CAN STATUS
- BOARD DIAGNOSTIC (256 DISPOSABLE CODE MANAGE FROM PLC)





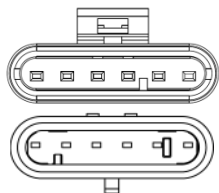
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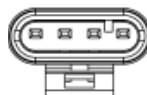


ELECTRICAL FEATURES

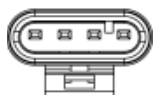
INPUT		OUTPUT BANKS POWER CONNECTIONS			OUTPUTS								
BASIC VERSION	4 UNIVERSAL INPUT 4÷20 mA (0÷25 mA) 0÷5 V 0÷10 V 0÷40 V HIGH SIDE INPUT LOW SIDE INPUT 4 DIGITAL INPUTS HIGH SIDE INPUT LOW SIDE INPUTS	EXTERNAL SUPPLY BY MAIN POSITIVE PIN 1 CAN LINE	EXTERNAL SUPPLY BY SAFETY LINE PIN 6 CAN LINE	OPT 3	8 HIGH SIDE OUTPUTS— IN TWO INDIPENDENT BANKS								
		A, B		1	BANK A				BANK B				
			A,B	2	DIGIT /PWM	RATI O	RELA Y	OPT. 1	DIGIT /PWM	RATI O	RELAY	OPT. 2	
		A	B	3	4	0	0	A	4	0	0	A	
					3	0	1	B	3	0	1	B	
					2	1	0	C	2	1	0	C	
					2	0	2	D	1	0	2	D	
					1	1	1	E	0	1	1	E	
					0	2	0	F	0	2	0	F	
					0	1	2	G	0	1	2	G	
					HIGH SIDE OUTPUTS								
					SINGLE OUT MAX CURR: 5A				BANK TOTAL CURRENT: 8A				
BASIC AND BIPOWER VERSION					4 SUPPLEMENTARY – LOW SIDE OUTPUTS								
					SINGLE OUT MAX CURRENT: 4A				BANK TOTAL CURRENT: 8A				
BIPOWER VERSION	SUPPLEMENTARY BIPOWER PLUG	IMPORTANT: BIPOWER CONNECTION EXCLUDES THE SUPPLY (A/B BANKS) BY DOUBLE CAN LINE (PIN1/6)											
		BANK A BIPOWER – BANK B SUPPLIED BY PIN 1 CAN LINE											1P1
		BANK A BIPOWER – BANK B SUPPLIED BY PIN 6 CAN LINE											1P2
		BANK B BIPOWER – BANK B SUPPLIED BY PIN 1 CAN LINE											2P1
		BANK B BIPOWER – BANK B SUPPLIED BY PIN 6 CAN LINE			2P2	SINGLE OUT MAX CURR: 5A				BANK TOTAL CURRENT: 16A			
		BANK A AND B BIPOWER			3P								



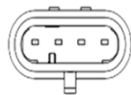
DOUBLE CAN LINE IN/OUT	
PIN	DESCRIPTION
1	POWER SUPPLY
2	LINE H (CANBUS)
3	NEGATIVE
4	LINE L (CAN BUS)
5	SAFETY LINE
6	EXTERNAL SUPPLY BY SAFETY LINE



INPUT	
PIN	DESCRIPTION
1	POSITIVE
2	INPUT (A/D:L-H)
3	GND
4	INPUT (A/D:L-H)



OUTPUT	
PIN	DESCRIPTION
1	OUTPUT (A/D:H)
2	OUTPUT (A/D:H)
3	GND
4	OUTPUT LOW SIDE



SUPPLEMENTARY BIPOWER PLUG	
PIN	DESCRIPTION
1	POWER SUPPLY BANK A
2	GND
3	POWER SUPPLY BANK B
4	GND



NOTE